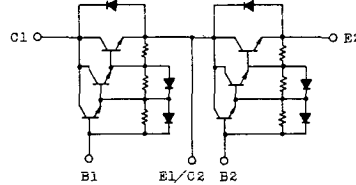


トランジスタ・モジュール (NPN, ダーリントン接続, 2個直列接続)

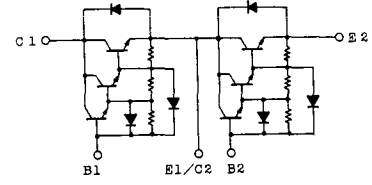
- ダーリントン・トランジスタを2個直列接続
- フリーホイール・ダイオード付
- 電極と金属ケース部が絶縁されている
- 直流電流増幅率は80以上(定格電流にて)

■等価回路

CK-1



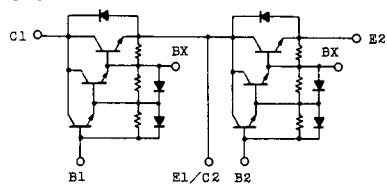
CK-2



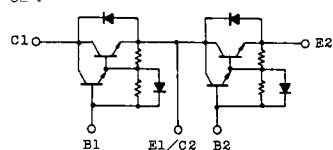
注1.  $T_c=25^{\circ}\text{C}$ . 注2. AC, 1分間。

| 型名         | 最大定格 ( $T_m=25^{\circ}\text{C}$ ) |                |           |       |          |       |       |          |       |                        |                        | 電気的特性     |           |              |           |              |                |           |          |              |           |
|------------|-----------------------------------|----------------|-----------|-------|----------|-------|-------|----------|-------|------------------------|------------------------|-----------|-----------|--------------|-----------|--------------|----------------|-----------|----------|--------------|-----------|
|            | $V_{CBO}$                         | $V_{CEX(SUS)}$ | $V_{EBO}$ | $I_c$ | $I_{CP}$ | $I_B$ | $I_F$ | $I_{FM}$ | $P_c$ | $T_j$                  | $T_{Stg}$              | $V_{Iso}$ | $I_{CBO}$ |              | $I_{EBO}$ |              | $V_{CEO(SUS)}$ |           | $h_{FE}$ |              |           |
|            | (V)                               | (V)            | (V)       | (A)   | (ms)     | (A)   | (A)   | (ms)     | (W)   | ( $^{\circ}\text{C}$ ) | ( $^{\circ}\text{C}$ ) | (V)       | 最大 (mA)   | $V_{CE}$ (V) | 最大 (mA)   | $V_{EB}$ (V) | 最大 (V)         | $I_c$ (A) | 最小 (V)   | $V_{CE}$ (V) | $I_c$ (A) |
| MG15N2CK1  | 1100                              | 1100           | 7         | 15    | 30       | 1.5   | 15    | 30       | 150   | 150                    | -40~125                | 2500      | 1.0       | 1100         | 200       | 7            | 900            | 1.0       | 100      | 5            | 15        |
| MG15N2YK1  | 1100                              | 1100           | 7         | 15    | 30       | 1.5   | 15    | 30       | 150   | 150                    | -40~125                | 2500      | 1.0       | 1100         | 200       | 7            | 900            | 1.0       | 100      | 5            | 15        |
| MG25M2CK2  | 1000                              | 1000           | 7         | 25    | 50       | 2.5   | 25    | 50       | 300   | 150                    | -40~125                | 2500      | 1.0       | 1000         | 200       | 7            | 880            | 1.0       | 100      | 5            | 25        |
| MG25M2YK1  | 1000                              | 1000           | 7         | 25    | 50       | 2.5   | 25    | 50       | 300   | 150                    | -40~125                | 2500      | 1.0       | 1000         | 200       | 7            | 880            | 1.0       | 100      | 5            | 25        |
| MG25M2YK9  | 1000                              | 1000           | 7         | 25    | 50       | 2.5   | 25    | 50       | 300   | 150                    | -40~125                | 2500      | 1.0       | 1000         | 200       | 7            | 880            | 1.0       | 100      | 5            | 25        |
| MG25N2CK1  | 1100                              | 1100           | 7         | 25    | 50       | 2.5   | 25    | 50       | 300   | 150                    | -40~125                | 2500      | 1.0       | 1100         | 200       | 7            | 900            | 0.5       | 100      | 5            | 25        |
| MG25N2YK1  | 1100                              | 1100           | 7         | 25    | 50       | 2.5   | 25    | 50       | 300   | 150                    | -40~125                | 2500      | 1.0       | 1100         | 200       | 7            | 900            | 0.5       | 100      | 5            | 25        |
| MG30G2CL3  | 600                               | 600            | 6         | 30    | 60       | 3.0   | 30    | 60       | 250   | 150                    | -40~125                | 2500      | 1.0       | 600          | 200       | 6            | 450            | 0.5       | 100      | 5            | 30        |
| MG30G2YL1  | 600                               | 600            | 6         | 30    | 60       | 3.0   | 30    | 60       | 200   | 150                    | -40~125                | 2500      | 1.0       | 600          | 200       | 6            | 450            | 0.5       | 100      | 5            | 30        |
| MG40S2YK1  | 1400                              | 1400           | 7         | 40    | 80       | 4.0   | 40    | 80       | 400   | 150                    | -40~125                | 2500      | 2.0       | 1400         | 150       | 7            | 1000           | 1.0       | 100      | 5            | 40        |
| MG50G2CL3  | 600                               | 600            | 6         | 50    | 100      | 5.0   | 50    | 100      | 300   | 150                    | -40~125                | 2500      | 1.0       | 600          | 200       | 6            | 450            | 0.5       | 100      | 5            | 50        |
| MG50G2YL1A | 600                               | 600            | 6         | 50    | 100      | 5.0   | 50    | 100      | 300   | 150                    | -40~125                | 2500      | 1.0       | 600          | 200       | 6            | 450            | 0.5       | 100      | 5            | 50        |
| MG50M2CK2  | 1000                              | 1000           | 7         | 50    | 100      | 5.0   | 50    | 100      | 350   | 150                    | -40~125                | 2500      | 1.0       | 1000         | 200       | 7            | 880            | 1.0       | 100      | 5            | 50        |
| MG50M2YK1  | 1000                              | 1000           | 7         | 50    | 100      | 5.0   | 50    | 100      | 350   | 150                    | -40~125                | 2500      | 1.0       | 1000         | 200       | 7            | 880            | 1.0       | 100      | 5            | 50        |
| MG50M2YK9  | 1000                              | 1000           | 7         | 50    | 100      | 5.0   | 50    | 100      | 350   | 150                    | -40~125                | 2500      | 1.0       | 1000         | 200       | 7            | 880            | 1.0       | 100      | 5            | 50        |
| MG50N2CK1  | 1100                              | 1100           | 7         | 50    | 100      | 5.0   | 50    | 100      | 350   | 150                    | -40~125                | 2500      | 1.0       | 1100         | 200       | 7            | 900            | 1.0       | 100      | 5            | 50        |
| MG50Q2YK1  | 1200                              | 1200           | 7         | 50    | 100      | 5.0   | 50    | 100      | 350   | 150                    | -40~125                | 2500      | 1.0       | 1200         | 200       | 7            | 900            | 1.0       | 100      | 5            | 50        |
| MG75G2CL1  | 600                               | 600            | 6         | 75    | 150      | 10    | 75    | 150      | 350   | 150                    | -40~125                | 2500      | 1.0       | 600          | 200       | 6            | 450            | 0.5       | 80       | 5            | 75        |
| MG75G2YL1A | 600                               | 600            | 6         | 75    | 150      | 10    | 75    | 150      | 350   | 150                    | -40~125                | 2500      | 1.0       | 600          | 200       | 6            | 450            | 0.5       | 80       | 5            | 75        |
| MG75H2CL1  | 600                               | 600            | 6         | 75    | 150      | 10    | 75    | 150      | 350   | 150                    | -40~125                | 2500      | 1.0       | 600          | 200       | 6            | 500            | 0.5       | 80       | 5            | 75        |
| MG75H2YL1A | 600                               | 600            | 6         | 75    | 150      | 10    | 75    | 150      | 350   | 150                    | -40~125                | 2500      | 1.0       | 600          | 200       | 6            | 500            | 0.5       | 80       | 5            | 75        |

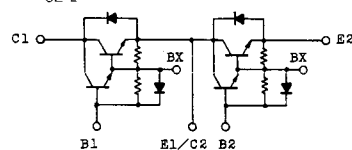
CK-3



CL-1

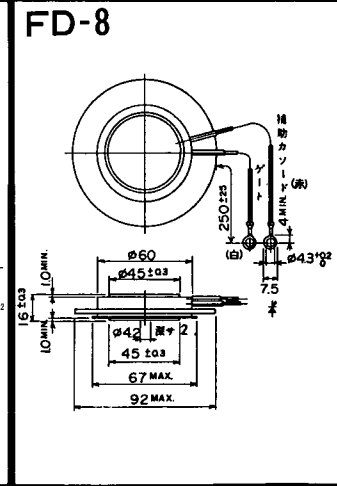
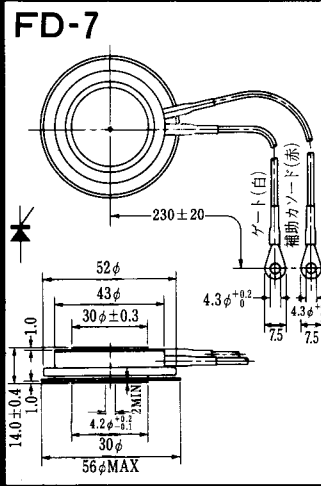
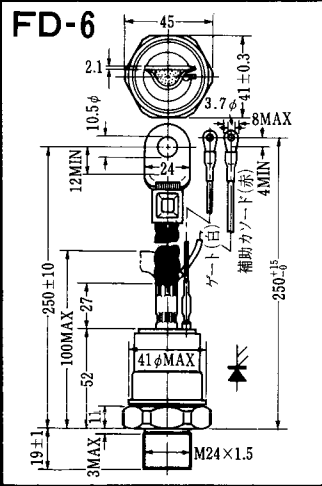
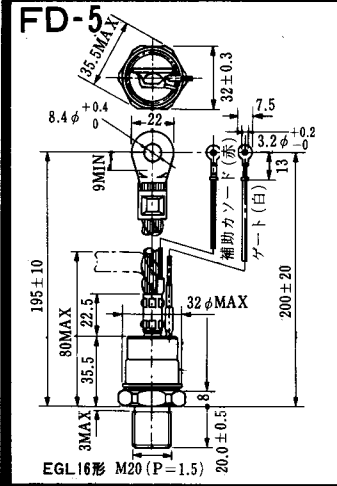
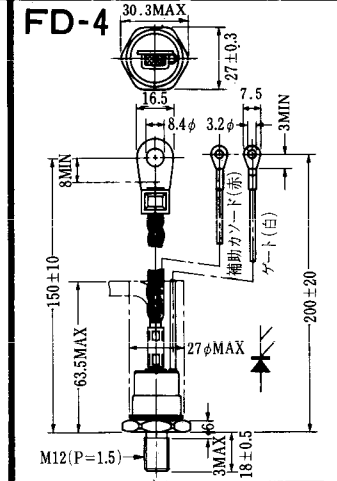
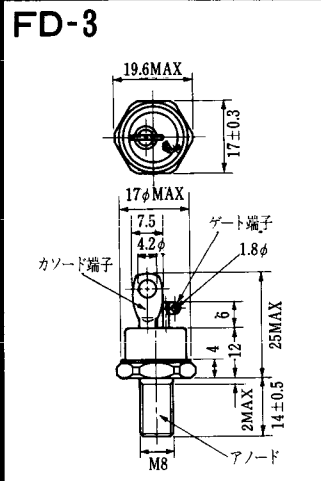
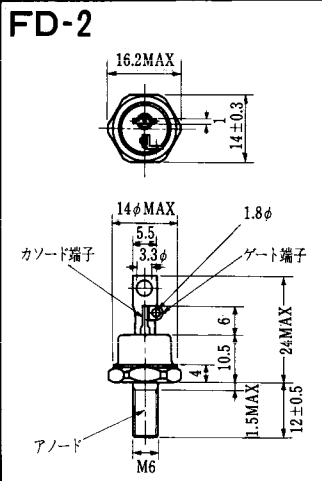
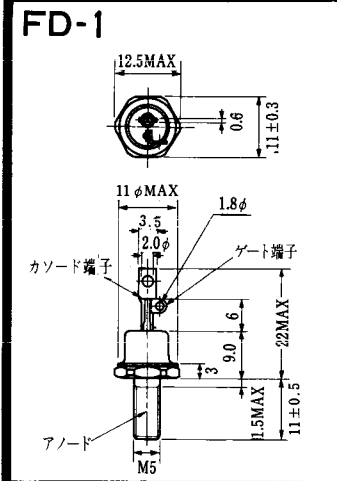


CL-2



注3. スイッチング時間の \* 印はtyp. 値。

| (T <sub>a</sub> =25°C) |                 |                       |                       |                 |                  |                |                        |                        |                        | エミッタ・コレクタ間ダイオード       |                       |                       |                         |                       | 熱抵抗                    |                 | 等 価 回 路 | 外 形 図 | 記 事  | 型 名      |                             |                    |
|------------------------|-----------------|-----------------------|-----------------------|-----------------|------------------|----------------|------------------------|------------------------|------------------------|-----------------------|-----------------------|-----------------------|-------------------------|-----------------------|------------------------|-----------------|---------|-------|------|----------|-----------------------------|--------------------|
| 飽和電圧 (V)               |                 | I <sub>c</sub><br>(A) | I <sub>B</sub><br>(A) | スイッチング時間 (μs)   |                  |                | I <sub>B1</sub><br>(A) | I <sub>B2</sub><br>(A) | V <sub>cc</sub><br>(V) | R <sub>L</sub><br>(Ω) | V <sub>F</sub><br>(V) | I <sub>F</sub><br>(A) | t <sub>rr</sub><br>(μs) | I <sub>F</sub><br>(A) | V <sub>BE</sub><br>(V) | di/dt<br>(A/μs) |         |       |      |          | R <sub>th(j-c)</sub> (°C/W) |                    |
| V <sub>CE</sub>        | V <sub>BE</sub> |                       |                       | t <sub>on</sub> | t <sub>stg</sub> | t <sub>f</sub> |                        |                        |                        |                       |                       |                       |                         |                       |                        |                 |         |       |      |          | R <sub>th(外)</sub>          | R <sub>th(内)</sub> |
| 最大                     | 最大              |                       |                       | 最大              | 最大               | 最大             |                        |                        |                        | 最大                    | 最大                    | 最大                    | 最大                      | 最大                    | 最大                     | 最大              | 最大      | 最大    |      |          |                             |                    |
| 2.5                    | 3.5             | 15                    | 0.3                   | 2               | 11               | 6              | 0.3                    | -0.9                   | 600                    | 40                    | 1.5                   | 15                    | 1.0                     | 15                    | -3                     | 60              | 0.83    | 1.3   | CK-2 | 2-68B2A  |                             | MG15N2CK1          |
| 2.5                    | 3.5             | 15                    | 0.3                   | 2               | 11               | 6              | 0.3                    | -0.9                   | 600                    | 40                    | 1.5                   | 15                    | 1.0                     | 15                    | -3                     | 60              | 0.83    | 1.3   | YK-1 | 2-94C3A  |                             | MG15N2YK1          |
| 2.5                    | 3.5             | 25                    | 0.5                   | 2               | 15               | 5              | 0.5                    | -0.5                   | 600                    | 24                    | 1.7                   | 25                    | 1.0                     | 25                    | -3                     | 100             | 0.41    | 1.3   | CK-2 | 2-68B2A  |                             | MG25N2CK2          |
| 2.5                    | 3.5             | 25                    | 0.5                   | 2               | 15               | 5              | 0.5                    | -0.5                   | 600                    | 24                    | 1.7                   | 25                    | 1.0                     | 25                    | -3                     | 100             | 0.41    | 1.3   | YK-1 | 2-94C3A  |                             | MG25N2YK1          |
| 2.5                    | 3.5             | 25                    | 0.5                   | 2               | 15               | 5              | 0.5                    | -0.5                   | 600                    | 24                    | 1.7                   | 25                    | 1.0                     | 25                    | -3                     | 100             | 0.41    | 1.3   | YK-1 | 2-94D1A  |                             | MG25N2YK9          |
| 2.5                    | 3.5             | 25                    | 0.5                   | 2               | 14               | 6              | 0.5                    | -1.5                   | 600                    | 24                    | 1.7                   | 25                    | 1.0                     | 25                    | -3                     | 100             | 0.41    | 1.3   | CK-2 | 2-68B2A  |                             | MG25N2CK1          |
| 2.5                    | 3.5             | 25                    | 0.5                   | 2               | 14               | 6              | 0.5                    | -1.5                   | 600                    | 24                    | 1.7                   | 25                    | 1.0                     | 25                    | -3                     | 100             | 0.41    | 1.3   | YK-1 | 2-94C3A  |                             | MG25N2YK1          |
| 2.0                    | 2.5             | 30                    | 0.6                   | 1               | 12               | 2              | 0.6                    | -0.6                   | 300                    | 10                    | 1.5                   | 30                    | 1.0                     | 30                    | -3                     | 100             | 0.5     | 1.8   | CL-1 | 2-68A2A  |                             | MG30G2CL3          |
| 2.0                    | 2.5             | 30                    | 1.0                   | 1               | 12               | 3              | 0.6                    | -0.6                   | 300                    | 10                    | 1.6                   | 30                    | 1.0                     | 30                    | -2                     | 60              | 0.625   | 1.8   | YL-1 | 2-94C3A  |                             | MG30G2YL1          |
| 2.5                    | 3.5             | 40                    | 0.8                   | 2               | 17               | 3              | 0.8                    | -2.4                   | 600                    | 15                    | 1.8                   | 40                    | 1.2                     | 40                    | -3                     | 100             | 0.31    | 1.3   | YK-1 | 2-108A2A |                             | MG40S2YK1          |
| 2.0                    | 2.5             | 50                    | 1.0                   | 1               | 12               | 2              | 1.0                    | -1.0                   | 300                    | 6                     | 1.5                   | 50                    | 1.0                     | 50                    | -3                     | 100             | 0.41    | 1.3   | CL-1 | 2-68A2A  |                             | MG50G2CL3          |
| 2.0                    | 2.5             | 50                    | 1.0                   | 1               | 12               | 2              | 1.0                    | -1.0                   | 300                    | 6                     | 1.7                   | 50                    | 1.0                     | 50                    | -3                     | 100             | 0.41    | 1.3   | YL-1 | 2-94C3A  |                             | MG50G2YL1A         |
| 2.5                    | 3.5             | 50                    | 1.0                   | 2               | 15               | 5              | 1.0                    | -1.0                   | 600                    | 12                    | 1.7                   | 50                    | 1.0                     | 50                    | -3                     | 100             | 0.36    | 1.3   | CK-2 | 2-68B2A  |                             | MG50M2CK2          |
| 2.5                    | 3.5             | 50                    | 1.0                   | 2               | 15               | 5              | 1.0                    | -1.0                   | 600                    | 12                    | 1.7                   | 50                    | 1.0                     | 50                    | -3                     | 100             | 0.36    | 1.3   | YK-1 | 2-94C3A  |                             | MG50M2YK1          |
| 2.5                    | 3.5             | 50                    | 1.0                   | 2               | 15               | 5              | 1.0                    | -1.0                   | 600                    | 12                    | 1.7                   | 50                    | 1.0                     | 50                    | -3                     | 100             | 0.36    | 1.3   | YK-1 | 2-94D1A  |                             | MG50M2YK9          |
| 2.5                    | 3.5             | 50                    | 1.0                   | 2               | 15               | 5              | 1.0                    | -3.0                   | 600                    | 12                    | 1.8                   | 50                    | 2.0                     | 50                    | -3                     | 100             | 0.35    | 1.3   | CK-2 | 2-68B2A  |                             | MG50N2CK1          |
| 2.5                    | 3.2             | 50                    | 1.0                   | 2               | 13               | 4              | 1.0                    | -3.0                   | 600                    | 12                    | 1.8                   | 50                    | 1.0                     | 50                    | -3                     | 100             | 0.35    | 1.3   | YK-1 | 2-94C3A  |                             | MG50N2YK1          |
| 2.0                    | 2.5             | 75                    | 1.5                   | 2               | 12               | 2              | 1.5                    | -1.5                   | 300                    | 4                     | 1.5                   | 75                    | 2.0                     | 75                    | -3                     | 100             | 0.35    | 1.3   | CL-1 | 2-68A2A  |                             | MG75G2CL1          |
| 2.0                    | 2.5             | 75                    | 1.5                   | 2               | 12               | 2              | 1.5                    | -1.5                   | 300                    | 4                     | 1.7                   | 75                    | 1.0                     | 75                    | -3                     | 100             | 0.36    | 1.3   | YL-1 | 2-94C3A  |                             | MG75G2YL1A         |
| 2.0                    | 2.5             | 75                    | 2.0                   | 2               | 12               | 4              | 2.0                    | -2.0                   | 300                    | 4                     | 1.5                   | 75                    | 2.0                     | 75                    | -3                     | 100             | 0.35    | 1.3   | CL-1 | 2-68A2A  |                             | MG75H2CL1          |
| 2.0                    | 2.5             | 75                    | 2.0                   | 2               | 12               | 4              | 2.0                    | -2.0                   | 300                    | 4                     | 1.7                   | 75                    | 1.0                     | 75                    | -3                     | 100             | 0.35    | 1.3   | YL-1 | 2-94C3A  |                             | MG75H2YL1A         |



