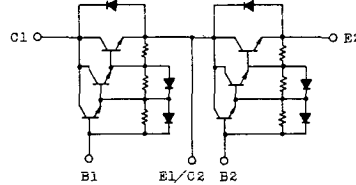


トランジスタ・モジュール (NPN, ダーリントン接続, 2個直列接続)

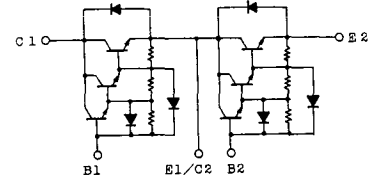
- ダーリントン・トランジスタを2個直列接続
- フリーホイール・ダイオード付
- 電極と金属ケース部が絶縁されている
- 直流電流増幅率は80以上(定格電流にて)

■等価回路

CK-1



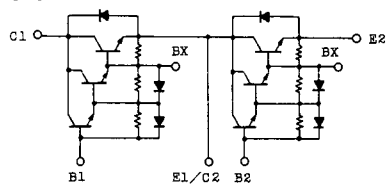
CK-2



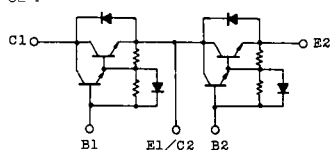
注1.  $T_c=25^{\circ}\text{C}$ . 注2. AC, 1分間。

| 型 名        | 最 大 定 格<br>( $T_m=25^{\circ}\text{C}$ ) |                |           |       |          |       |       |          |       |                        |                        | 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<br>(mA) | $V_{CE}$<br>(V) | 最大<br>(mA) | $V_{EB}$<br>(V) | 最大<br>(V)      | $I_c$<br>(A) | 最小<br>(V) | $V_{CE}$<br>(V) | $I_c$<br>(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           |

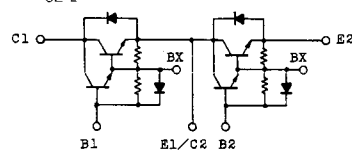
CK-3



CL-1

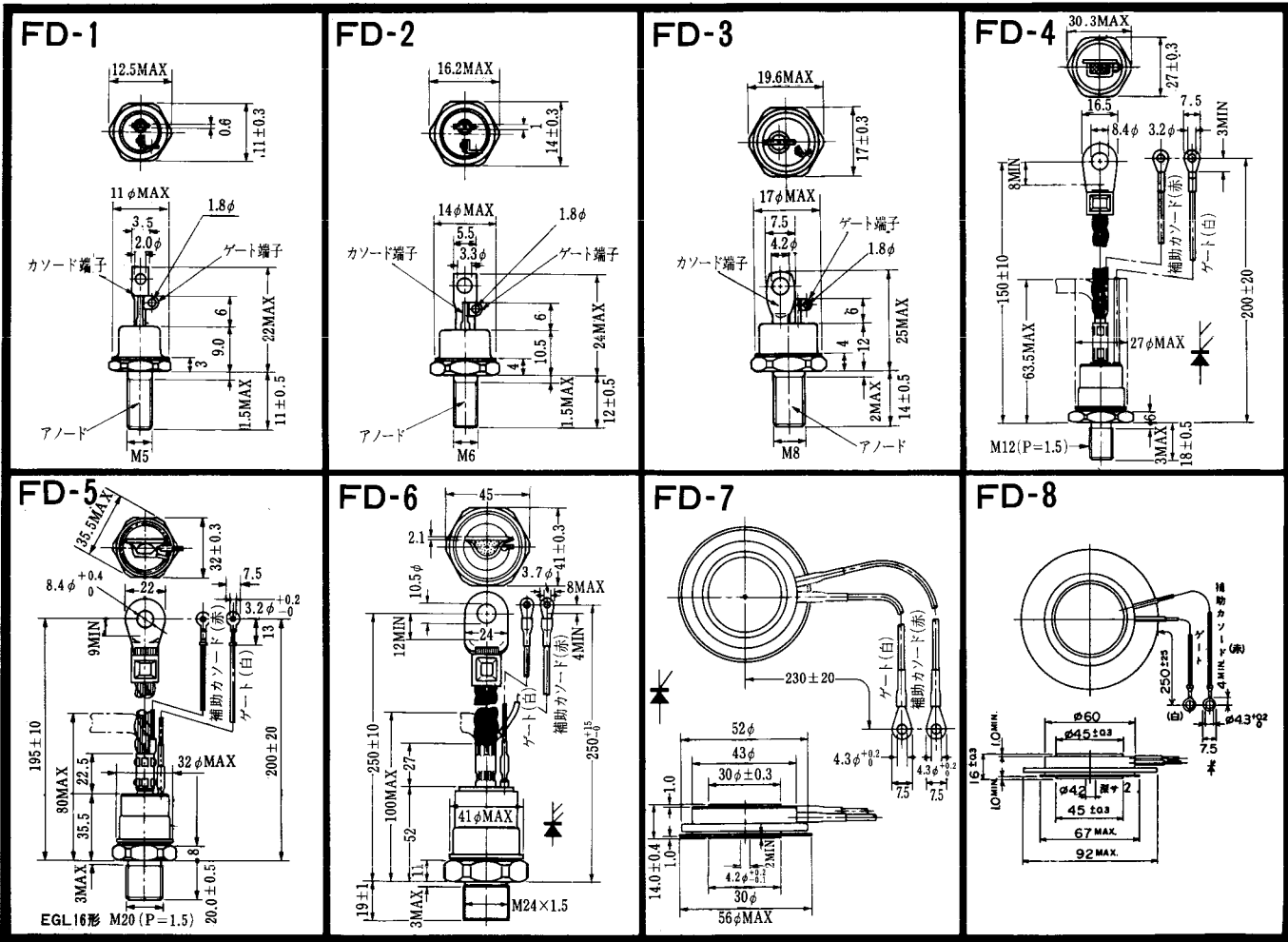


CL-2

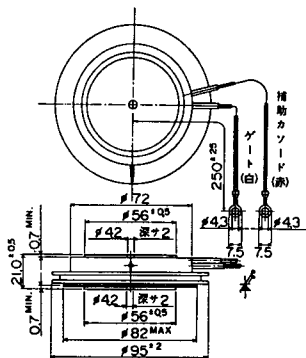


注3. スイッチング時間の \* 印は typ. 値。

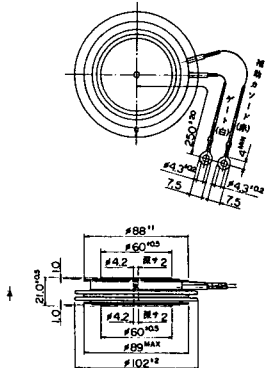
| (T <sub>a</sub> =25°C) |                 |                       |                       |                 |                  |                |                        |                        |                        | エミッタ・コレクタ間ダイオード       |                       |                       |                         |                       | 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> |                        |                        |                        |                       |                       |                       |                         |                       |                        |                 |         |       |      |          | トランジスタ部                     | ダイオード部     |
| 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