FD-9



FD-10



FD-12

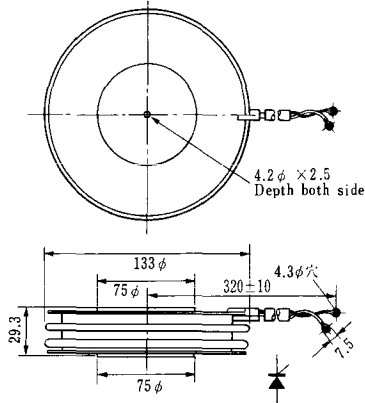


〈寸法図単位：mm〉

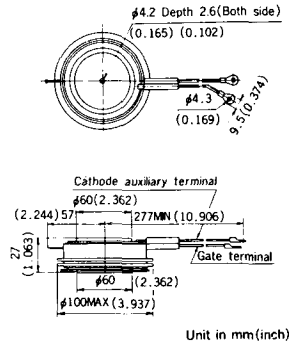


〈寸法図単位：mm〉

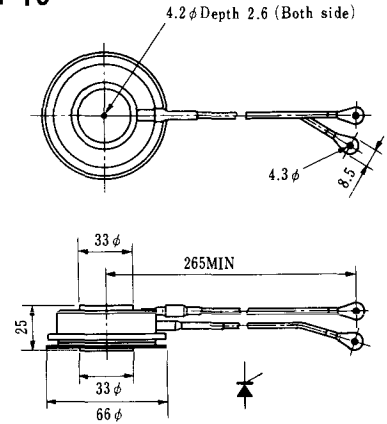
H-17



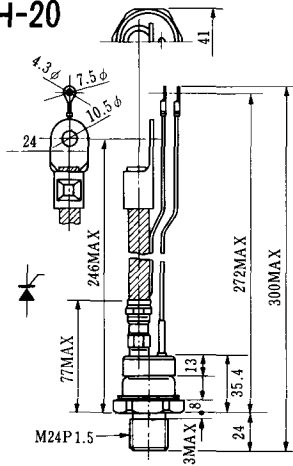
H-18



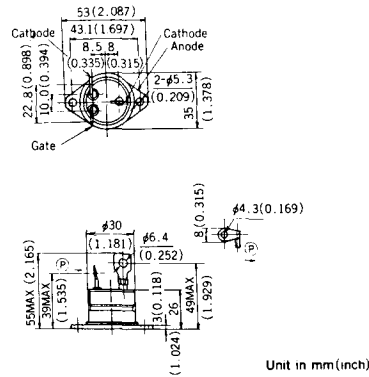
H-19



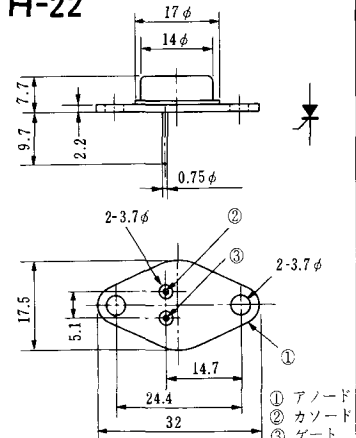
H-20



H-21



H-22



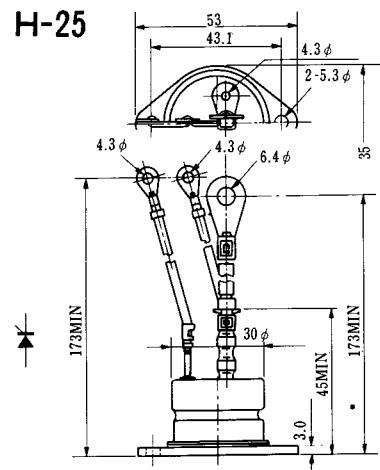
### H-23



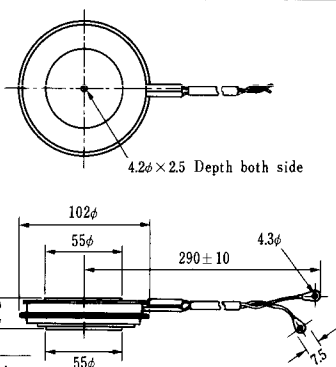
### H-24



### H-25



### H-26



| Type | Direction of polarity |
|------|-----------------------|
|------|-----------------------|

|      |  |
|------|--|
| CA12 |  |
|------|--|

### H-27

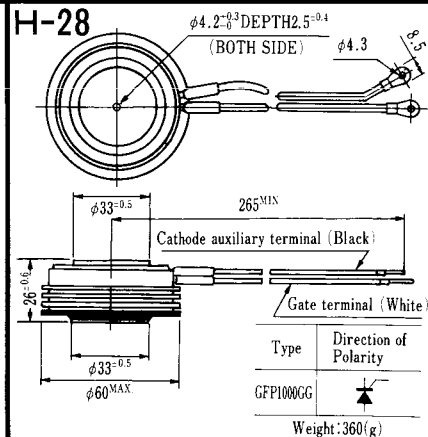


| Type | Direction of polarity |
|------|-----------------------|
|------|-----------------------|

|       |  |
|-------|--|
| CF11V |  |
|-------|--|

(注) CC11V: 400 ± 10  
CF11V: 250 ± 10

### H-28



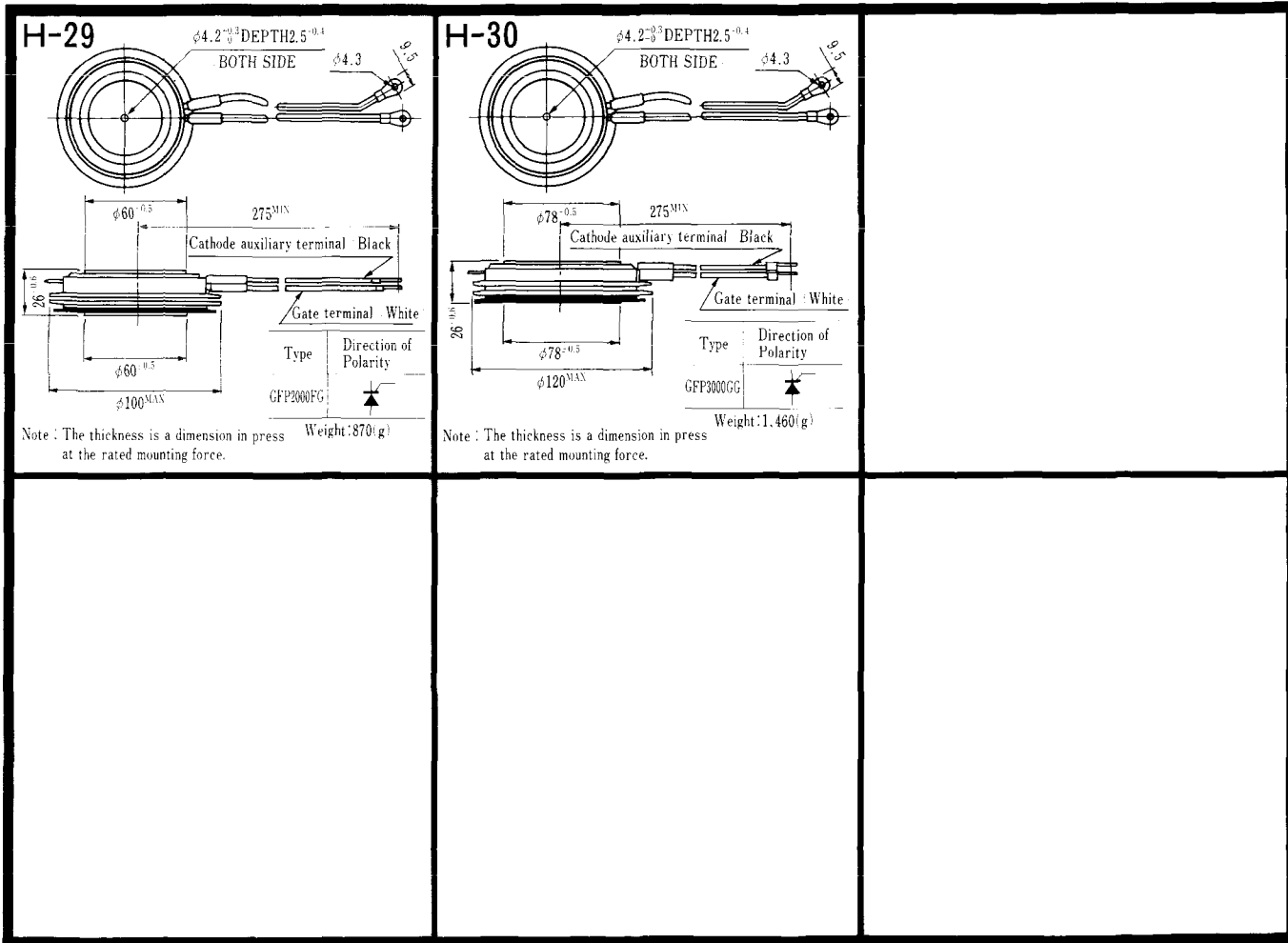
| Type | Direction of Polarity |
|------|-----------------------|
|------|-----------------------|

|          |  |
|----------|--|
| GFP100GG |  |
|----------|--|

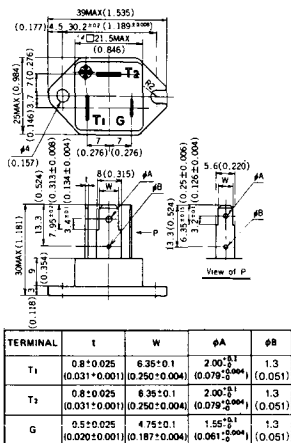
Weight: 360(g)

Note: The thickness is a dimension in press at the rated mounting force.



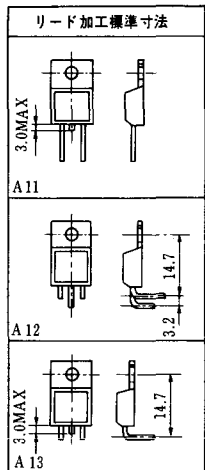
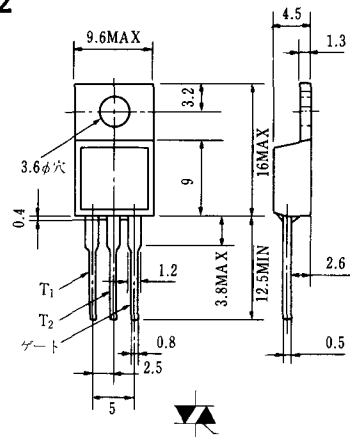


# HT-1

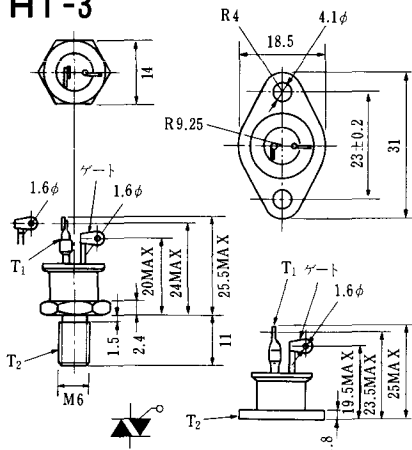


Unit in mm (inch)

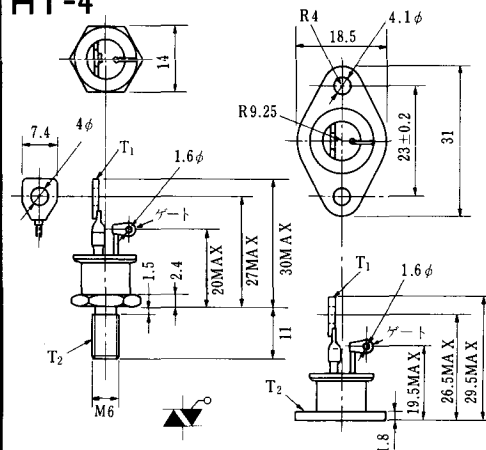
# HT-2



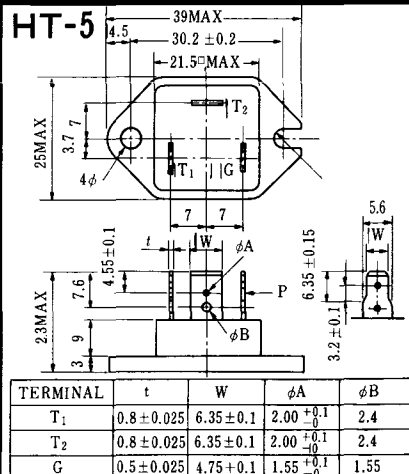
# HT-3



# HT-4



# HT-5



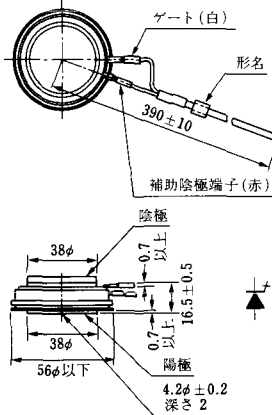
### M-1



### M-2



### M-3



### M-4



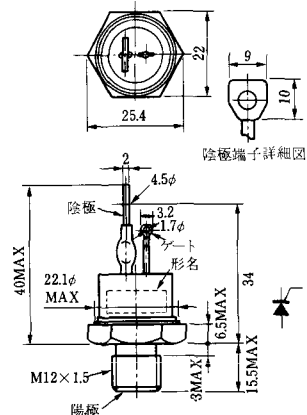
### M-5



### M-6



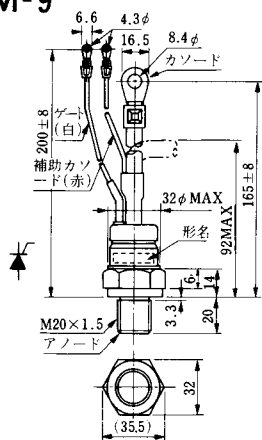
### M-7



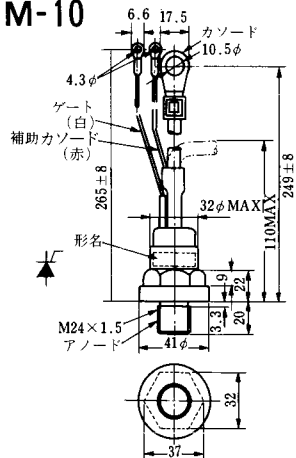
### M-8



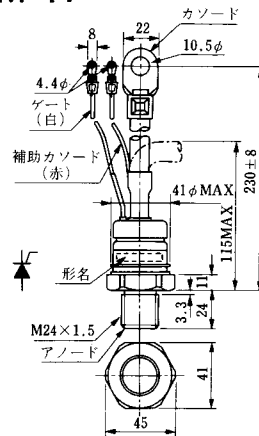
M-9



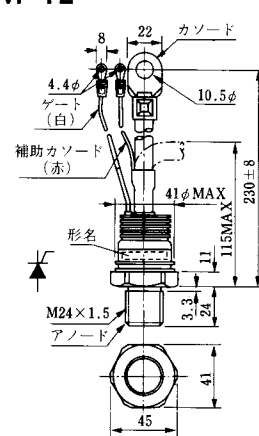
M-10



M-11



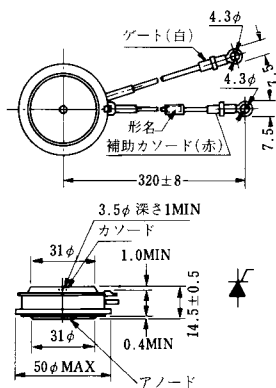
M-12



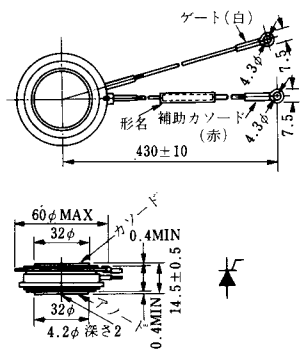
M-13



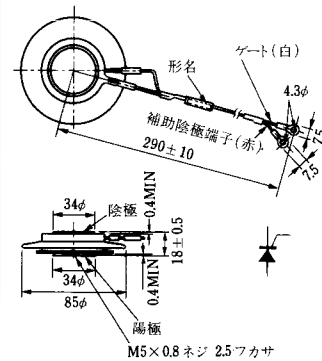
M-14

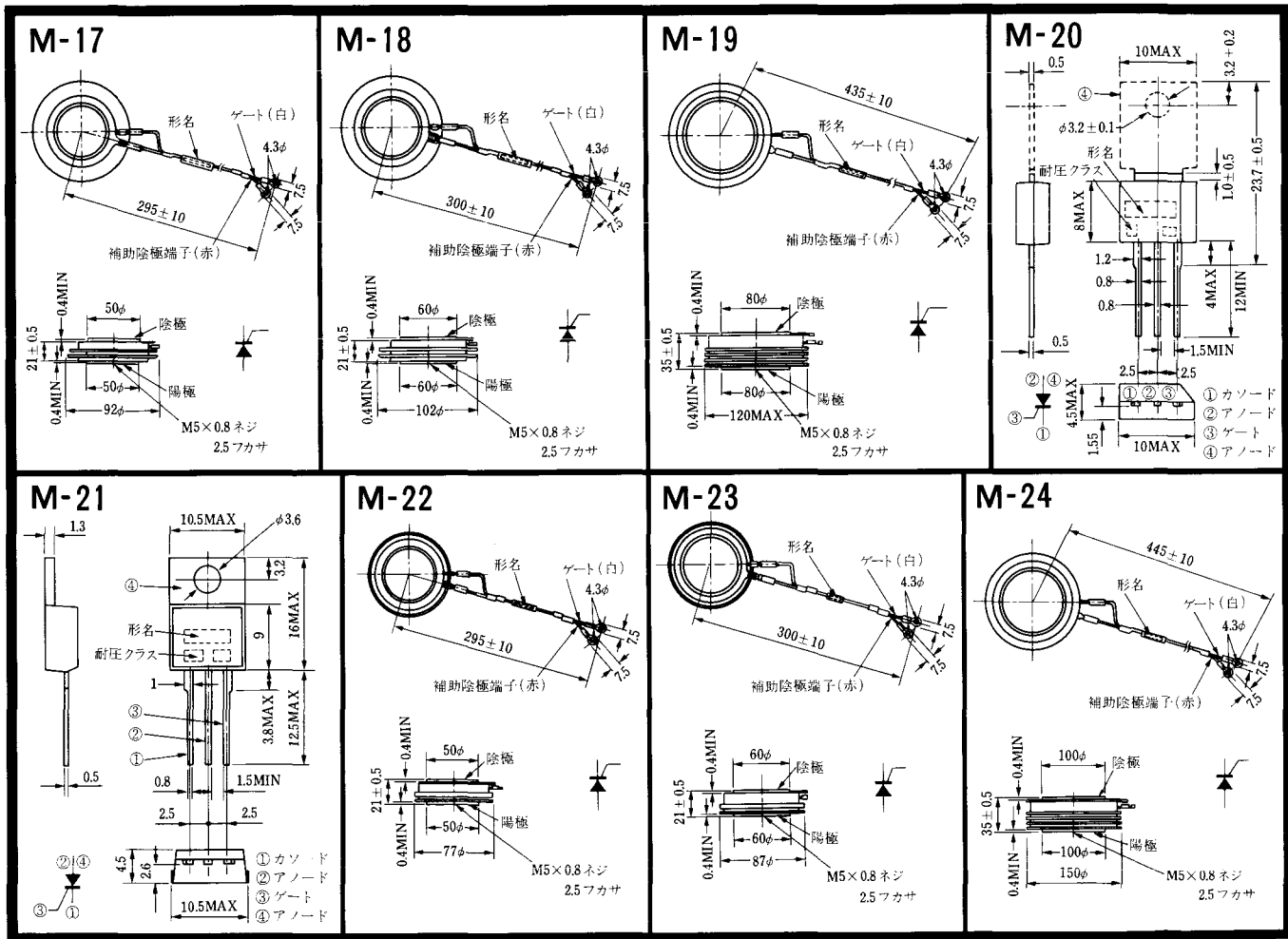


M-15



M-16





〈寸法図単位: mm〉

M-25



M-26



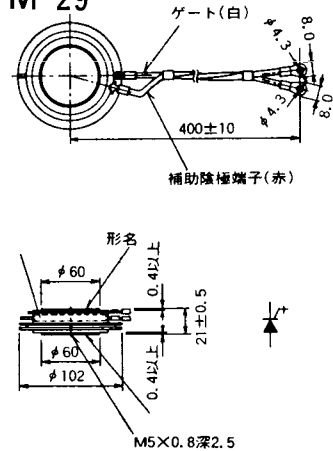
M-27



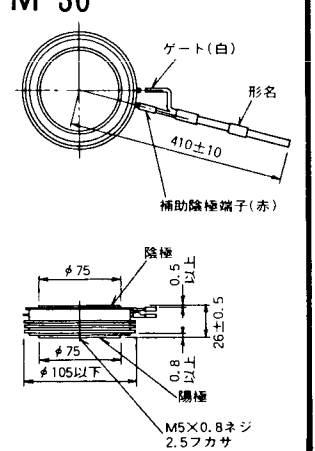
M-28



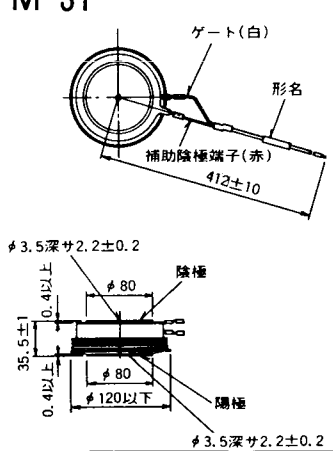
M-29



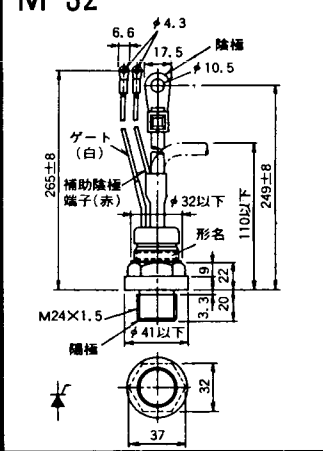
M-30



M-31

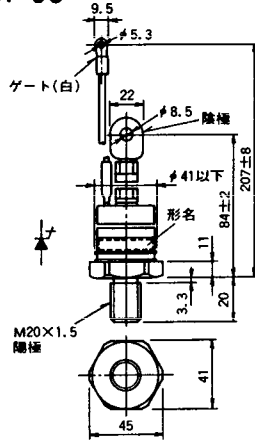


M-32

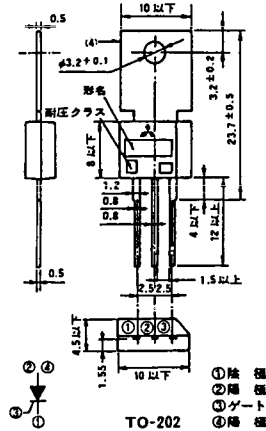


《寸法図単位：mm》

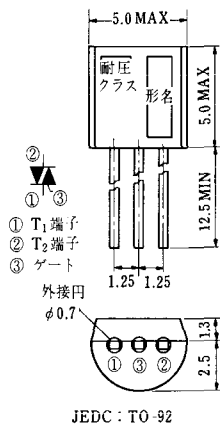
### M-33



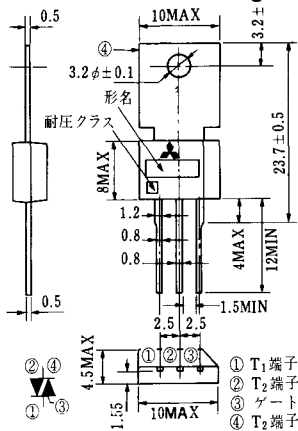
### M-34



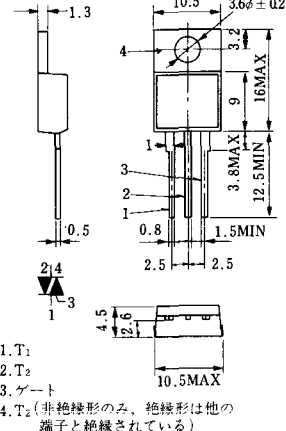
### MT-1



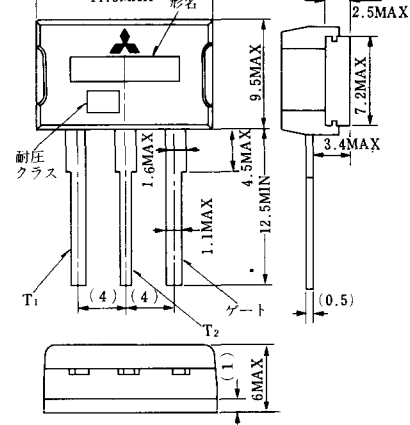
### MT-2



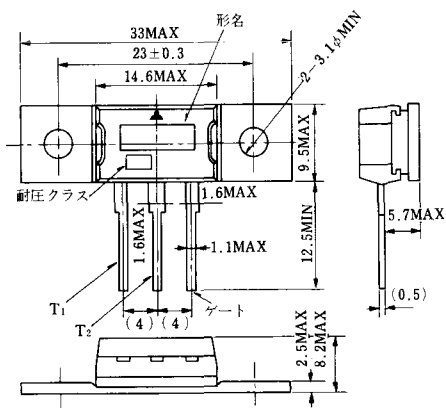
### MT-3



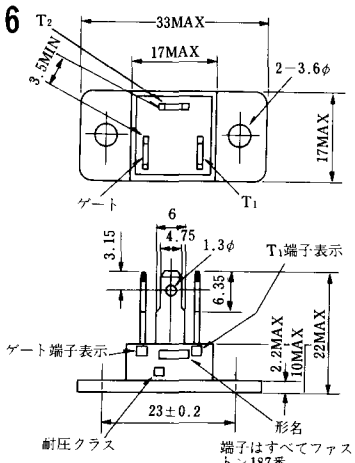
### MT-4



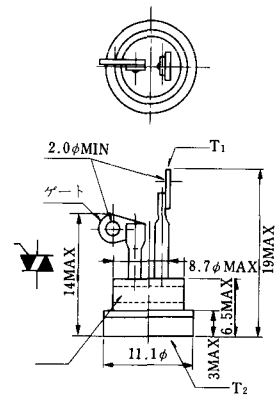
### MT-5



### MT-6



### MT-7



《寸法図単位：mm》



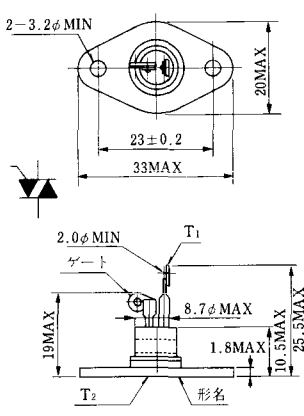
MT-8



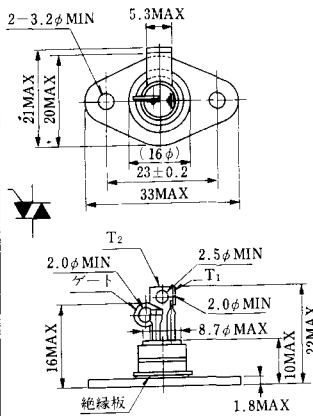
MT-9



MT-10



MT-11



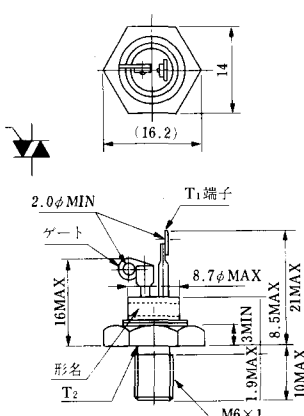
MT-12



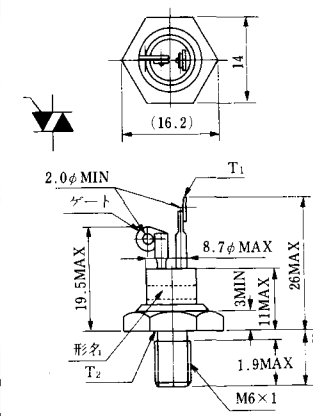
MT-13



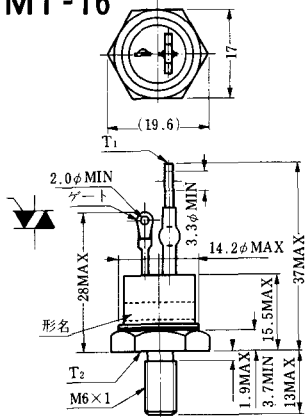
MT-14



MT-15



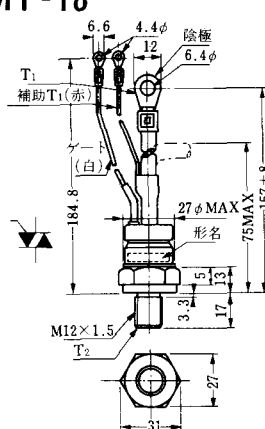
MT-16



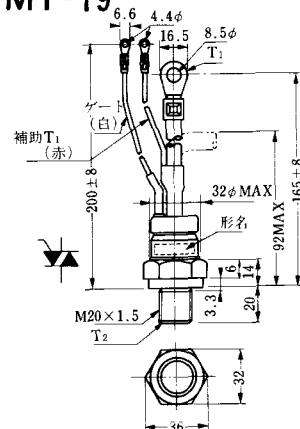
MT-17



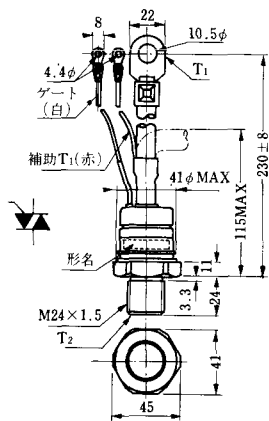
MT-18



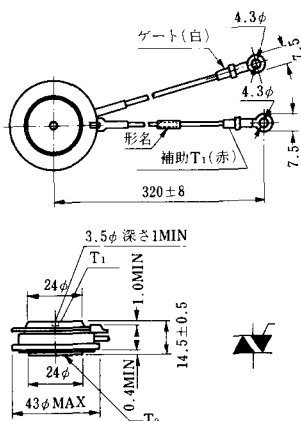
MT-19



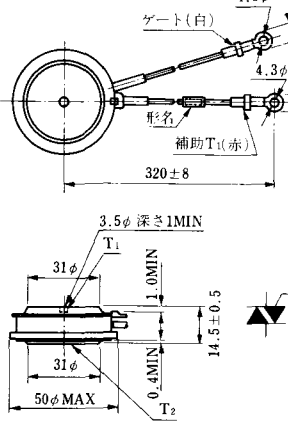
MT-20



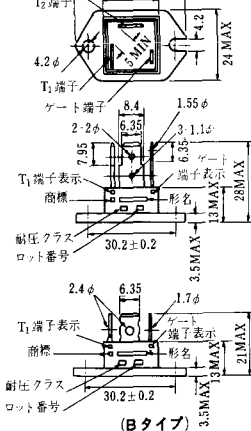
MT-21



MT-22



MT-23



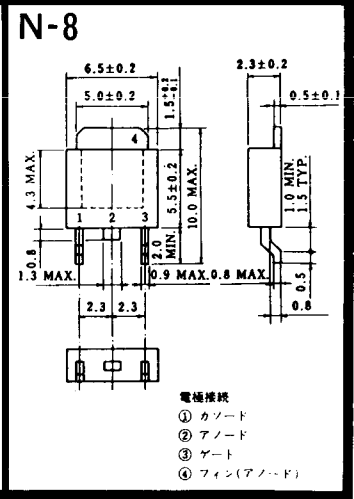
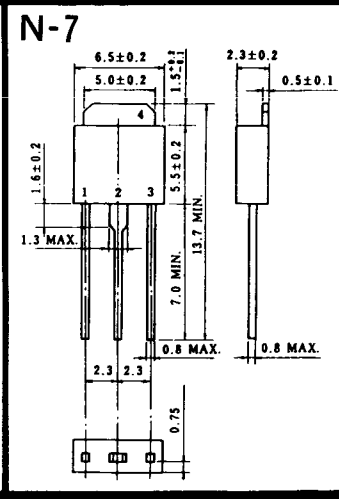
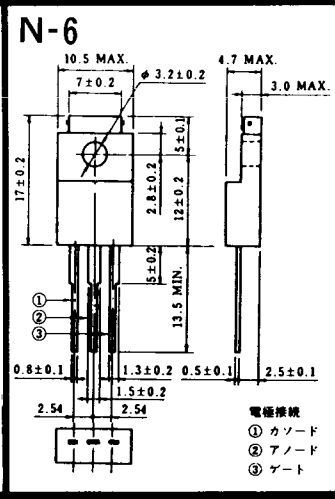
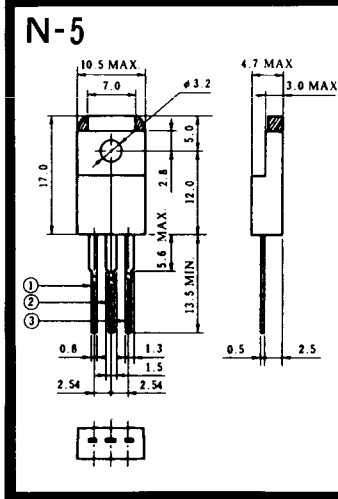
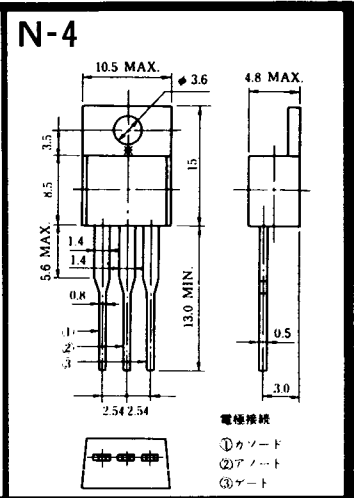
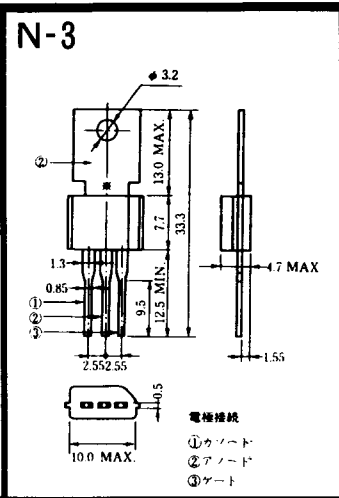
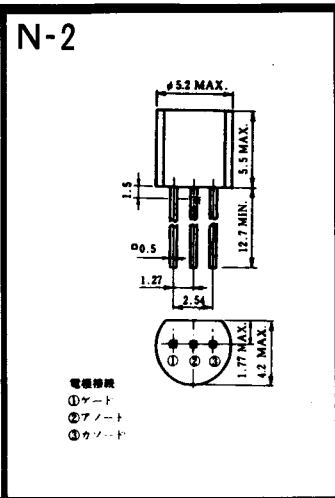
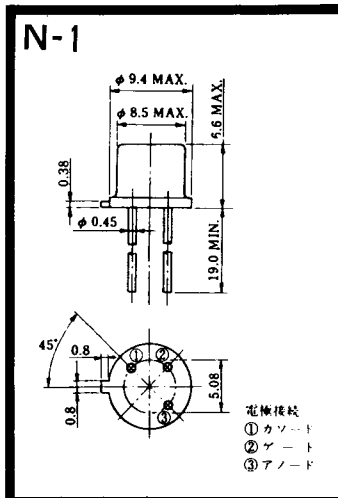
《寸法図単位：mm》

# MT-24

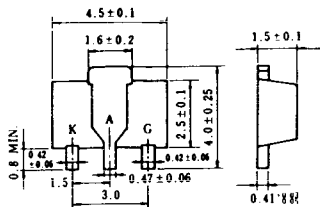


TO-3P

- ① T1端子
- ② T2端子
- ③ ゲート端子
- ④ T2端子



# N-9



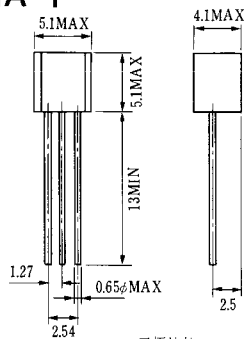
## 電極接続

K : カソード

A : アノード

G : ゲート

### NA-1

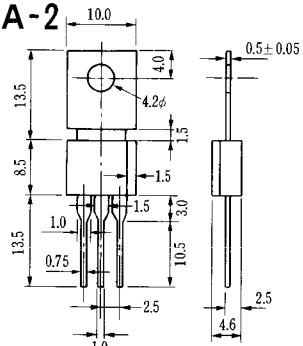


電極接続

1. ゲート
2. アノード
3. カソード

JEDEC: TO-92

### NA-2



電極接続

1. カソード
2. アノード
3. ゲート

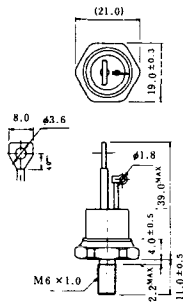
JEDEC: TO-202AA

### NI-1



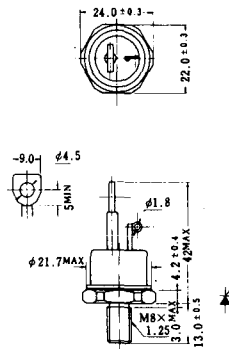
### NI-2

29RD



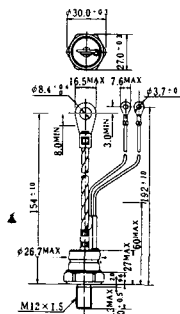
### NI-3

39RC  
59RC  
39RF  
59RF



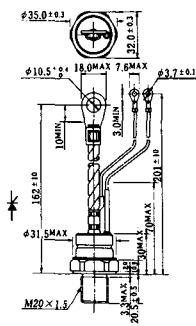
### NI-4

68RP, 88RP, 108RP, 68RS,  
88RS, 78RT, 88RLD, 88RLE,  
88RLF, 88RLG, 88RLH, 108RLE



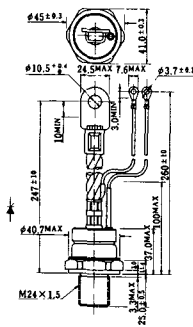
### NI-5

158RP, 208RP, 128RS, 178RS,  
156RT, 178RLD, 178RLE,  
178RLF, 178RLG, 178RLH,  
208RLE



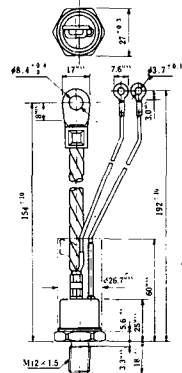
### NI-6

308RP, 408RP, 508RP, 278RS,  
358RS, 258RT, 258RLD, 258RLG,  
258RLH, 308RLE, 308RLF,  
358RLE



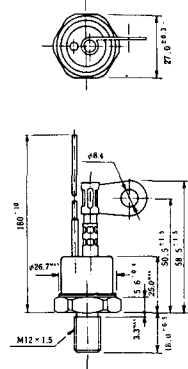
### NI-7

89RW<sub>JL</sub>  
129RW<sub>JL</sub>



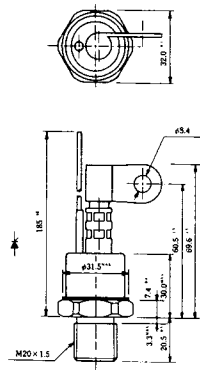
### NI-8

89RW  
129RW



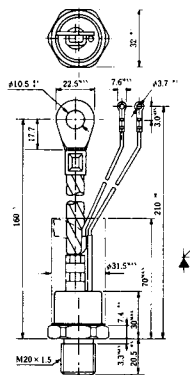
### NI-9

259RW  
309RW



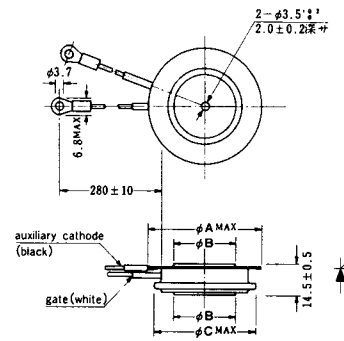
### NI-10

259RW<sub>J</sub>L  
309RW<sub>J</sub>L



### NI-11

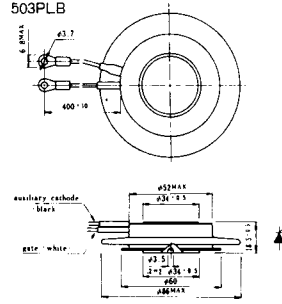
103PA  
253PA  
503PA  
553PA  
803PA  
103PLE  
103PLG  
103PLH  
203PLG  
253PLE  
253PLH  
353PLG  
403PLE  
403PLH



| 型名   | 103PA, 103PLE, 103PLG, 103PLH | 253PA, 203PLG, 253PLE, 253PLH | 503PA, 553PA, 353PLG, 403PLE, 403PLH | 803PA |
|------|-------------------------------|-------------------------------|--------------------------------------|-------|
| 寸法 A | 40                            | 46                            | 55.5                                 | 55.5  |
| 寸法 B | 16                            | 22                            | 30                                   | 32    |
| 寸法 C | 36                            | 42                            | 50.5                                 | 50.5  |