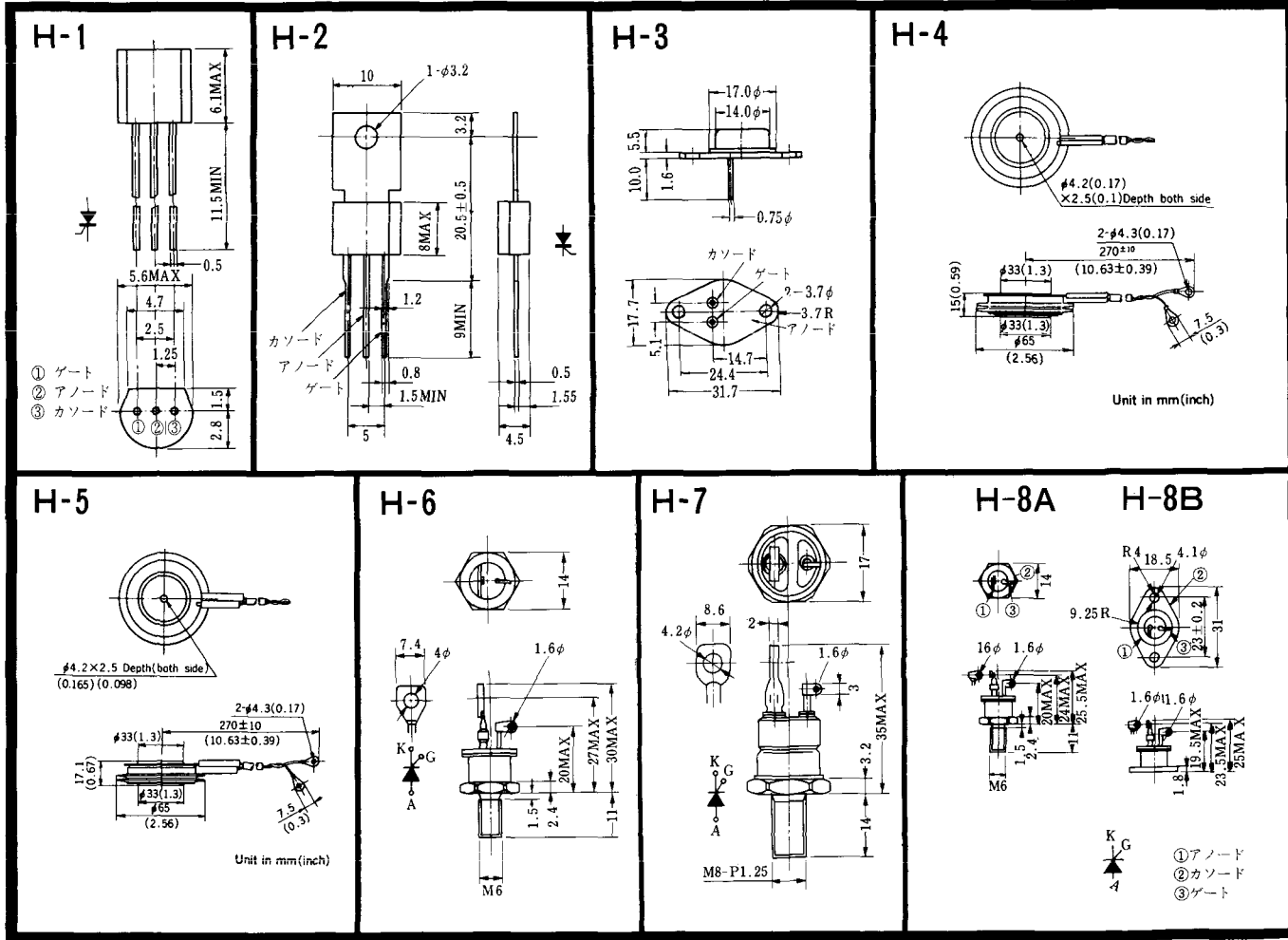


FD-10

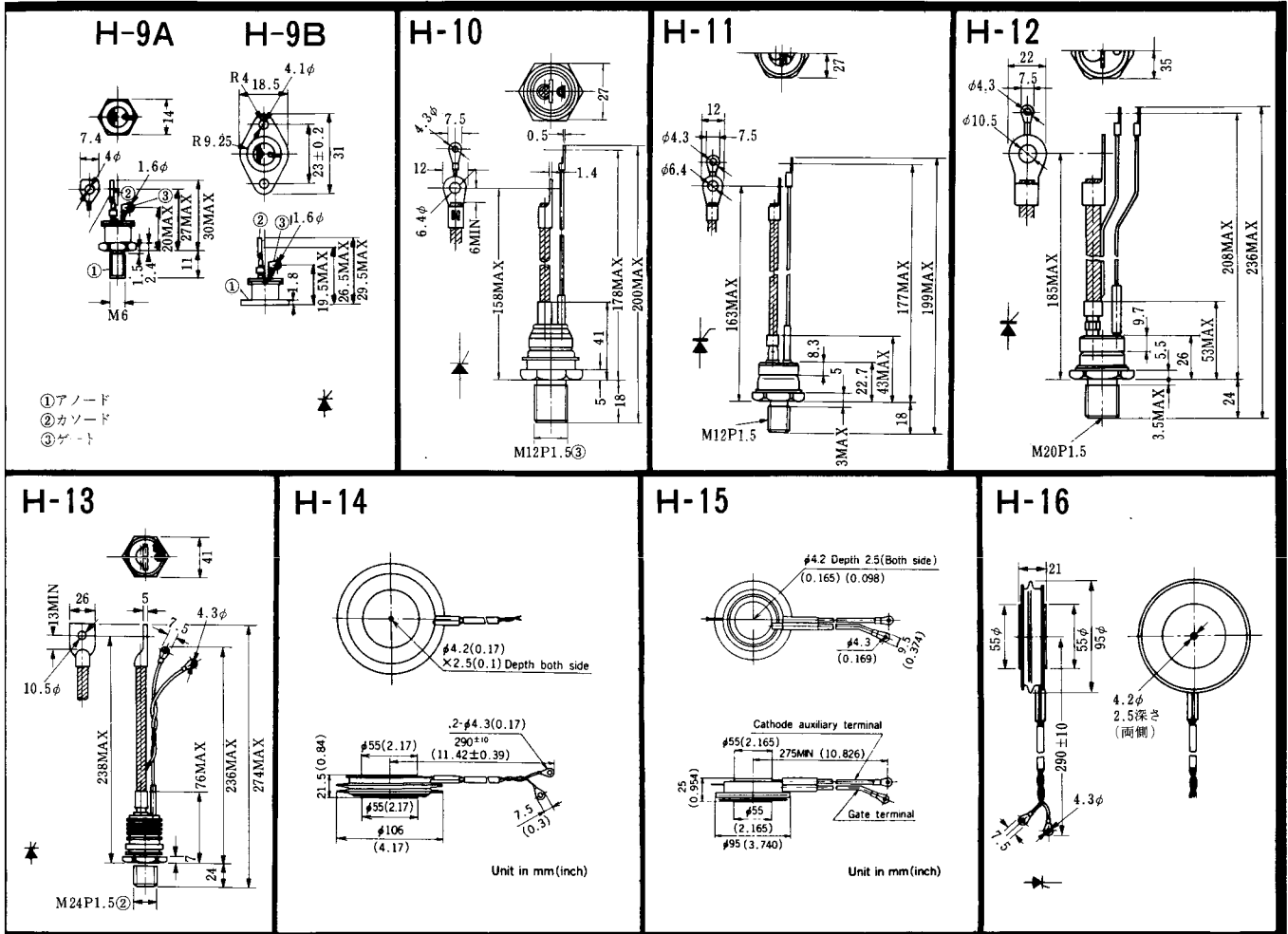


FD-11

FD-12

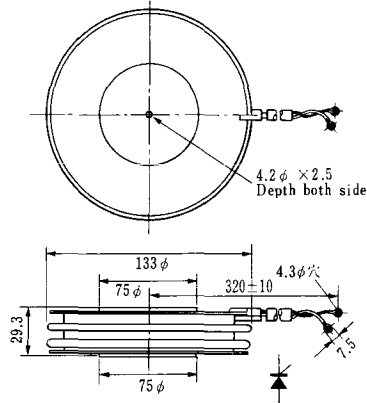


<寸法図単位：mm>



《寸法図単位：mm》

### H-17



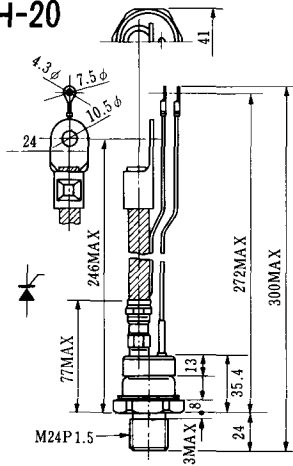
### H-18



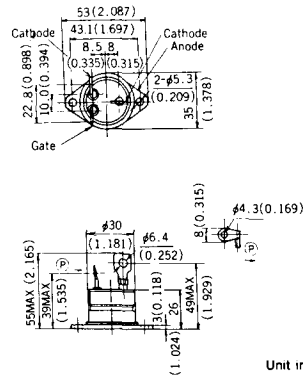
### H-19



### H-20



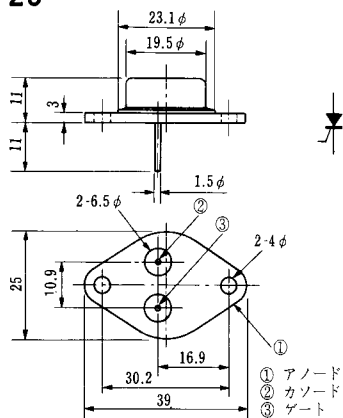
### H-21



### H-22



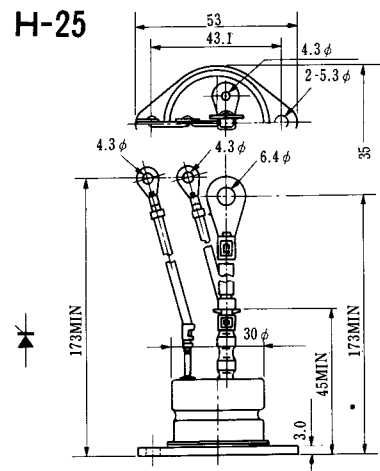
### H-23



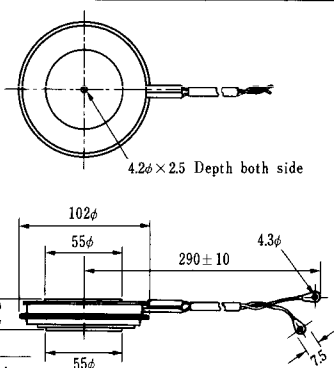
### H-24



### H-25



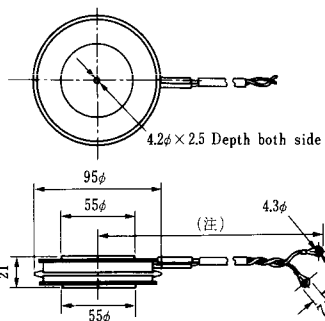