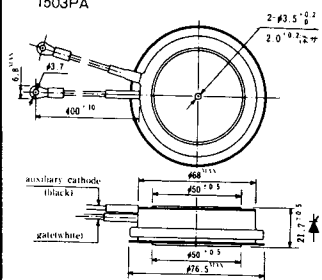
### NI-12

403PAB  
503PAB  
503PLB



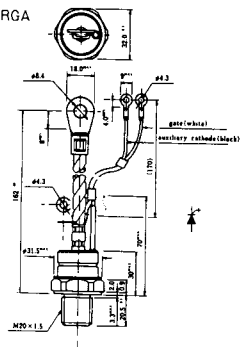
### NI-13

1003PA  
1003PAB  
1003PLF  
1003PLH  
1503PA



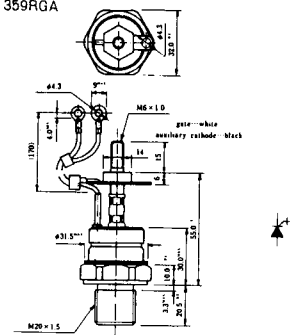
### NI-14

358RGA

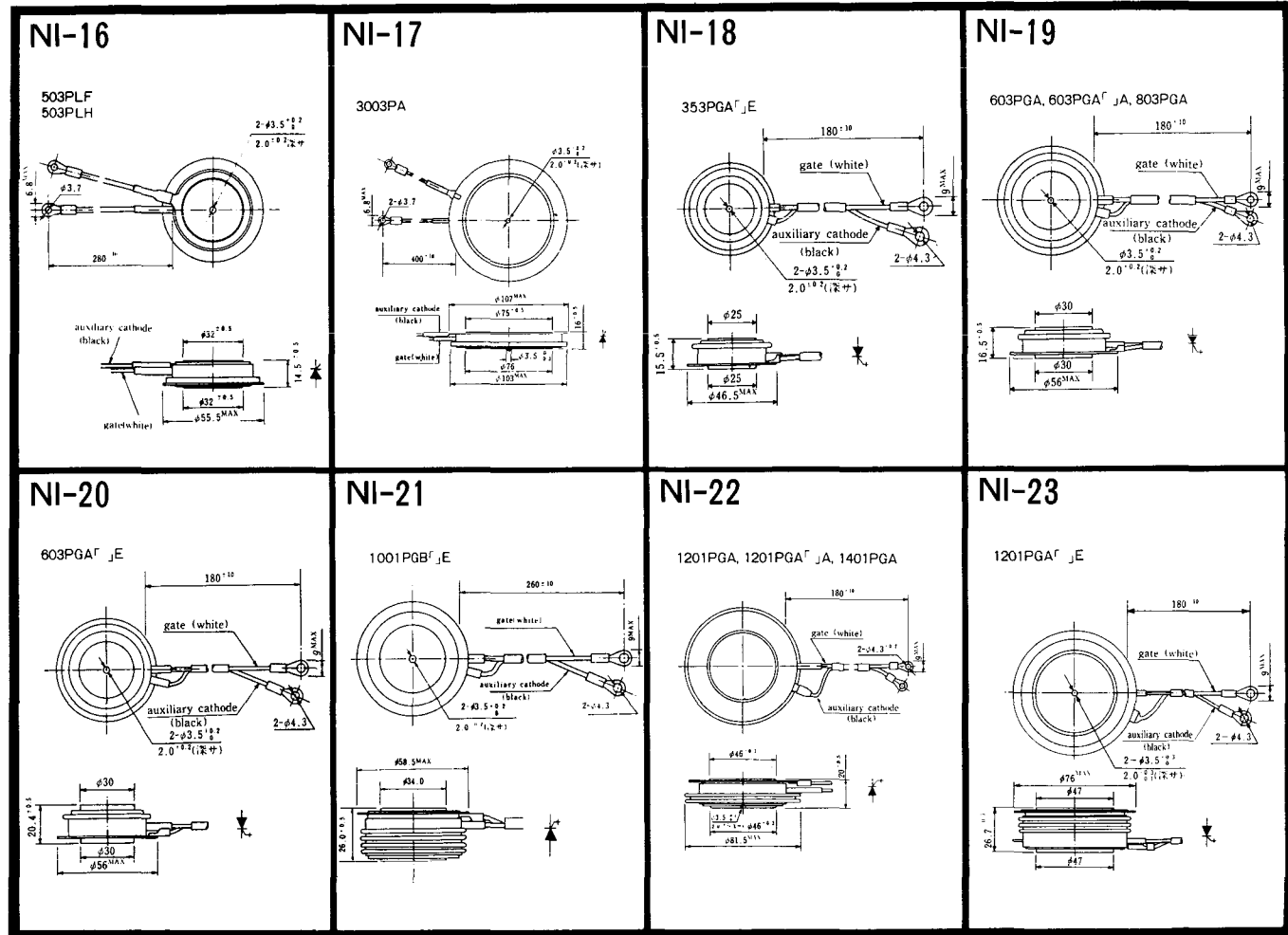


### NI-15

359RGA







《寸法图单位:mm》

NI-24

2001PGB<sup>r</sup> JE



NI-25

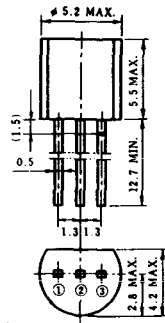
NI-26

### NT-1



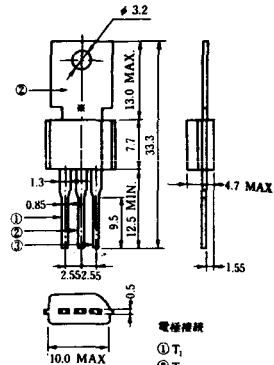
電極接続  
① T<sub>1</sub>  
② ゲート  
③ T<sub>2</sub>

### NT-2



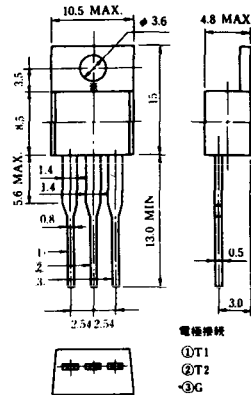
電極接続  
① T<sub>1</sub>  
② ゲート  
③ T<sub>2</sub>

### NT-3



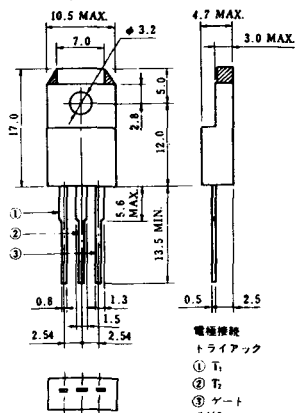
電極接続  
① T<sub>1</sub>  
② T<sub>2</sub>  
③ ゲート

### NT-4



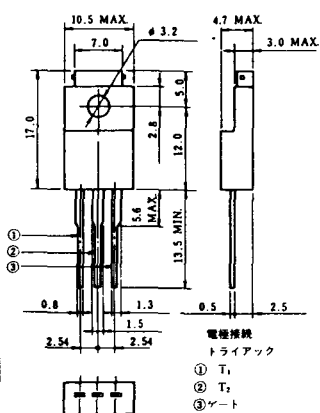
電極接続  
① T<sub>1</sub>  
② T<sub>2</sub>  
③ G

### NT-5



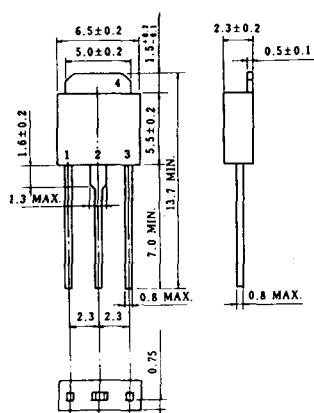
電極接続  
トライアック  
① T<sub>1</sub>  
② T<sub>2</sub>  
③ ゲート  
④ G

### NT-6

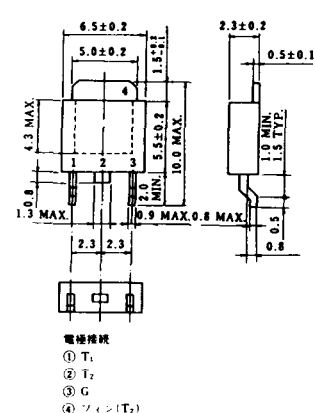


電極接続  
トライアック  
① T<sub>1</sub>  
② T<sub>2</sub>  
③ ゲート  
④ G  
⑤ 2k

### NT-7

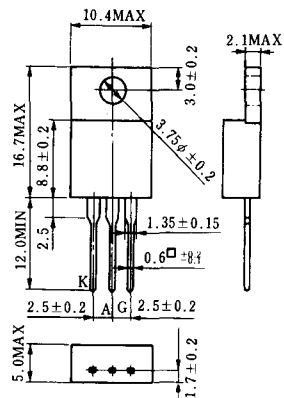


### NT-8



電極接続  
① T<sub>1</sub>  
② T<sub>2</sub>  
③ G  
④ ツイン(T<sub>2</sub>)

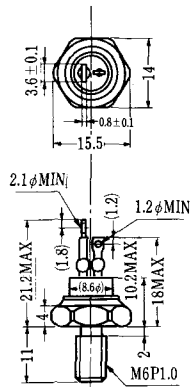
### S-1



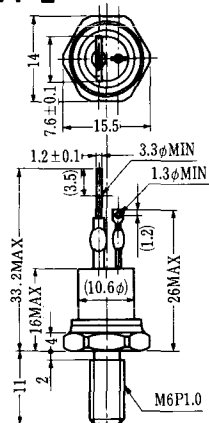
### ST-1



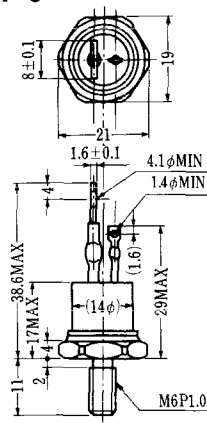
SA-1



SA-2



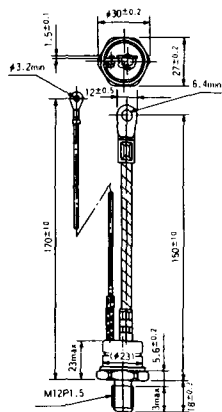
SA-3



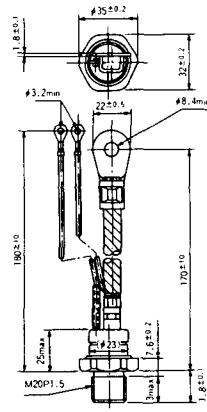
SA-4



SA-5



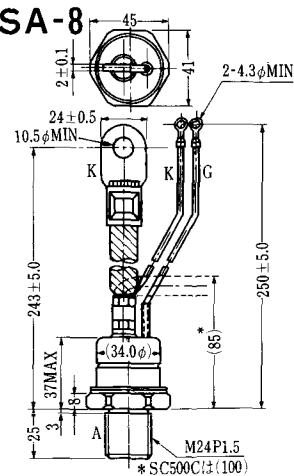
SA-6

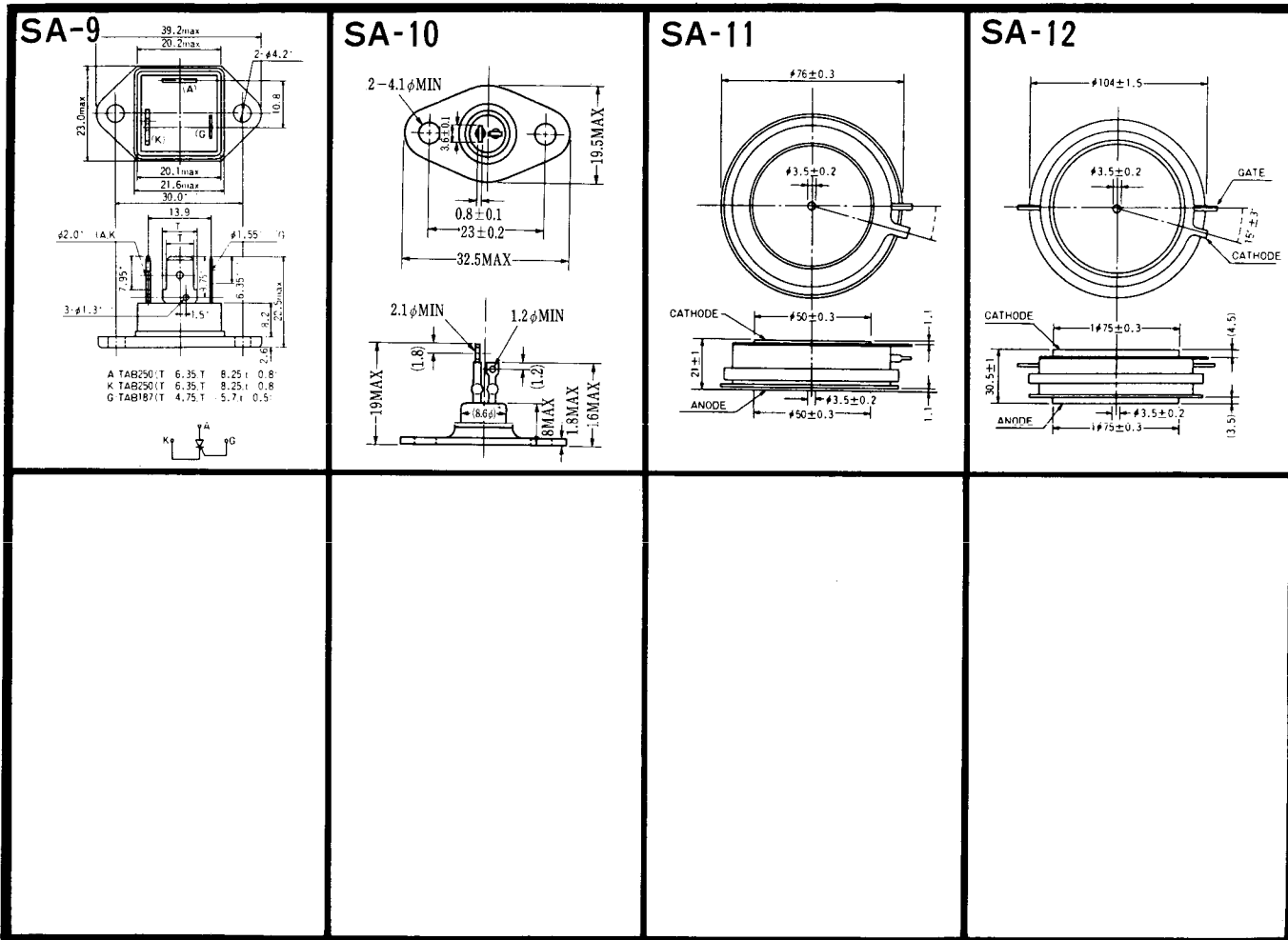


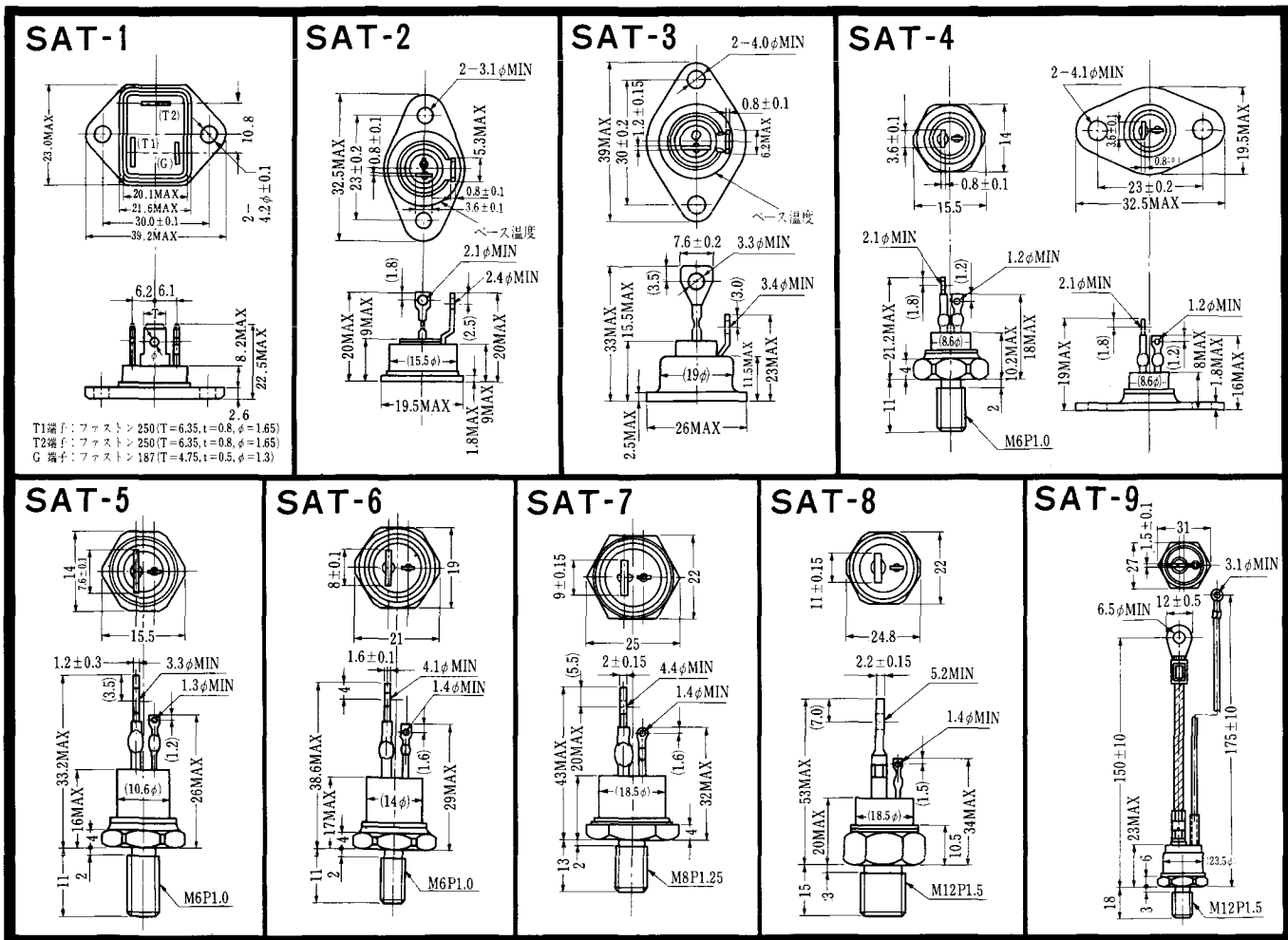
SA-7



SA-8







SAT-10

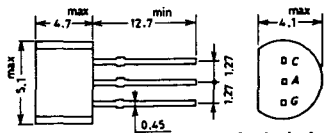


SAT-11



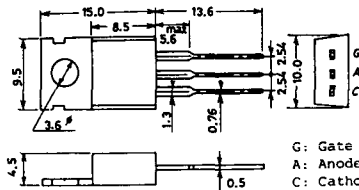


### SY-1 (1096A)



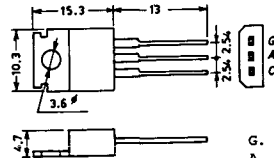
C: Cathode  
A: Anode  
G: Gate

### SY-2 (1151)



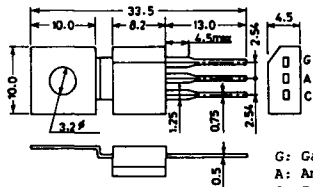
G: Gate  
A: Anode  
C: Cathode

### SY-3 (1104)



G: Gate  
A: Anode  
C: Cathode

### SY-4 (1150)



G: Gate  
A: Anode  
C: Cathode

1097A



G: Gate

1102



1141



1142



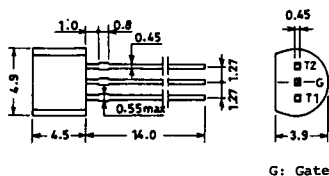
1144



1155

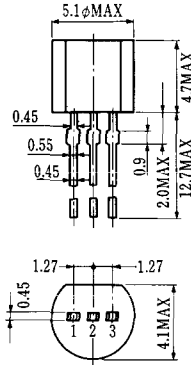


1192A



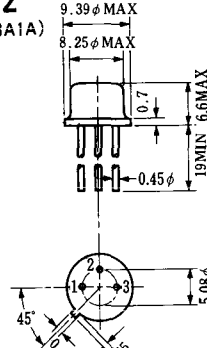
G: Gate

**T-1 (13-5A1A)**



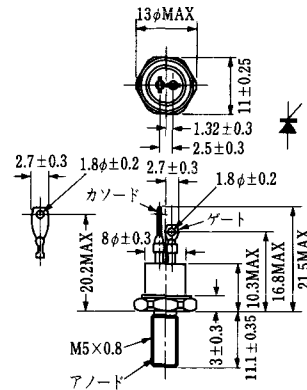
- 1 ゲート
- 2 アノード
- 3 カソード

**T-2 (13-8A1A)**



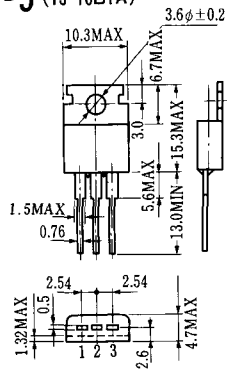
1. カソード
2. ゲート
3. アノード(ケース)