### H-26



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

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

### H-27

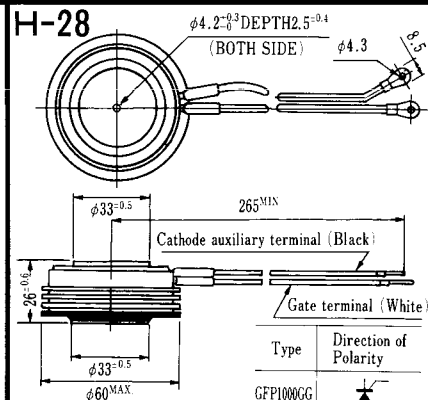


| Type | Direction of polarity |
|------|-----------------------|
|------|-----------------------|

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

(注) CC11V : 400 ± 10  
CF11V : 250 ± 10

### H-28



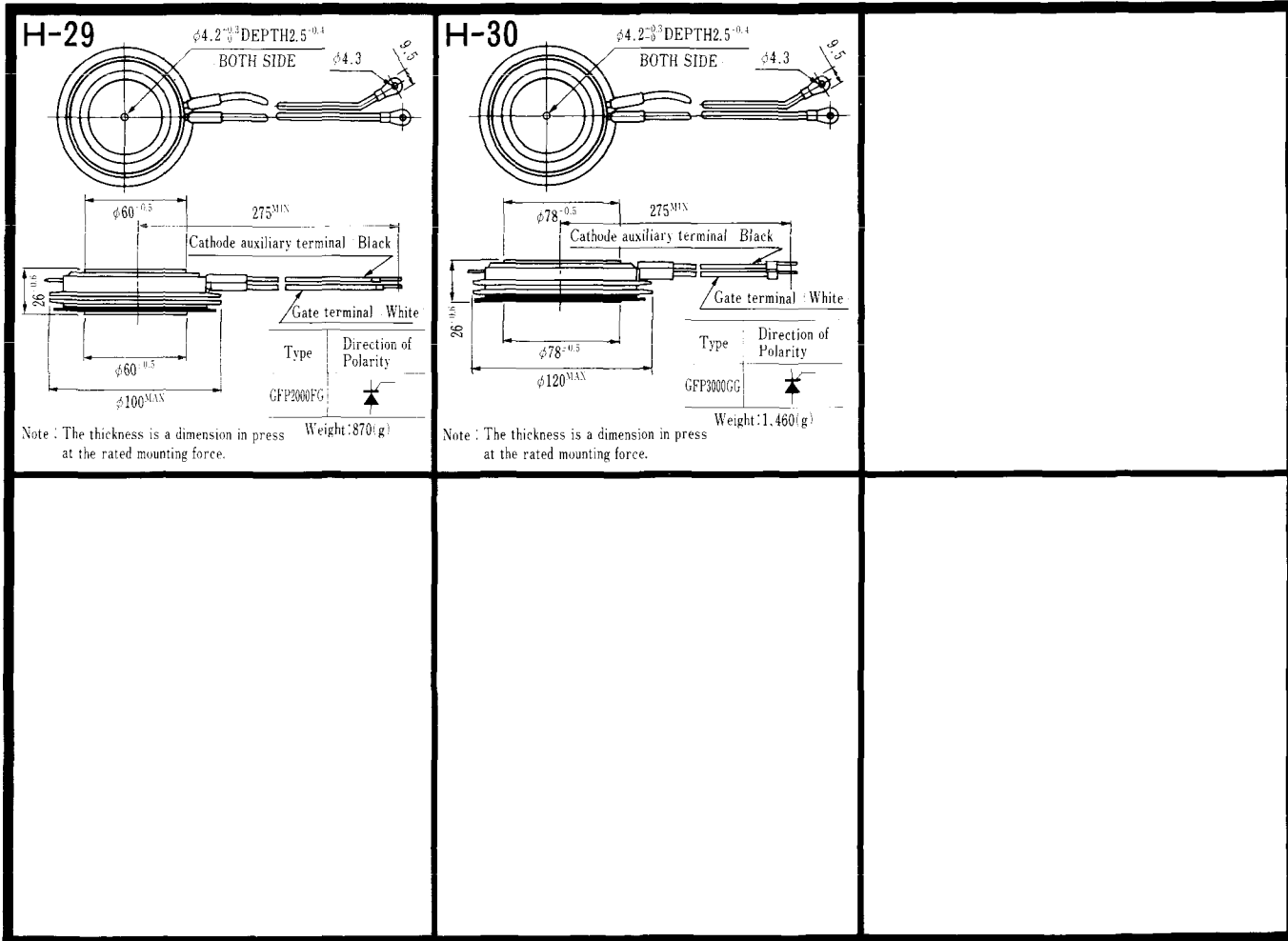
| Type | Direction of Polarity |
|------|-----------------------|
|------|-----------------------|

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

Weight: 360(g)

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







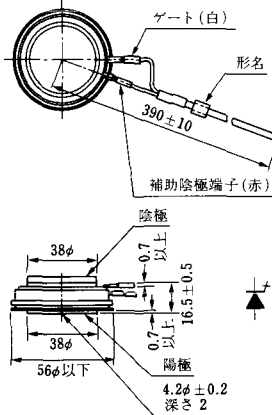
### M-1



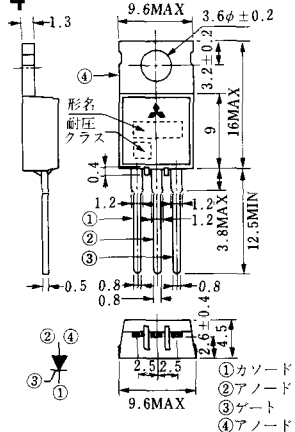
### M-2



### M-3



### M-4



### M-5



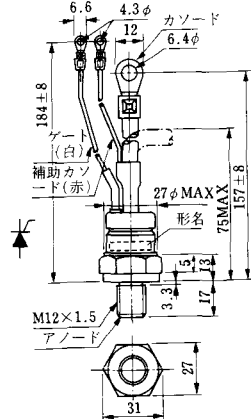
### M-6



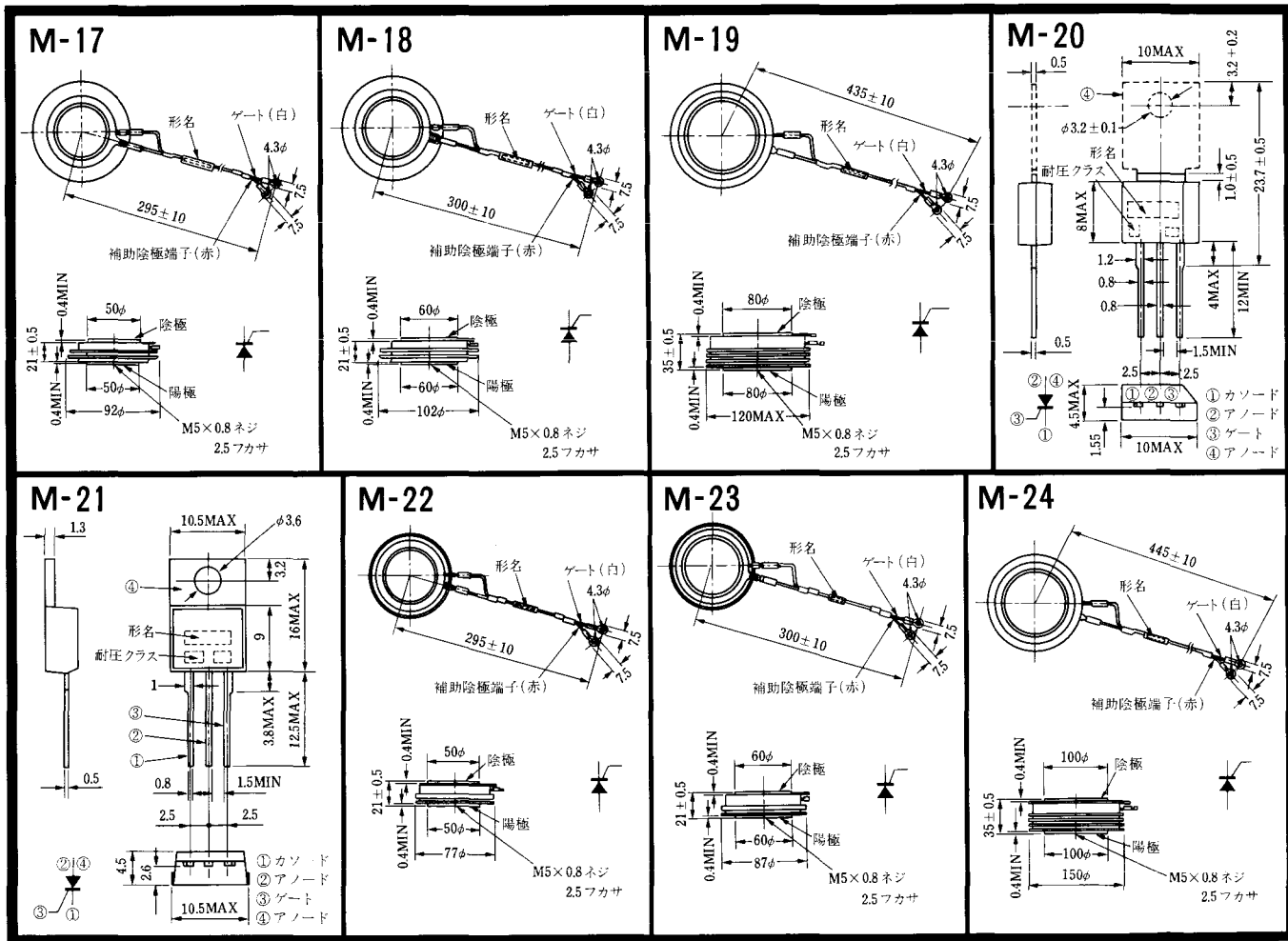
### M-7



### M-8







〈寸法図単位：mm〉

M-25



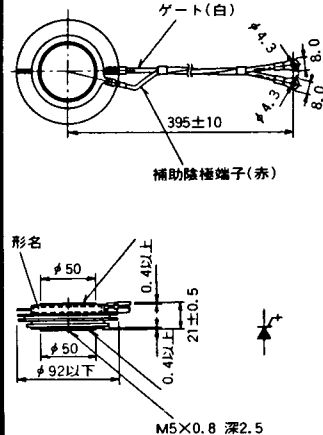
M-26



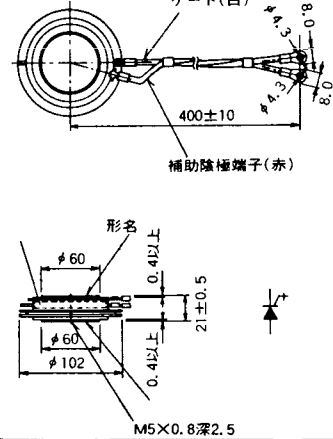
M-27



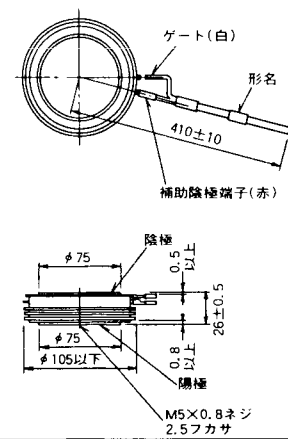
M-28



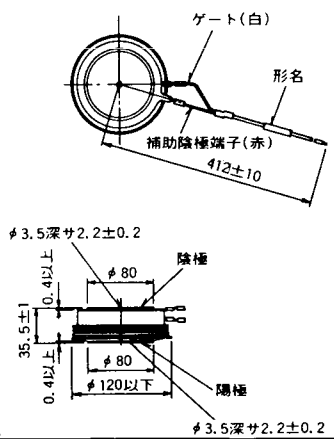
M-29



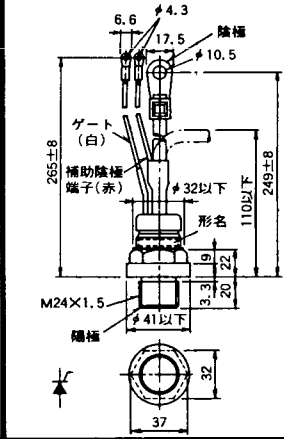
M-30



M-31

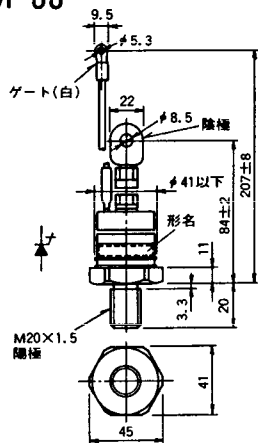