**T-3 (13-8C1A)**



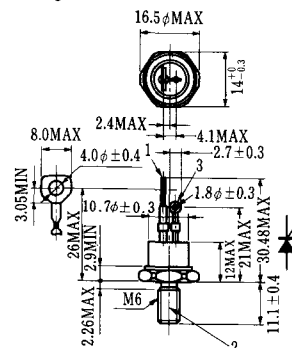
- 1 カソード
- 2 アノード
- 3 ゲート

**T-5 (13-10B1A)**



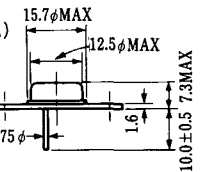
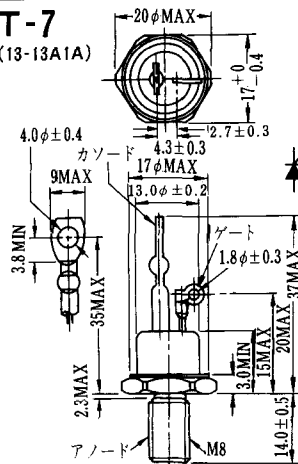
- 1 カソード
- 2 アノード
- 3 ゲート

**T-6 (13-11D1A)**



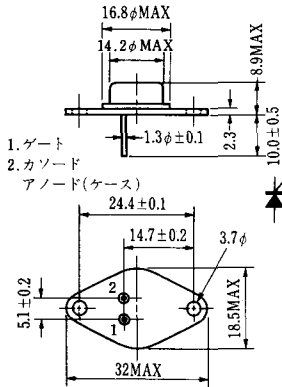
- 1 カソード
- 2 アノード
- 3 ゲート

**T-7 (13-13A1A)**



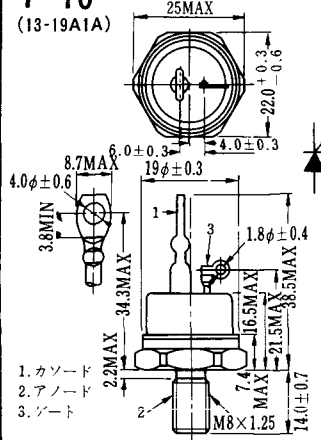
1. ゲート
2. カソード
3. アノード(ケース)

### T-9 (13-14A1A)



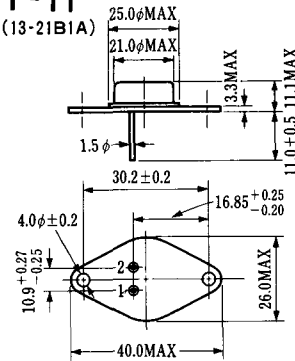
- 1. ゲート
- 2. カソード
- アノード(ケース)

### T-10 (13-19A1A)



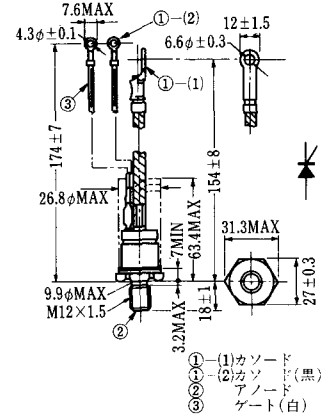
- 1. カソード
- 2. アノード
- 3. ゲート

### T-11 (13-21B1A)



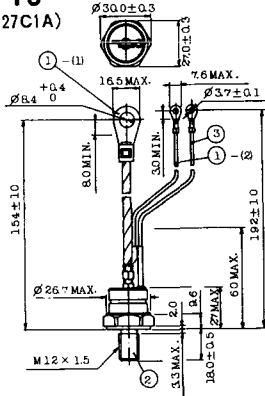
- 1. ゲート
- 2. カソード
- アノード(ケース)

### T-12 (13-27B1B)



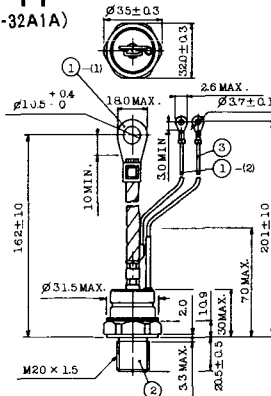
- ① (1) カソード
- ② (2) カソード(黒)
- ③ (1) アノード
- ④ (2) ゲート(白)

### T-13 (13-27C1A)



- 1-(1) カソード
- 2-(2) カソード(黒)
- 3 アノード
- 4 ゲート(白)

### T-14 (13-32A1A)



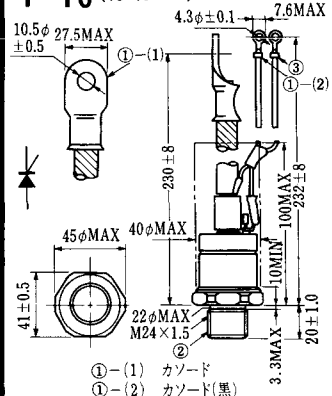
- 1-(1) カソード
- 2-(2) カソード(黒)
- 3 アノード
- 4 ゲート(白)

### T-15 (13-35C1B)



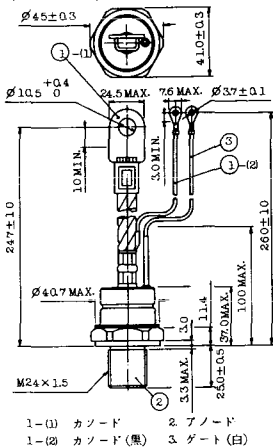
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

### T-16 (13-40B1A)

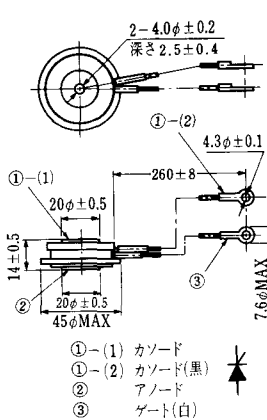


- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

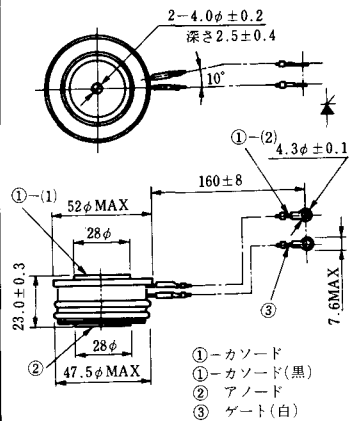
T-17 (13-42A1A)



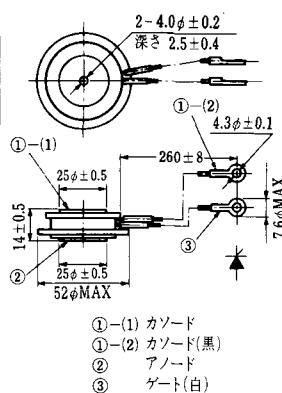
T-18 (13-45D1A)



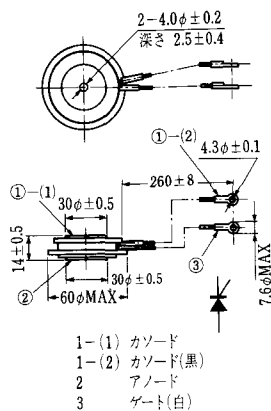
T-19 (13-52B1A)



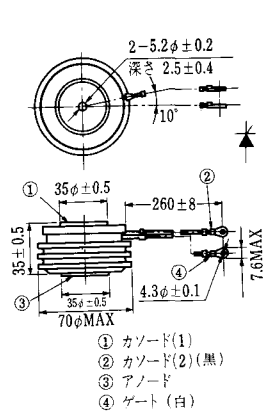
T-20 (13-52C1A)



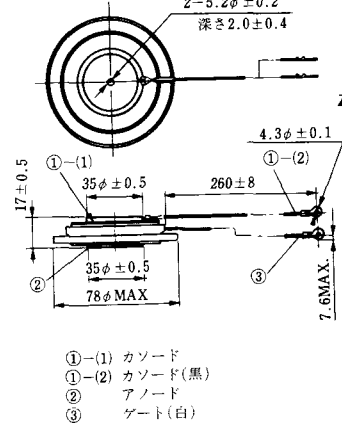
T-21 (13-60A1A)



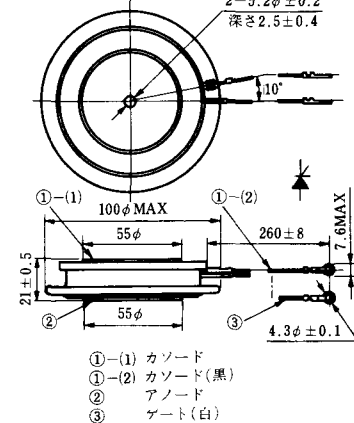
T-22 (13-70C1A)



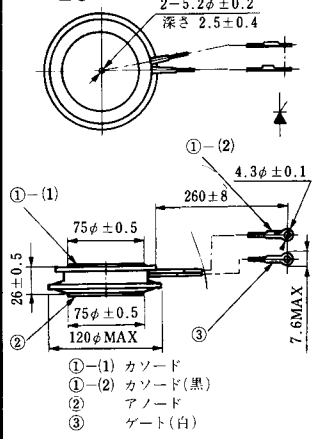
T-23 (13-78A1A)



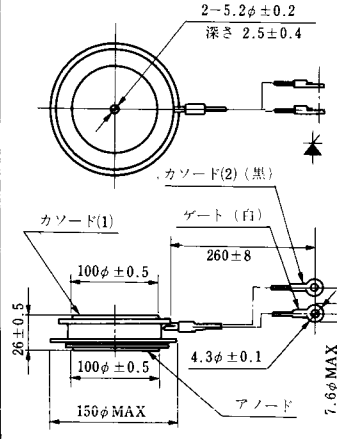
T-24 (13-100C1A)



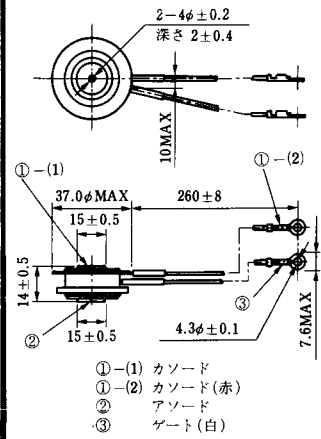
**T-25 (13-120A2A)**



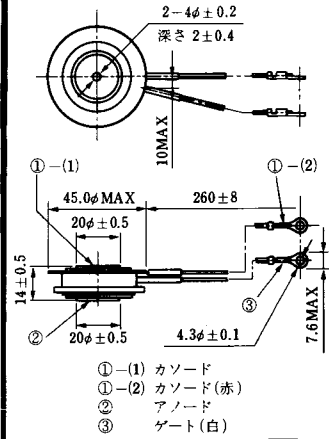
**T-26 (13-150A1A)**



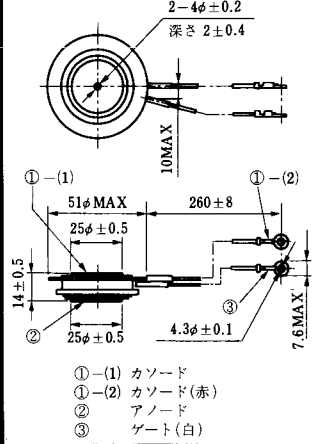
**T-27 (13-37A1A)**



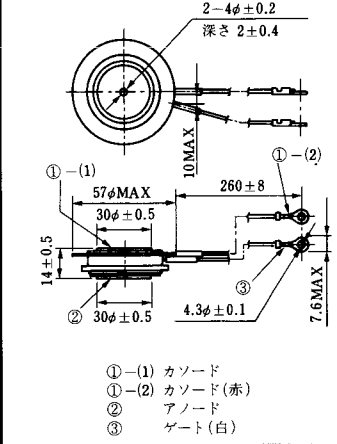
**T-28 (13-45E1A)**



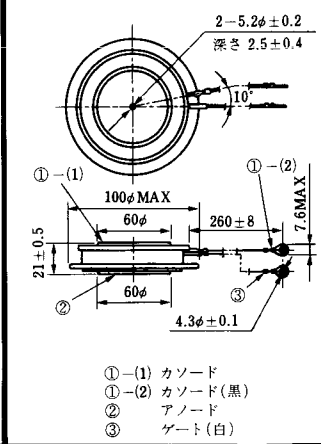
**T-29 (13-51A1A)**



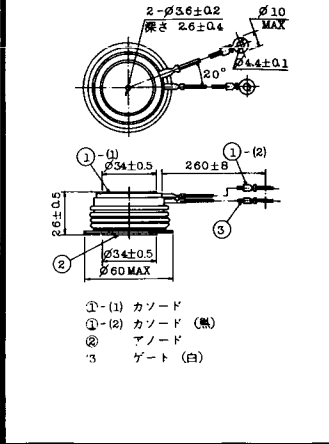
**T-30 (13-57A1A)**



**T-31 (13-100E1A)**

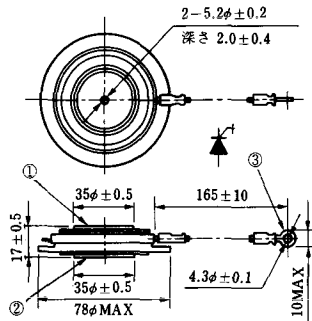


**T-32 (13-60E3A)**



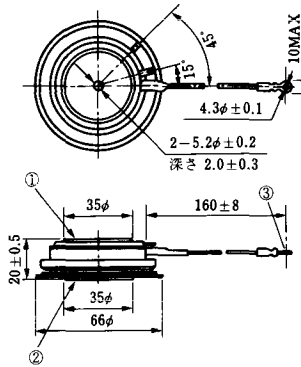
《寸法図単位：mm》

**T-33 (13-78B1A)**



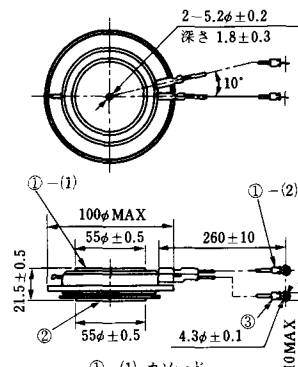
- ① カソード
- ② アノード
- ③ ゲート

**T-34 (13-66A1A)**



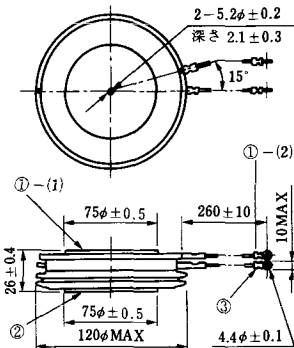
- ① カソード
- ② アノード
- ③ ゲート

**T-35 (13-100D1A)**



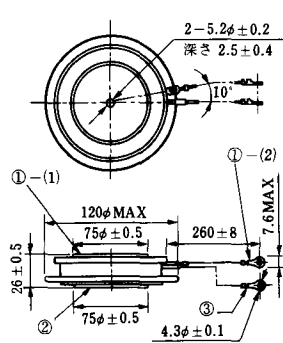
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

**T-36 (13-120E1A)**



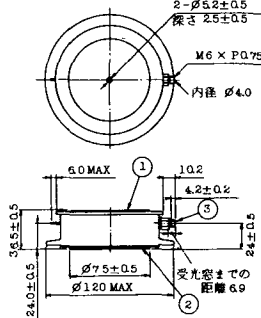
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

**T-37 (13-120A1A)**



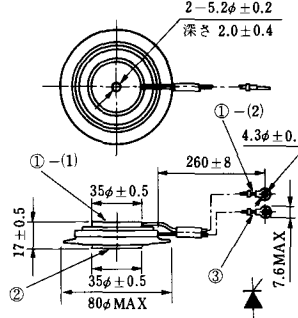
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

**T-38 (13-120C1A)**



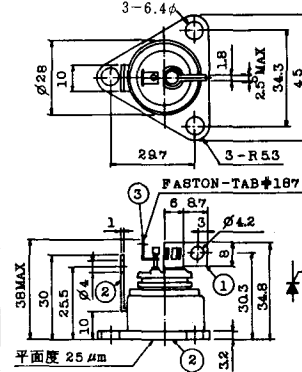
- ① カソード
- ② アノード
- ③ ゲート

**T-39 (13-80B1A)**



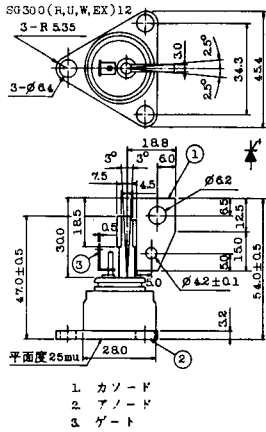
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

**T-40 (13-28A1A)**

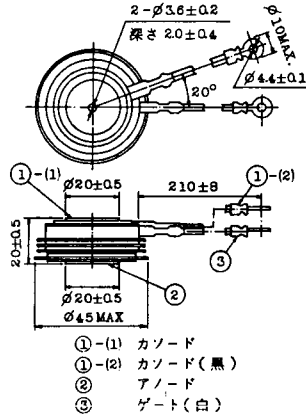


- 1. カソード
- 2. アノード
- 3. ゲート

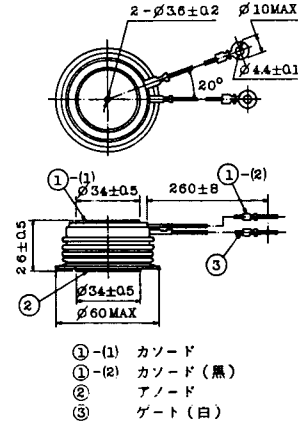
### T-41 (13-28A2A)



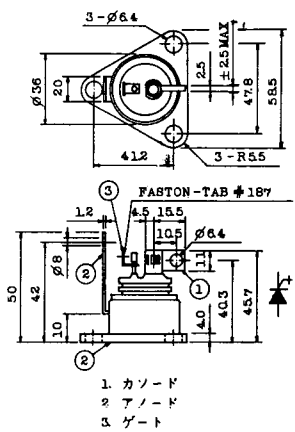
### T-42 (13-45F1A)



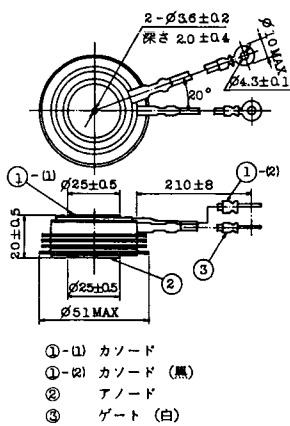
### T-43 (13-60E2A)



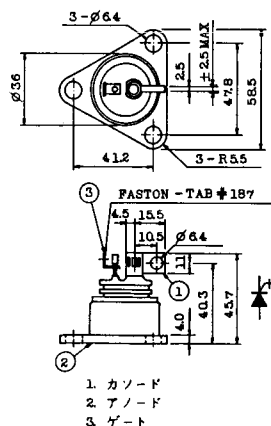
### T-44 (13-36A1A)