M-32



《寸法図単位：mm》

### M-33



### M-34



### MT-1



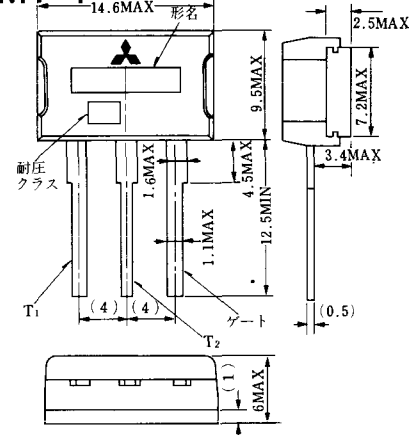
### MT-2



### MT-3



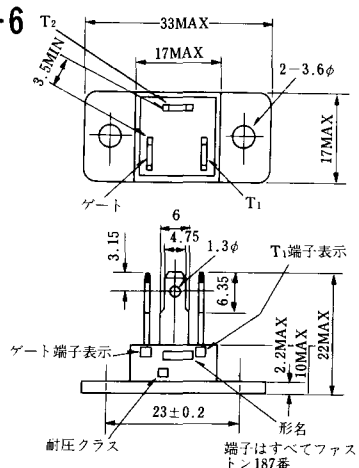
### MT-4



### MT-5



### MT-6



### MT-7



1. T<sub>1</sub>
2. T<sub>2</sub>
3. ゲート
4. T<sub>2</sub> (非絶縁形のみ、絶縁形は他の端子と絶縁されている)

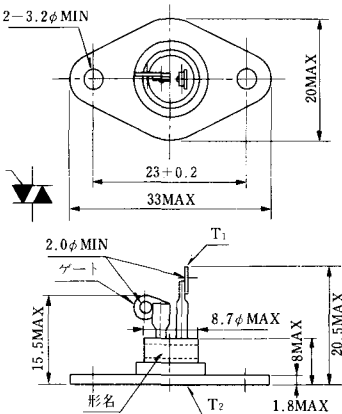
端子はすべてファス  
タン187番



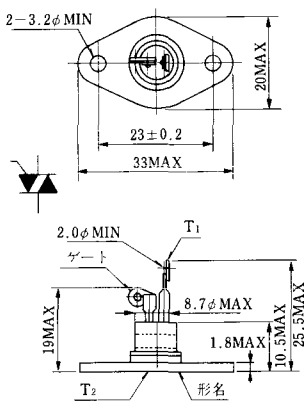
MT-8



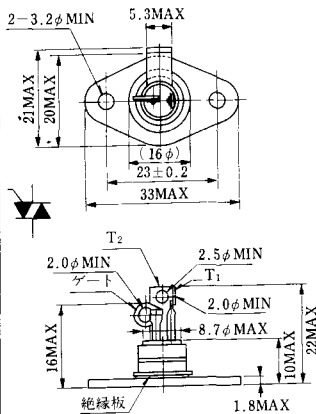
MT-9



MT-10



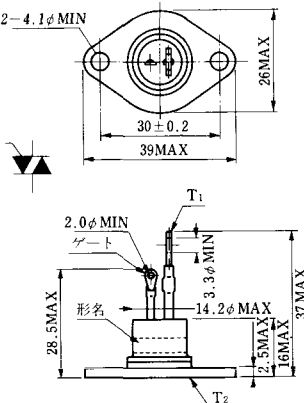
MT-11



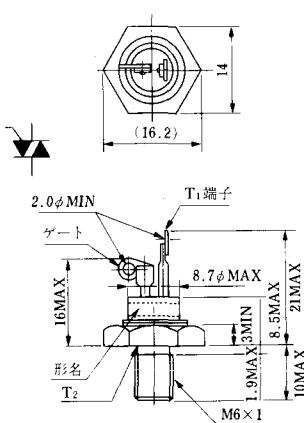
MT-12



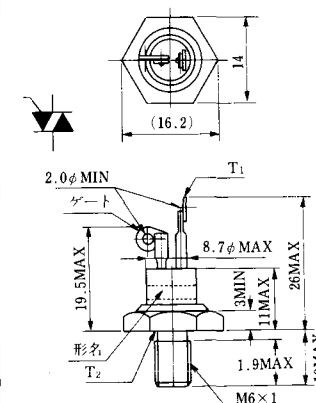
MT-13



MT-14

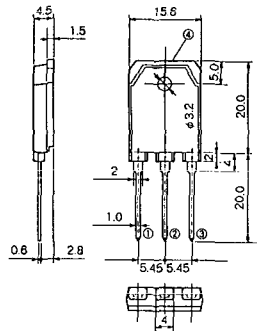