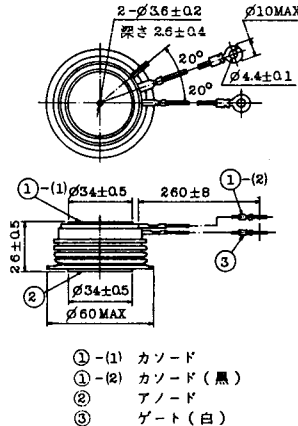
### T-45 (13-51B1A)



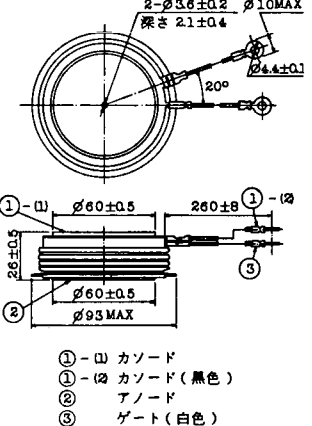
### T-46 (13-36B1A)



### T-47 (13-60E1A)



### T-48 (13-93C1A)



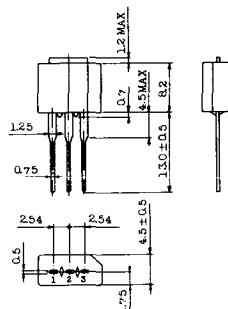


T-49 (13-75A1A)



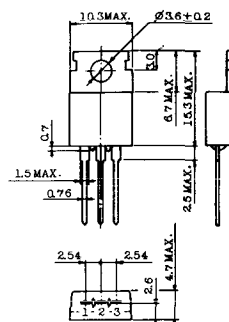
- 1-(1) カソード
- 1-(2) カソード(黒)
- 2 アノード
- 3 ゲート(白)

T-50 (13-10A3A)



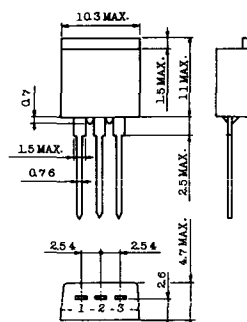
- 1 カソード
- 2 アノード
- 3 ゲート

T-51 (13-10D1A)



- 1 カソード
- 2 アノード
- 3 ゲート

T-52 (13-10D2A)



- 1 カソード
- 2 アノード
- 3 ゲート

T-53 (13-10E1B)



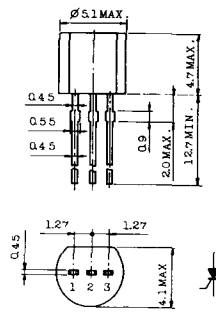
- 1 カソード
- 2 アノード
- 3 ゲート

T-54 (13-10F1B)



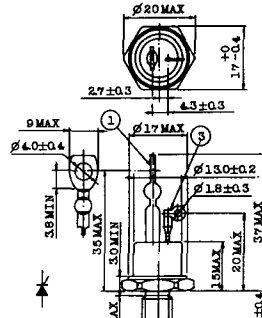
- 1 カソード
- 2 アノード
- 3 ゲート

T-55 (13-5A1D)



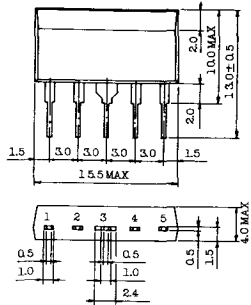
- 1 カソード
- 2 アノード
- 3 アノード

T-56 (13-13C1A)



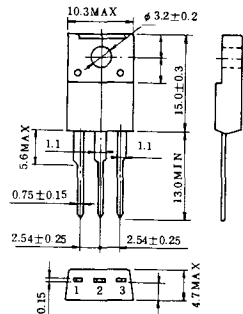
- 1 カソード
- 2 アノード
- 3 ゲート

T-57 (12-16C1A)



1. アノード (主)
2. ゲート (主)
3. カソード (共通)
4. ゲート (補助)
5. アノード (補助)

T-58 (13-10H1B)



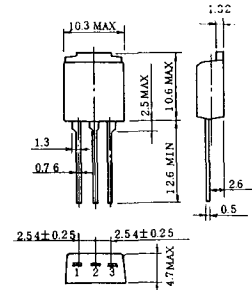
1. カソード
2. アノード
3. ゲート

T-59 (13-120A1A)



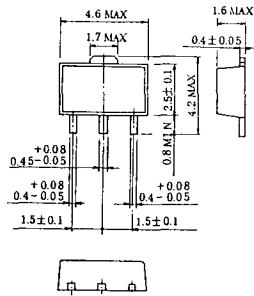
- 1-(1) カソード
- 1-(2) カソード (黒)
- 2 アノード
- 3 ゲート (白)

T-60



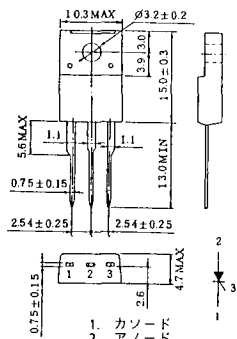
1. カソード
2. アノード
3. ゲート

T-61 (13-5B1A)



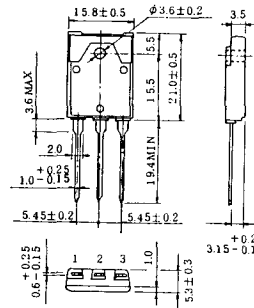
1. ゲート
2. アノード
3. カソード

T-62 (13-10H1A)

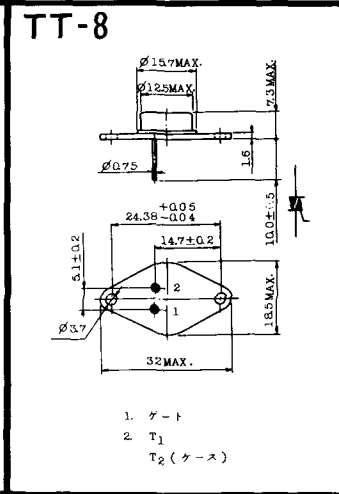
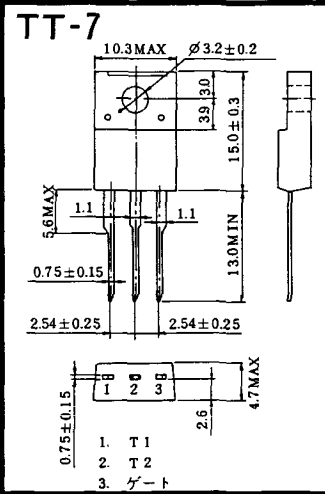
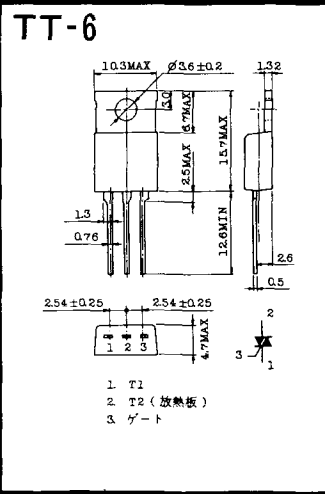
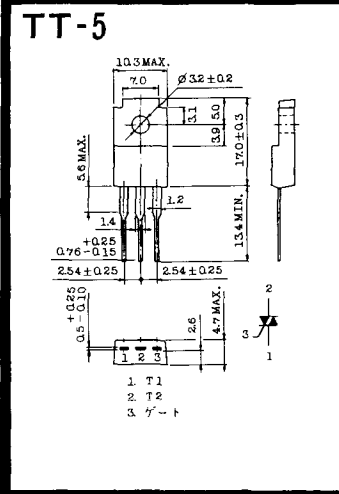
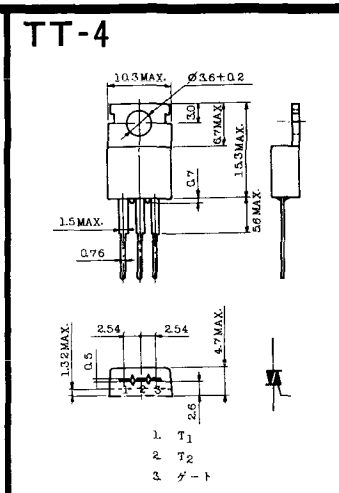
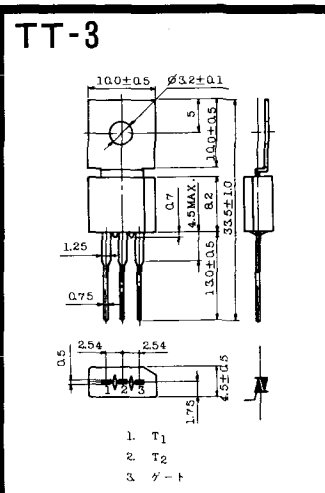
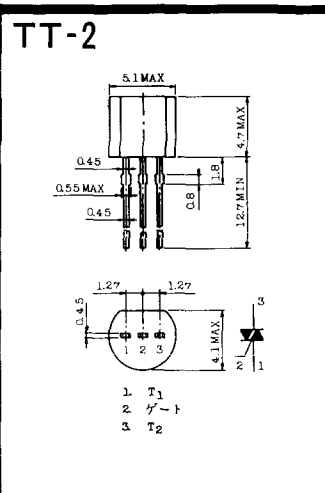
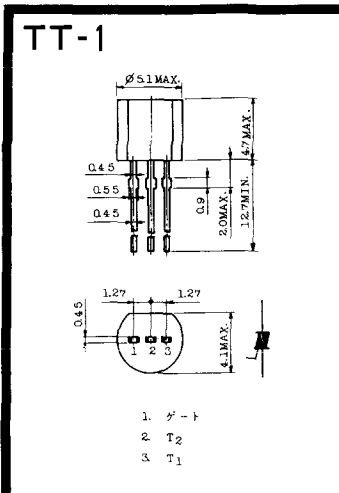


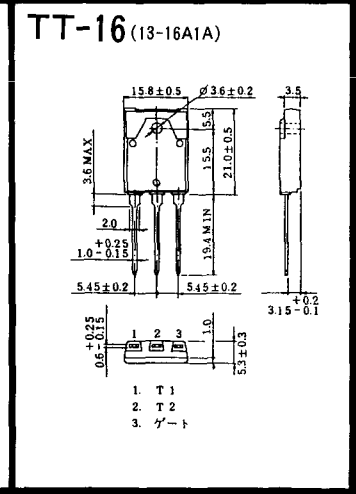
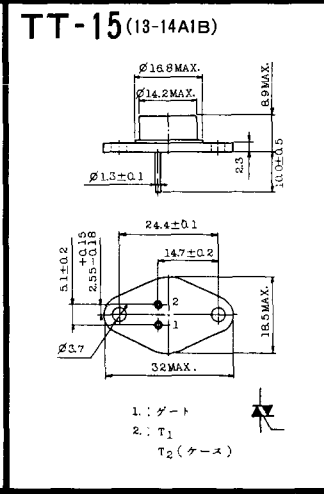
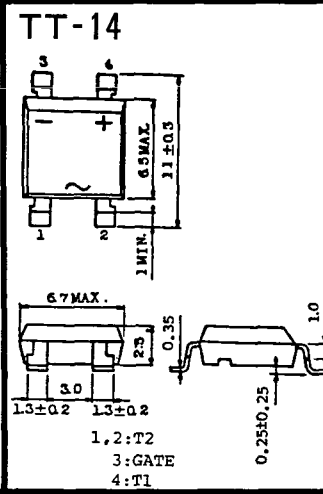
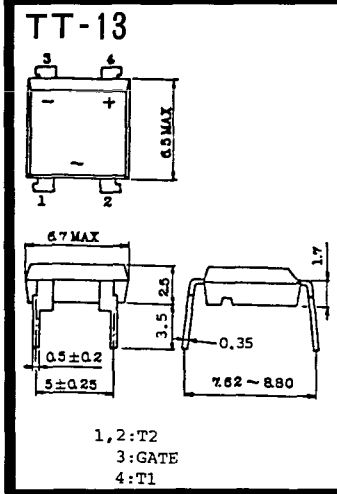
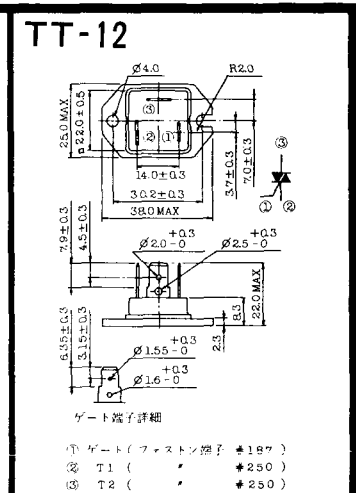
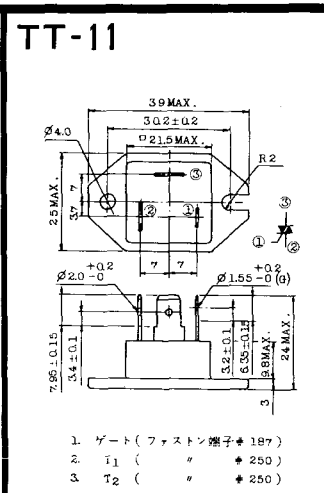
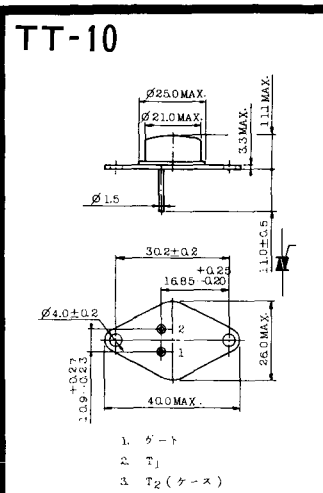
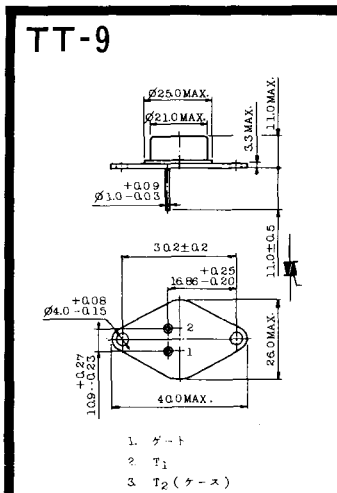
1. カソード
2. アノード
3. ゲート

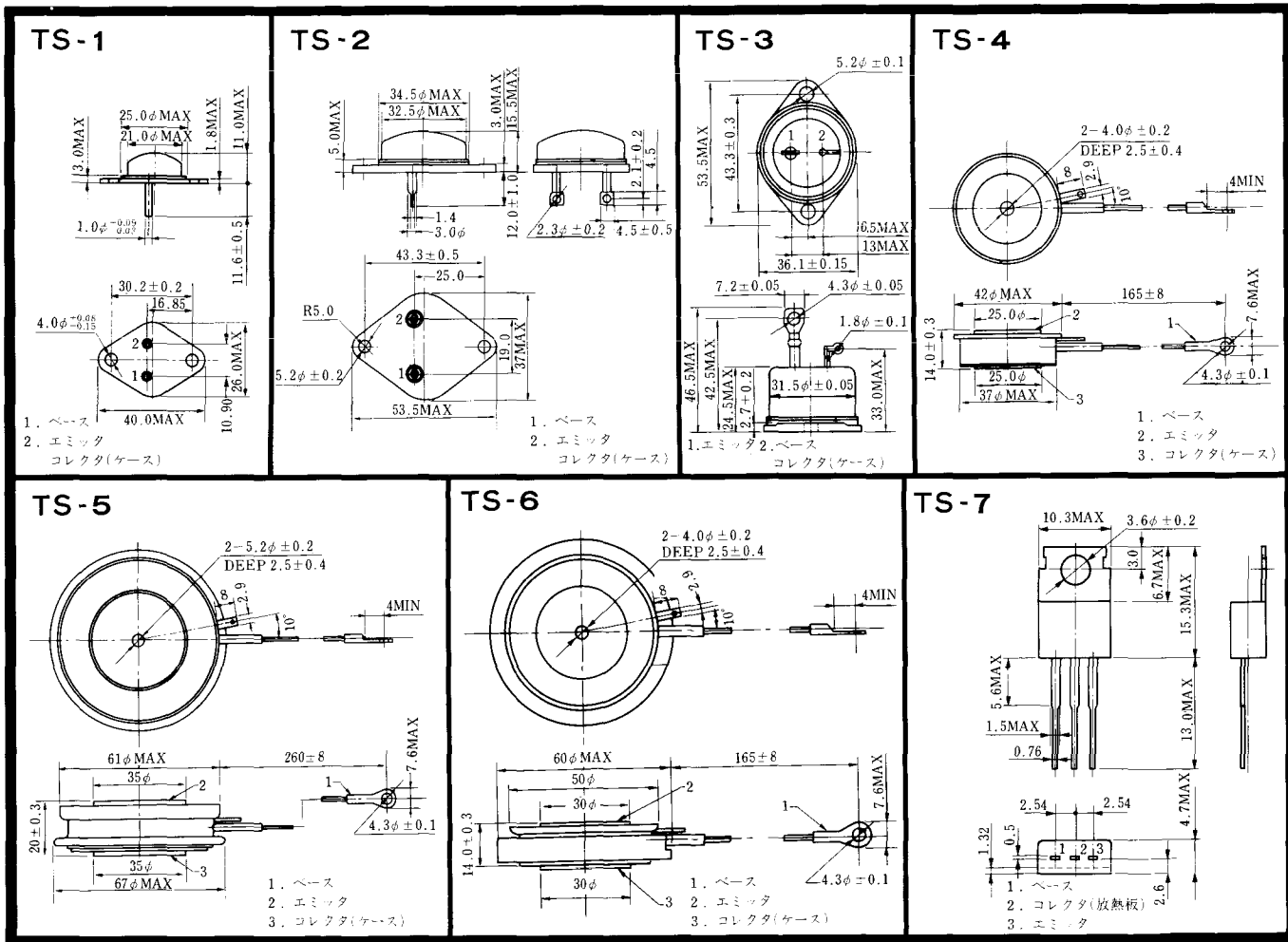
T-63 (13-16A1B)



1. カソード
2. アノード
3. ゲート







《寸法図単位：mm》

# TS-8



- 1. ベース
- 2. エミッタ  
コレクタ  
(ケース)

### S-62A1A



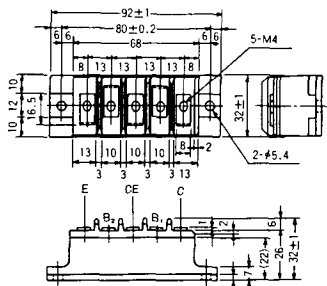
### S-80A1A



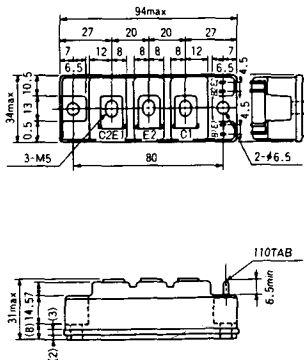
### S-88D1A



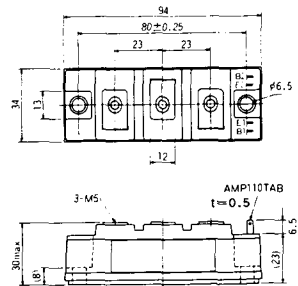
### S-92B1A



### S-94B1A



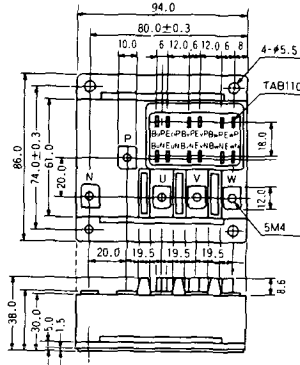
### S-94B1B



S-94B2A



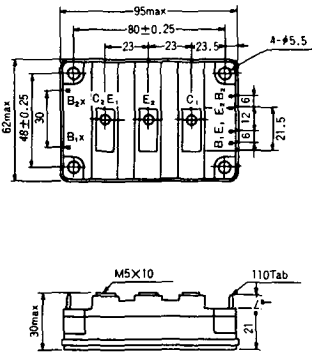
S-94D1A



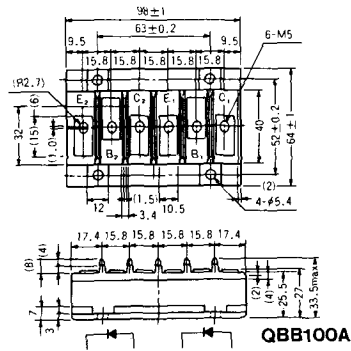
S-95A1A



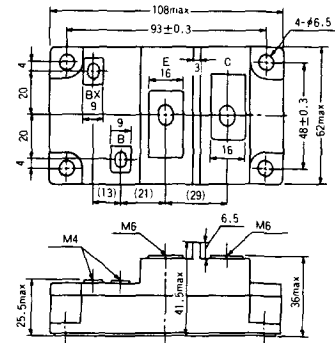
S-95B1A



S-98B1B

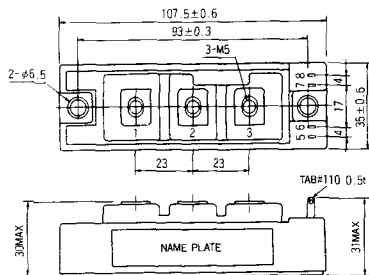


S-108A2A





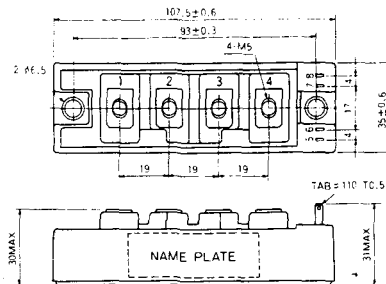
S-108B1A



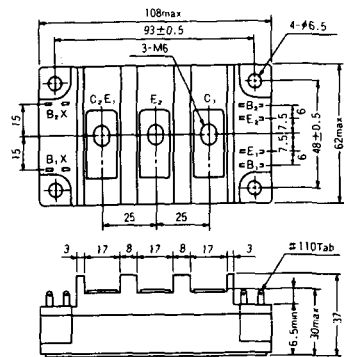
S-108B1B



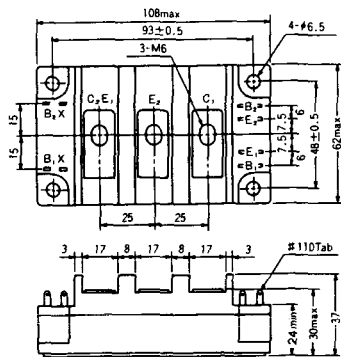
S-108B1C



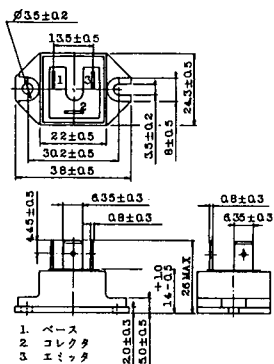
S-108B2A



S-108B2B



2-22B1A



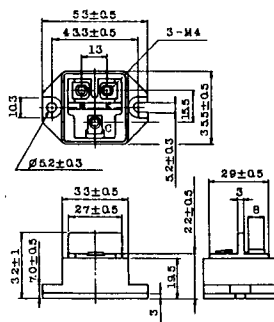
2-27A4A



2-33C1A



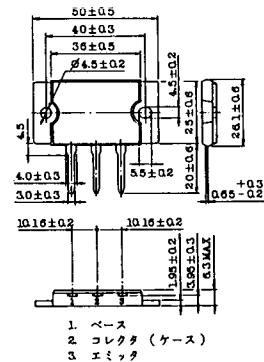
2-33D1A



2-33F1A



2-37A1A



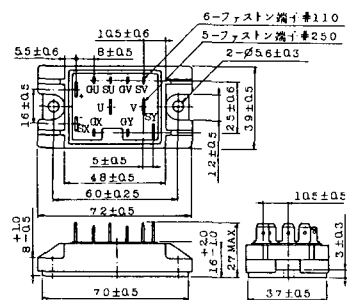
2-48A3A



2-48A3B



2-48A4A



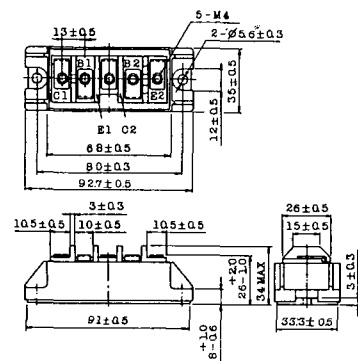
2-64A2A



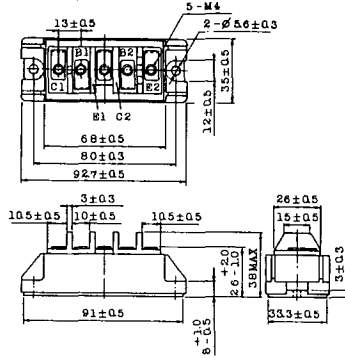
2-64A2B



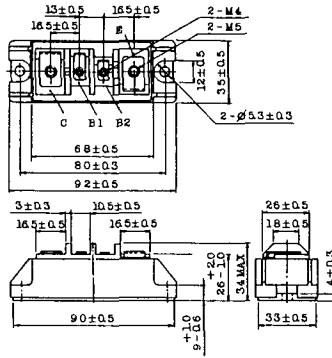
2-68A2A



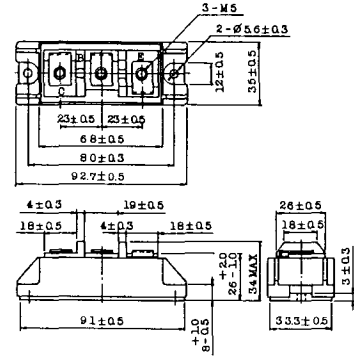
2-68B2A



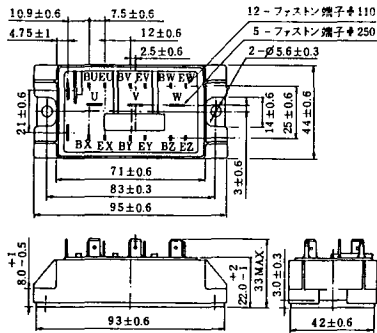
2-68C1A



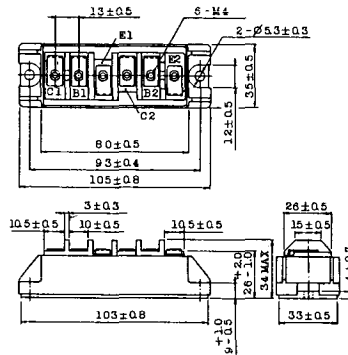
2-68D2A



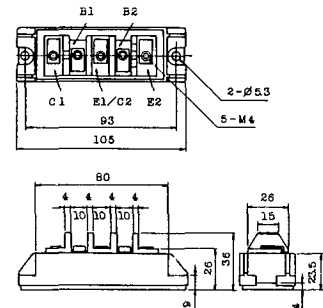
2-72A3A



2-80A1A



2-80B1A





### 2-94D1A



### 2-96A3A



### 2-96A4A



### 2-98B1A



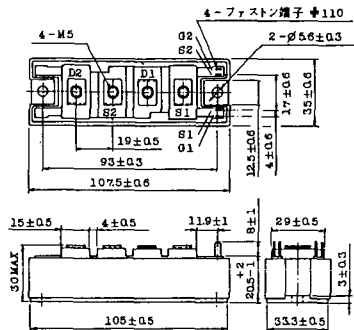
### 2-98C2A



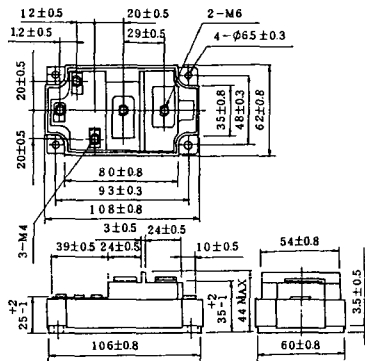
### 2-108A2A



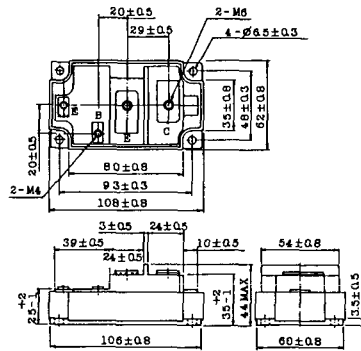
2-108B1A



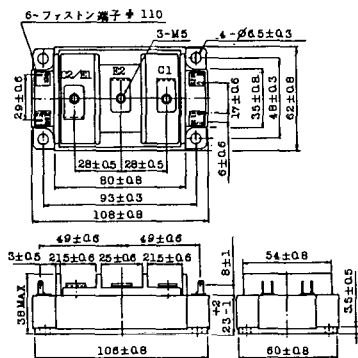
2-109A3A



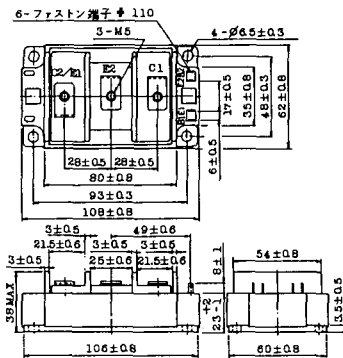
2-109A4A



2-109B3A



2-109B4A



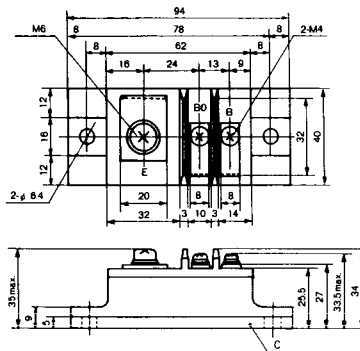
### BBT-II

BBTII  
1D200A-020



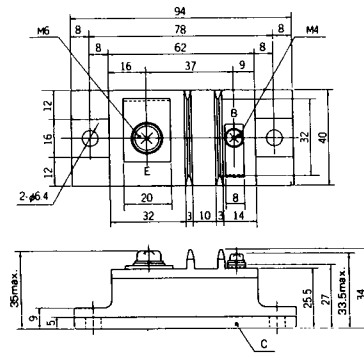
### BBT-III

BBTIII  
ETN31-055  
ETM36-030  
ETN36-030  
ETN35-030



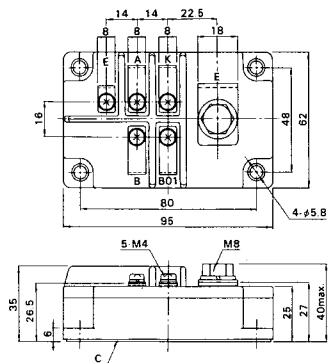
### BBT-III

BBTIII  
ETN01-055  
ET1257



### BBT-IV

BBTIV  
1D500A-030





M-101



M-102



M-103



M-104



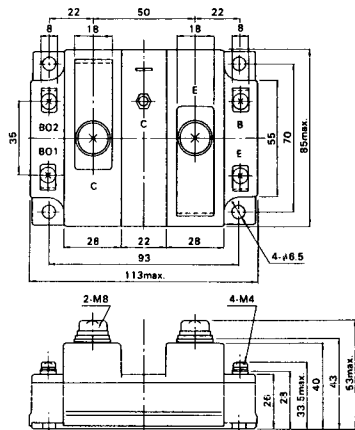
M-105



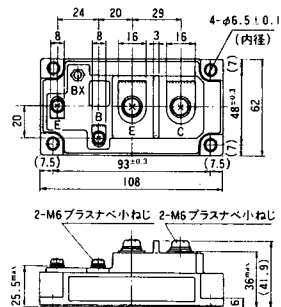
M-106



### M-107



### M-116



M-201



M-202



M-203



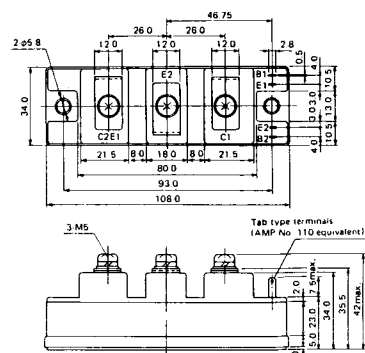
M-204



M-205



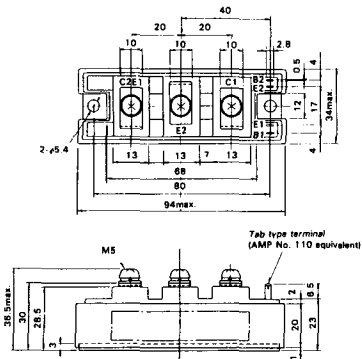
M-206



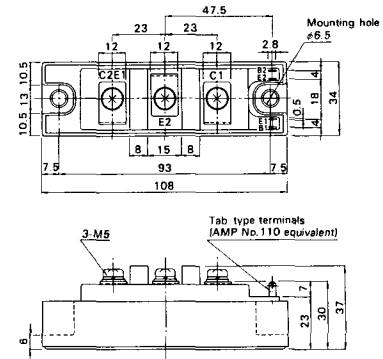
M-207



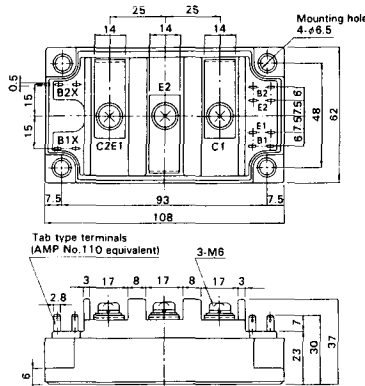
M-208



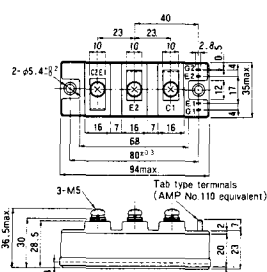
M-209



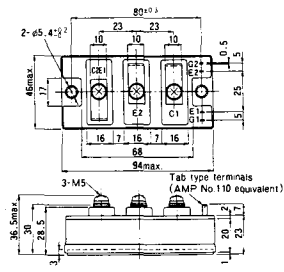
M-210



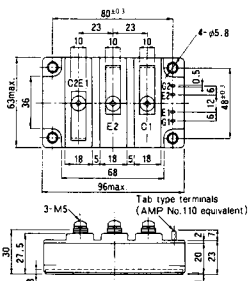
M-211



M-212

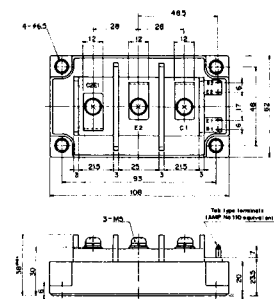


M-213



M-214

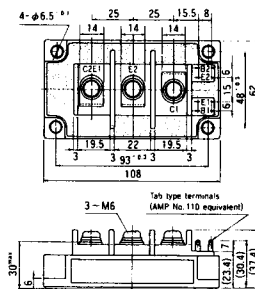
M-215



M-216



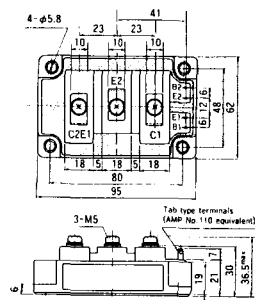
M-217



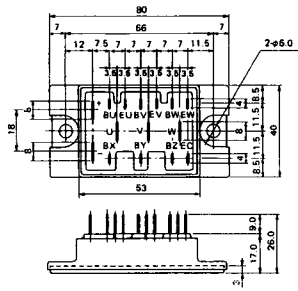
M-218



M-219



M-601



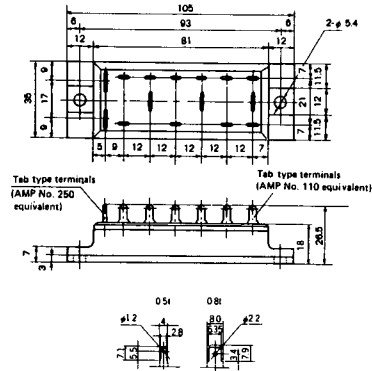
Tab type terminals  
(AMP No. 110 equivalent)



Tab type terminals  
(AMP No. 250 equivalent)



M-602

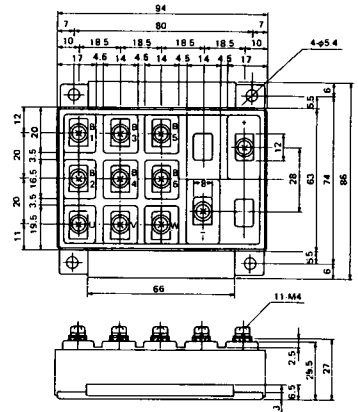


Tab type terminals  
(AMP No. 250 equivalent)

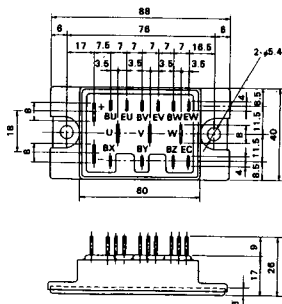
Tab type terminals  
(AMP No. 110 equivalent)



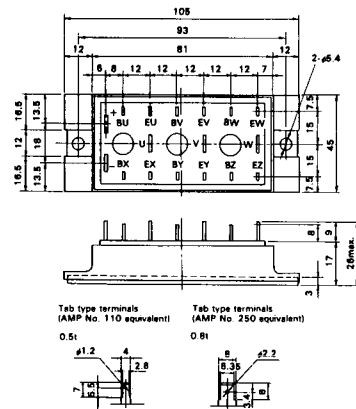
M-603



M-604



M-605

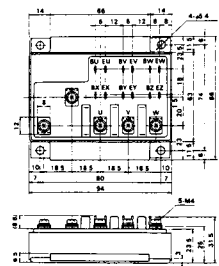


Tab type terminals  
(AMP No. 110 equivalent)

Tab type terminals  
(AMP No. 250 equivalent)