MT-15

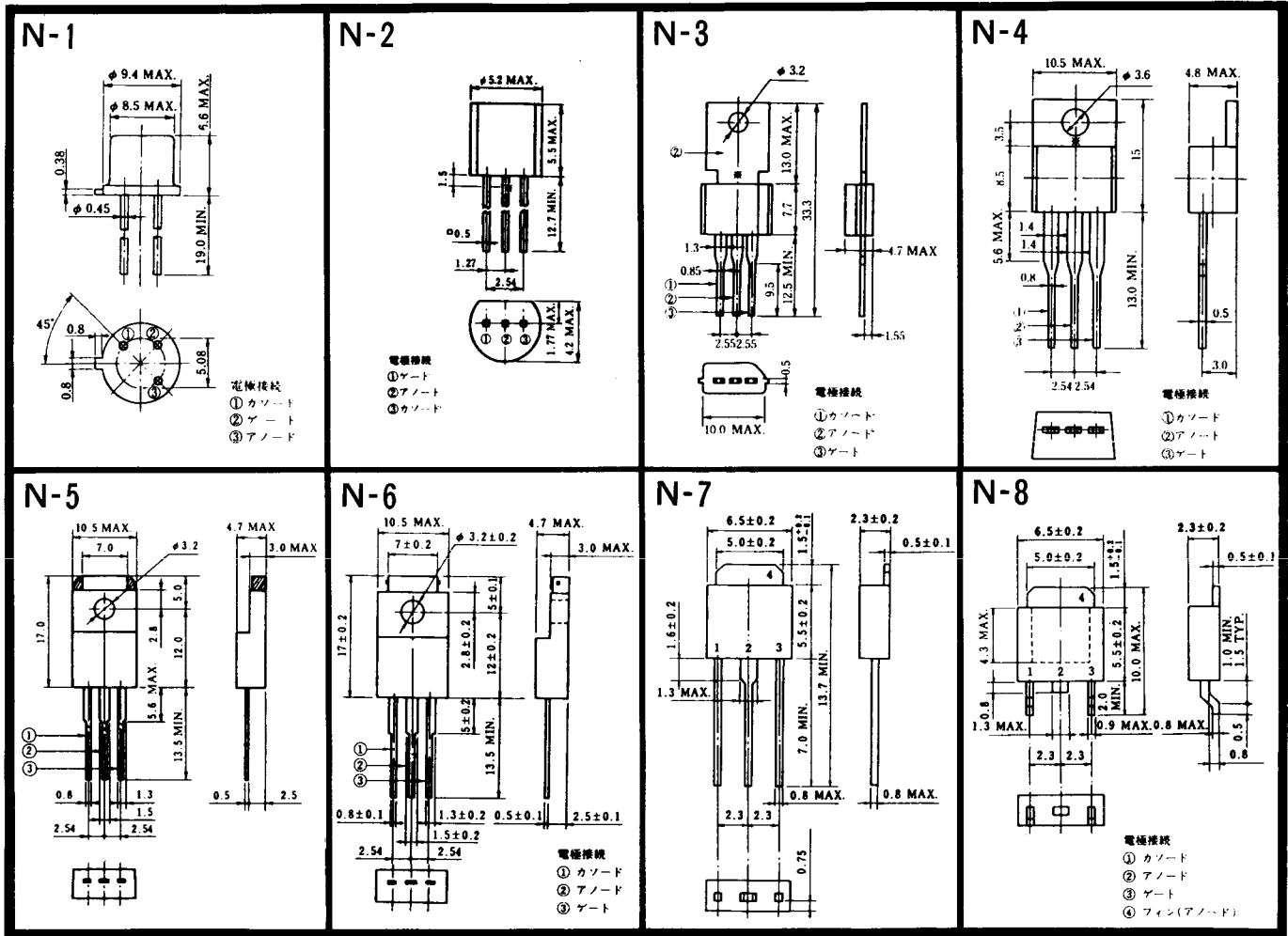




# MT-24

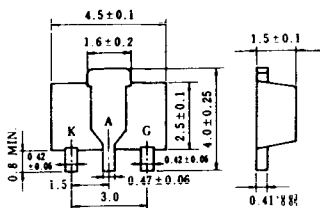


- ① T1 端子
  - ② T2 端子
  - ③ ゲート端子
  - ④ T2 端子
- TO - 3P



〈寸法図単位: mm〉

N-9



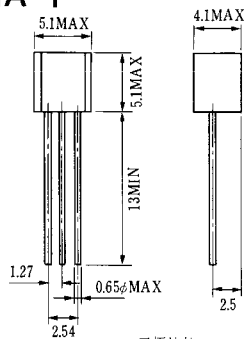
電極接続

K : カソード

A : アノード

G : ゲート

### NA-1

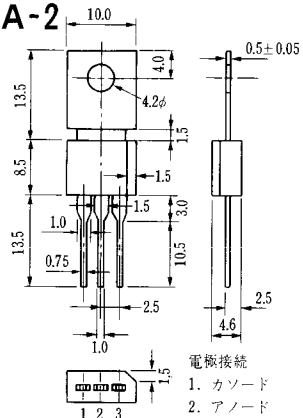


電極接続

1. ゲート
2. アノード
3. カソード

JEDEC: TO-92

### NA-2



電極接続

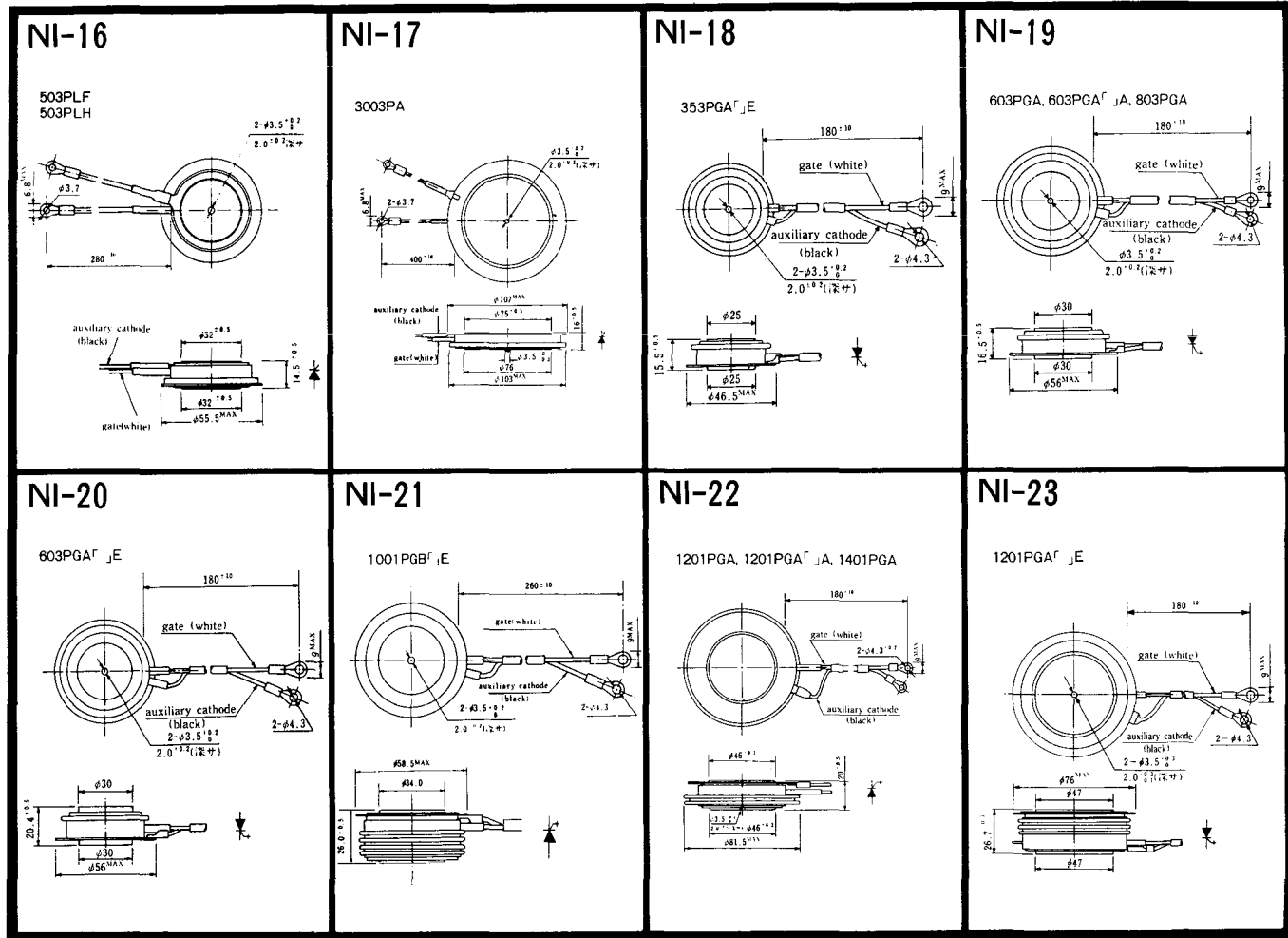
1. カソード
2. アノード
3. ゲート

JEDEC: TO-202AA



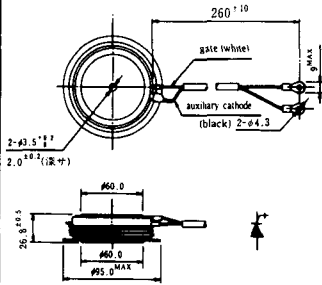






NI-24

2001PGB<sup>r</sup> JE



NI-25

NI-26

### NT-1



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

### NT-2



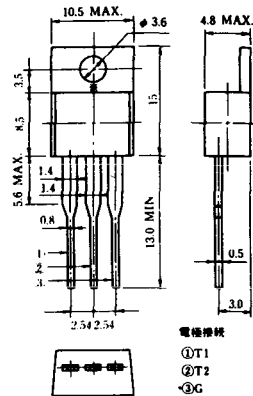
電極接続  