M-606



M-607



M-608



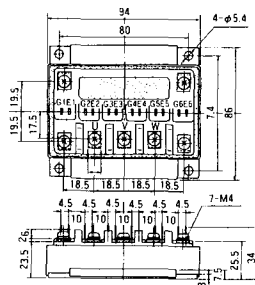
M-609



M-610



M-616

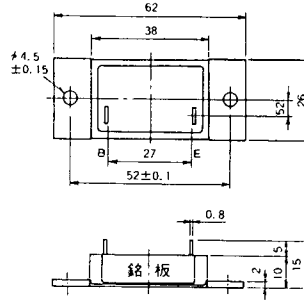




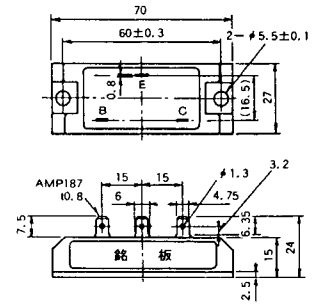
M-1A1A



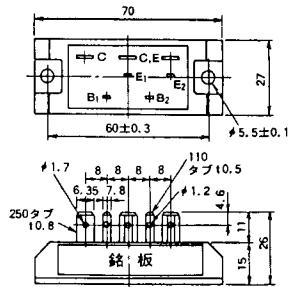
M-2A1A



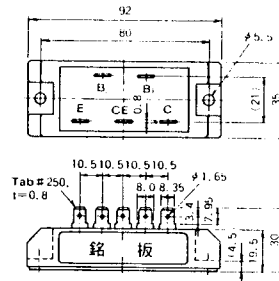
M-2B1A



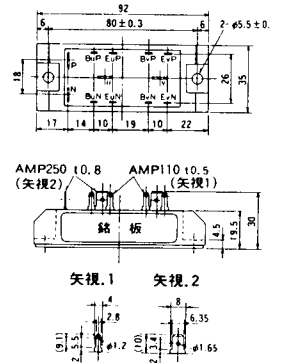
M-2B2A



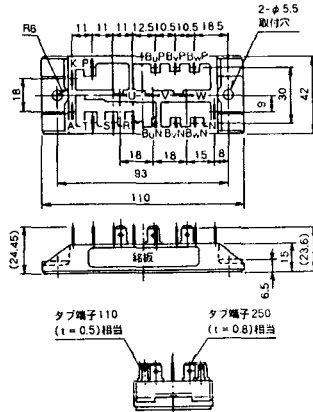
M-2C2A



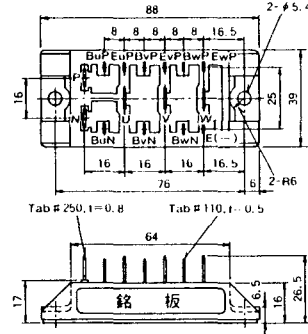
M-2D4A



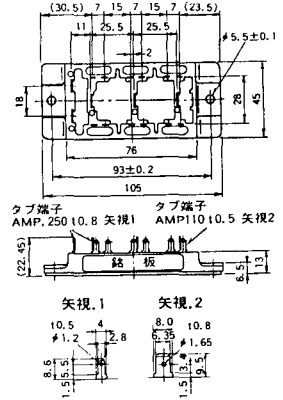
### M-2E6A



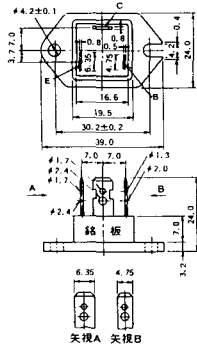
### M-2F6A



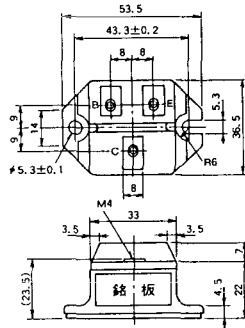
### M-2G6A



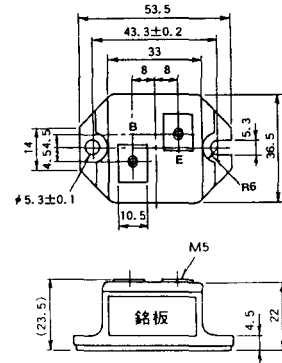
### M-3A1A



### M-3B1A



### M-3B1B



M-3C1A



M-3D6A



M-3E6A



M-4A1A



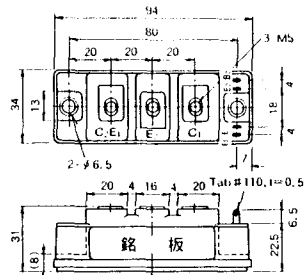
M-4A2A



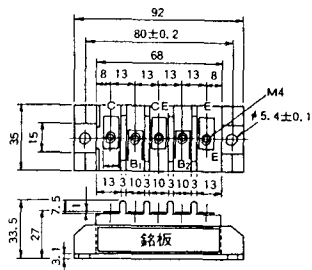
M-4A1B



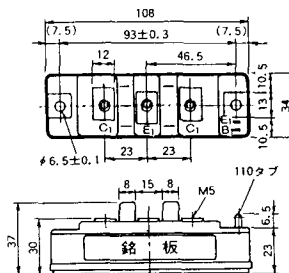
### M-4A2B



### M-4B2A



### M-5A1A



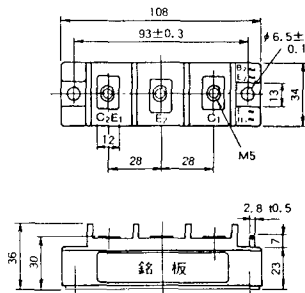
### M-5A1B



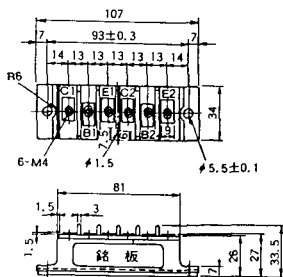
### M-5A2A



### M-5B2A



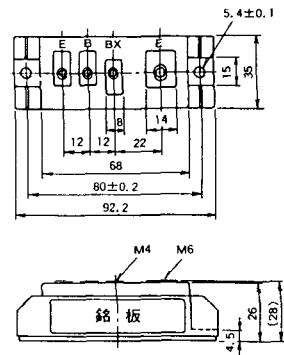
M-5C2A



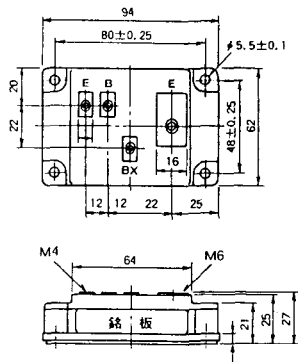
M-5D2A



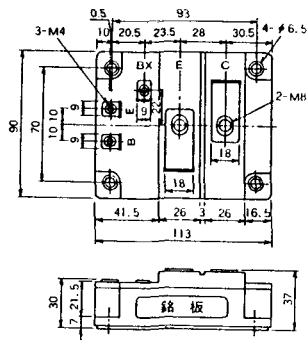
M-6A1A



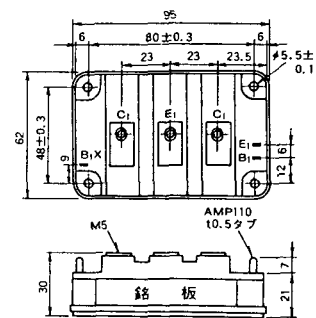
M-7A1A



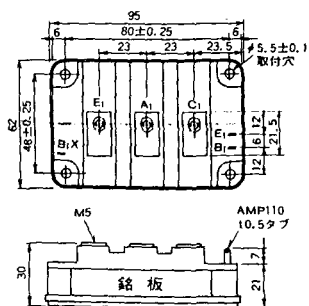
M-7B1A



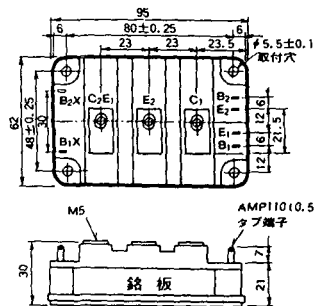
M-8A1A



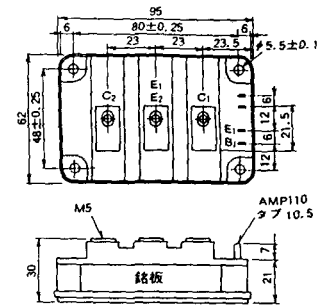
### M-8A1B



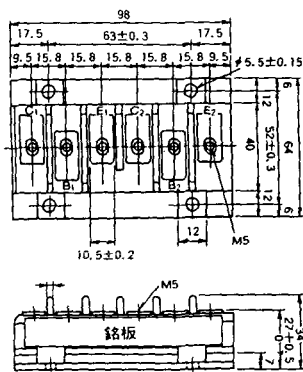
### M-8A2A



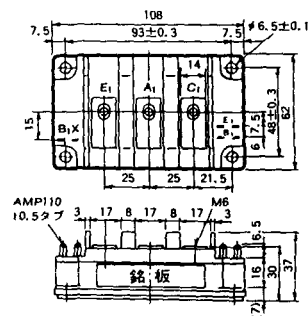
### M-8A2B



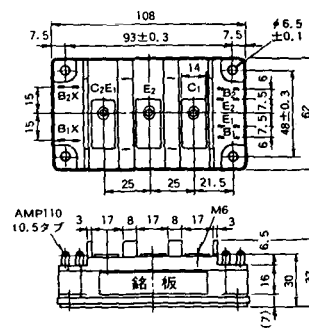
### M-8B2A



### M-9A1A



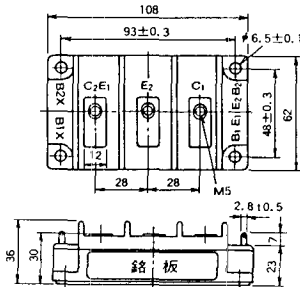
### M-9A2A



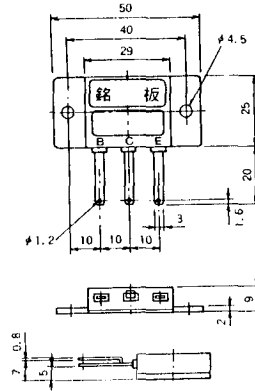
### M-9B1A



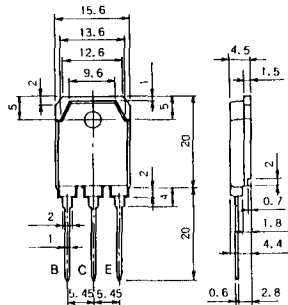
### M-9C2A



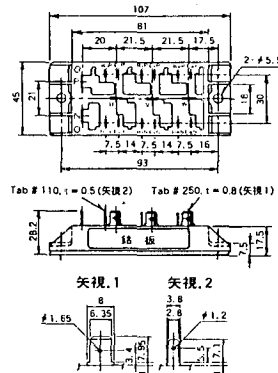
### M-1A1B



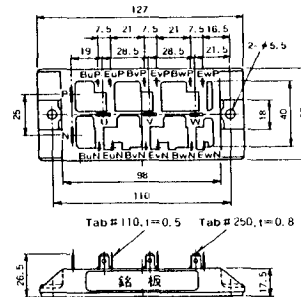
### M-1A1C



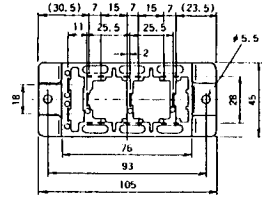
### M-2E6B



### M-2E6C



### M-2G6B



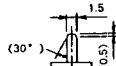
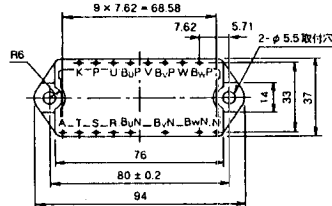
Tab #250, t=0.8 (矢視 1) Tab #110, t=0.5 (矢視 2)



矢視 1

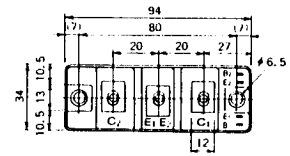
矢視 2

### M-3D6B



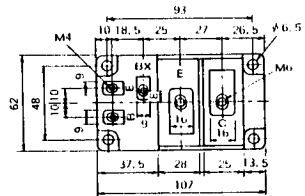
端子仕様

### M-4A2C

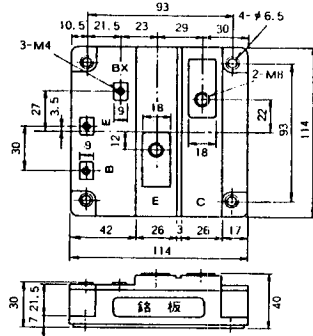


Tab #110, t=0.5

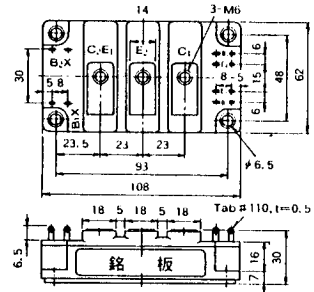
### M-7A1B



### M-7C1A

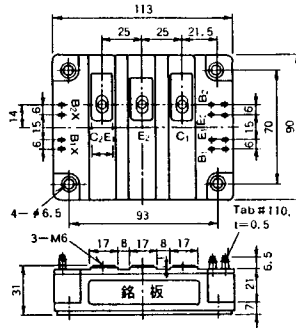


### M-8A2C

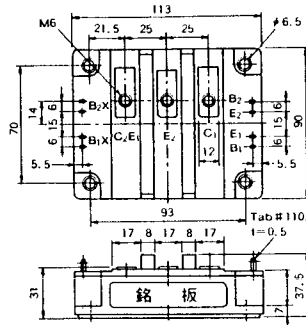




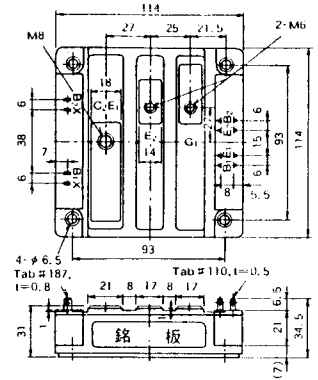
M-10A2A



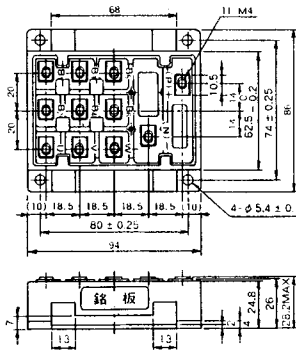
M-10A2B



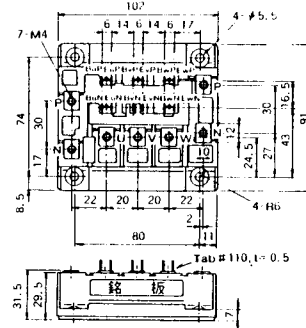
M-11A2A



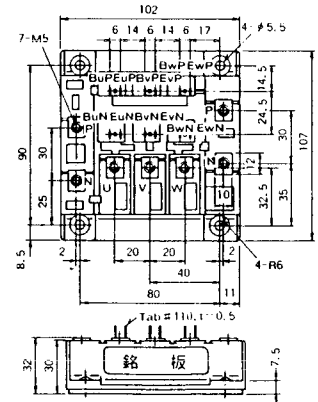
M-12A6A



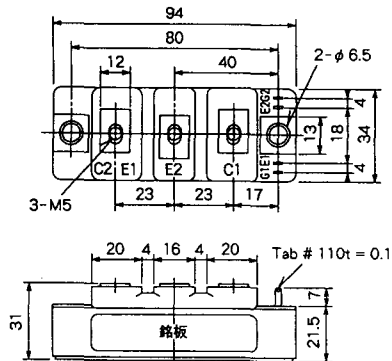
M-12B6A



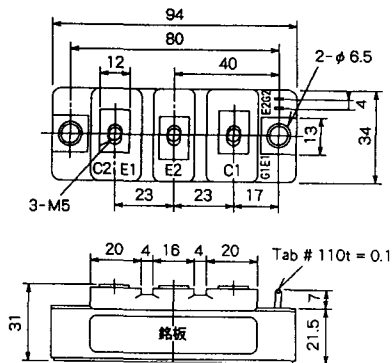
M-12B6B



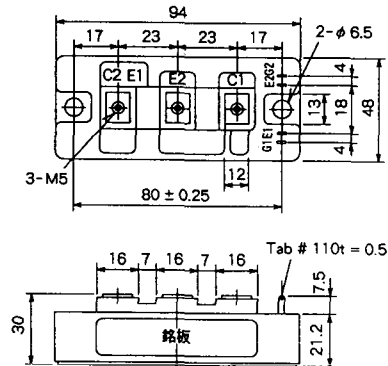
M-4A2D



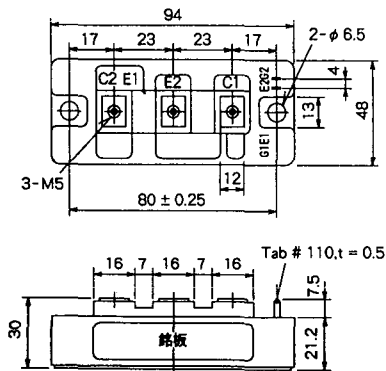
M-4A2E



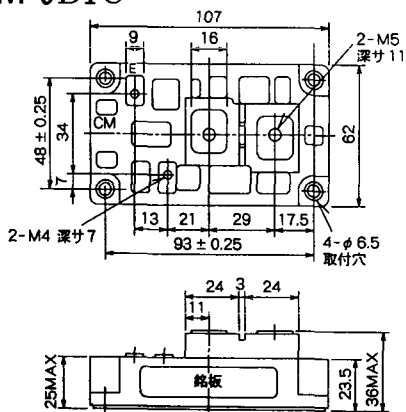
M-4C2A



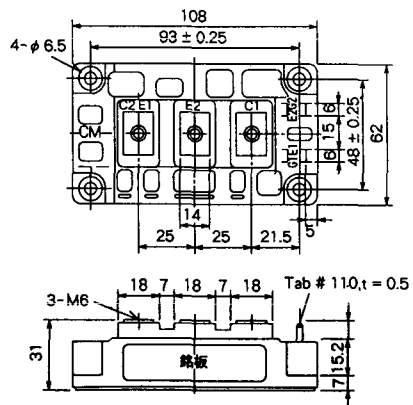
M-4C2B



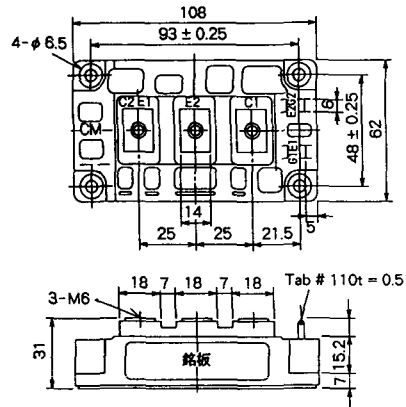
M-9B1C



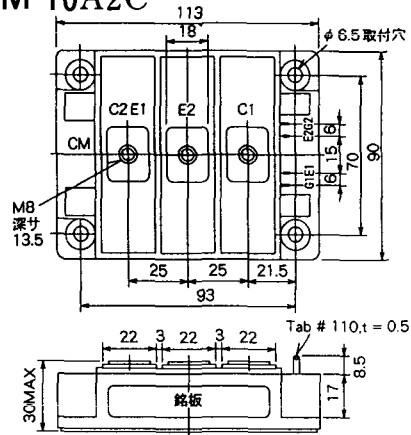
M-9D2A



### M-9D2B



### M-10A2C

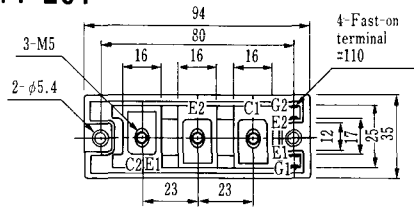


H-101



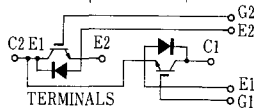
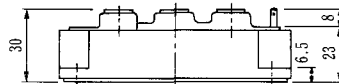
Weight :480g

### H-201



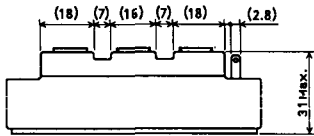
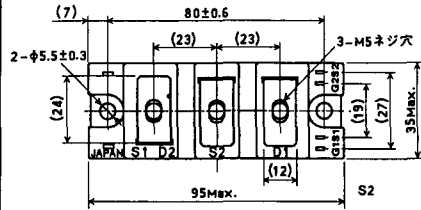
Weight: 200g

### H-202

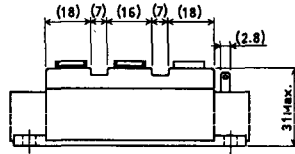
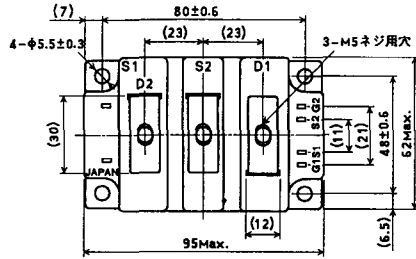


Weight: 360g

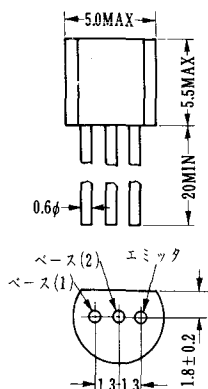
### LF-J



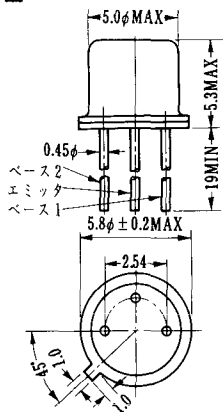
### LF-K



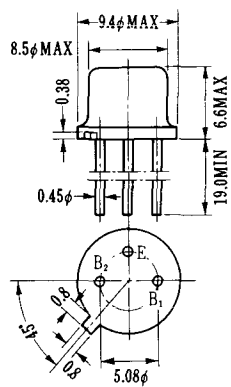
U-1



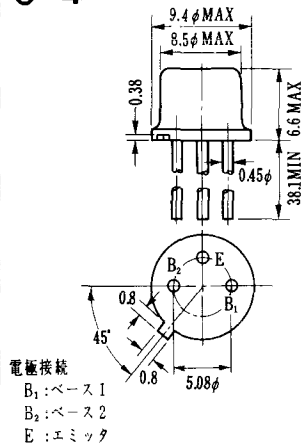
U-2



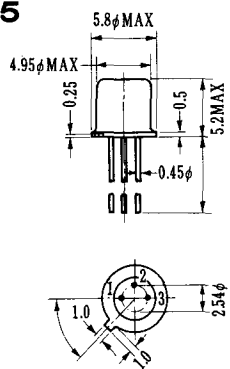
U-3



U-4

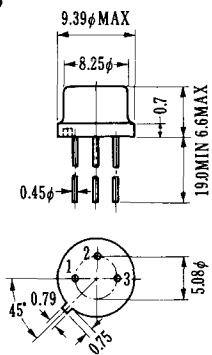


U-5



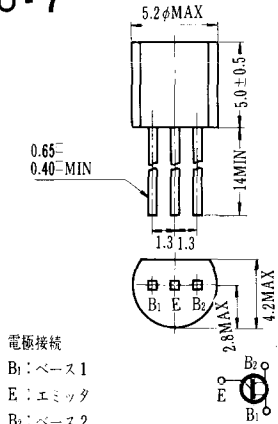
1. BASE 1
2. EMITTER
3. BASE 2 (CASE)

U-6



1. BASE (2)
2. EMITTER
3. BASE (1)

U-7



U-8