①T<sub>1</sub>  
②ゲート  
③T<sub>2</sub>

### NT-3



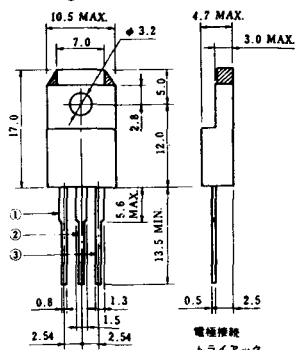
電極接続  
①T<sub>1</sub>  
②T<sub>2</sub>  
③ゲート

### NT-4



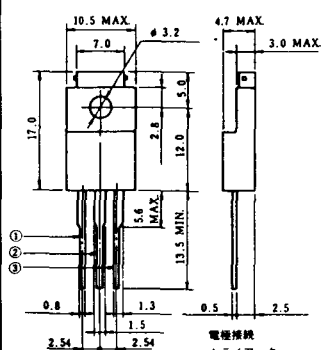
電極接続  
①T<sub>1</sub>  
②T<sub>2</sub>  
③G

### NT-5



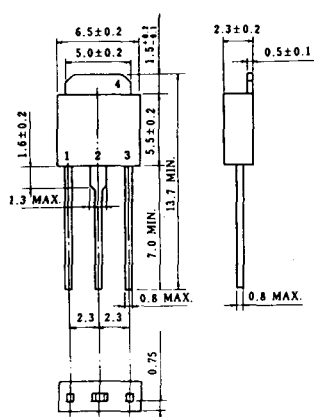
電極接続  
トライアック  
①T<sub>1</sub>  
②T<sub>2</sub>  
③ゲート  
④G

### NT-6

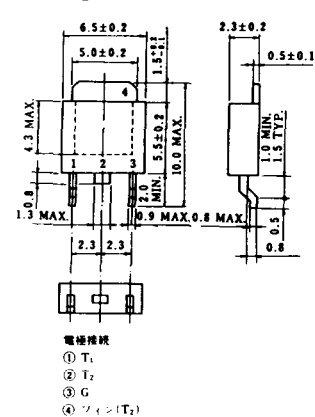


電極接続  
トライアック  
①T<sub>1</sub>  
②T<sub>2</sub>  
③ゲート  
④G

### NT-7

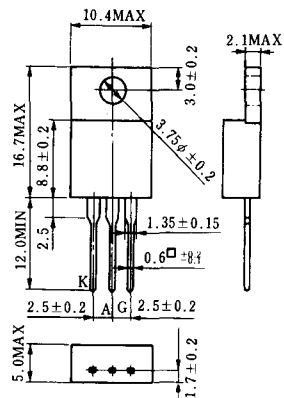


### NT-8

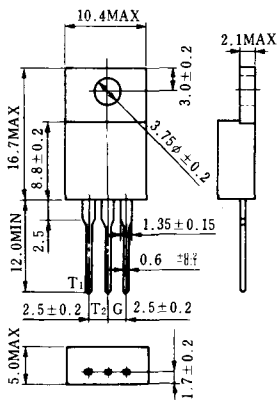


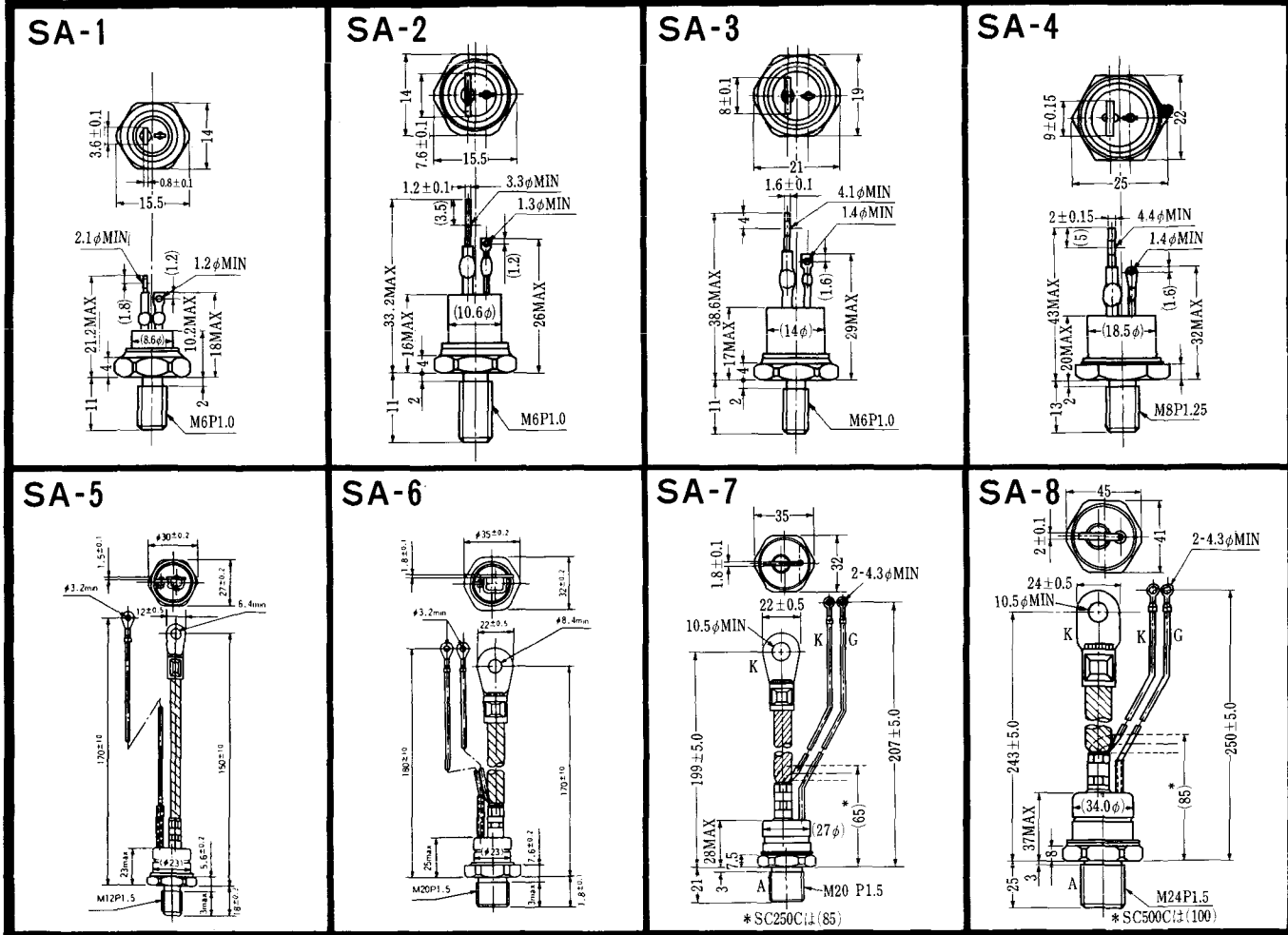
電極接続  
①T<sub>1</sub>  
②T<sub>2</sub>  
③G  
④フィッシュ(T<sub>2</sub>)

### S-1



### ST-1



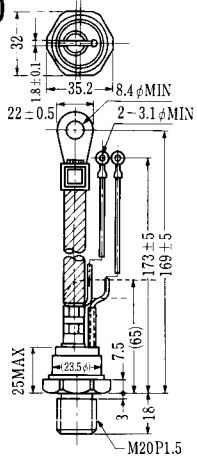


《寸法图单位:mm》

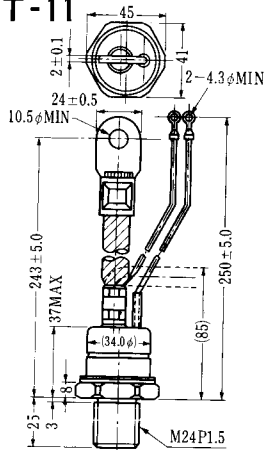




SAT-10

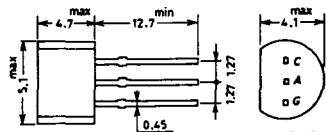


SAT-11



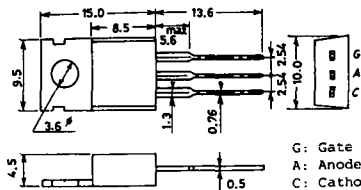


### SY-1 (1096A)



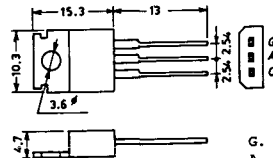
C: Cathode  
A: Anode  
G: Gate

### 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



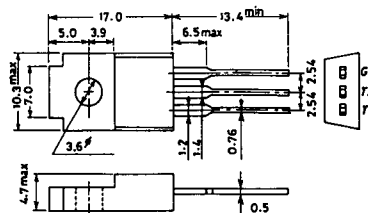
### 1141



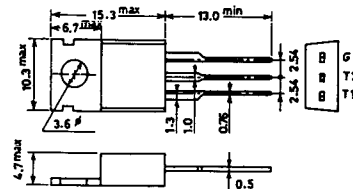
### 1142



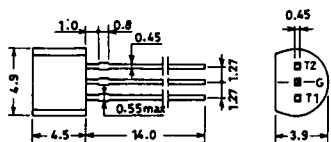
### 1144



### 1155

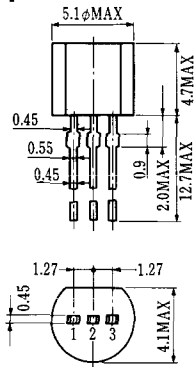


### 1192A



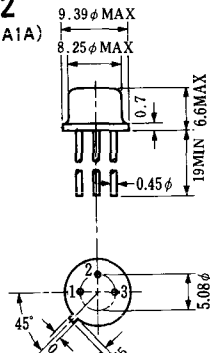
G: Gate

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



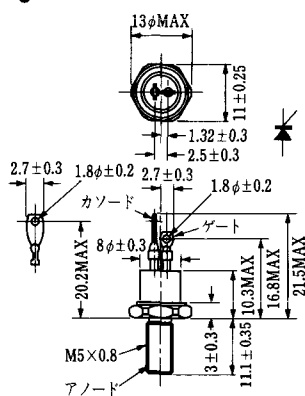
- 1 ゲート
- 2 アノード
- 3 カソード

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



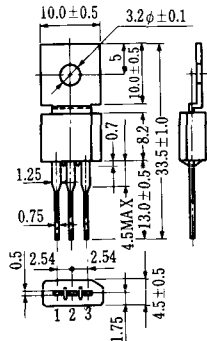
1. カソード
2. ゲート
3. アノード(ケース)

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



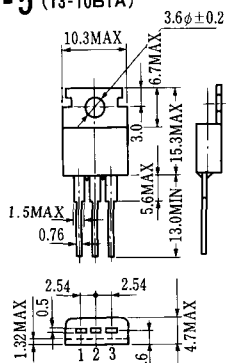
- 1 カソード
- 2 アノード
- 3 ゲート

**T-4 (13-10A1A)**



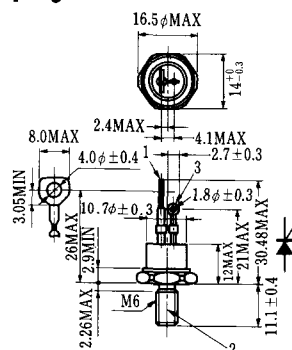
- 1 カソード
- 2 アノード
- 3 ゲート

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



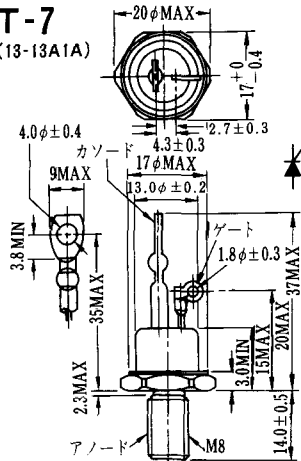
- 1 カソード
- 2 アノード
- 3 ゲート

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



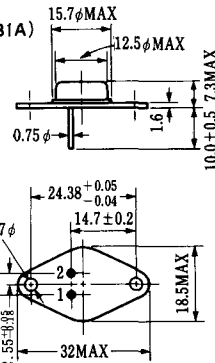
- 1 カソード
- 2 アノード
- 3 ゲート

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



- 1 カソード
- 2 アノード
- 3 ゲート

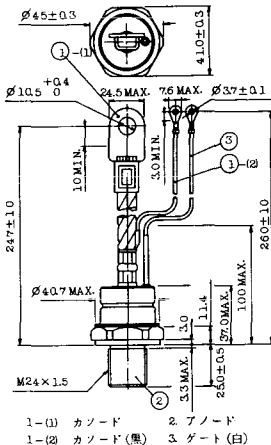
**T-8 (13-13B1A)**



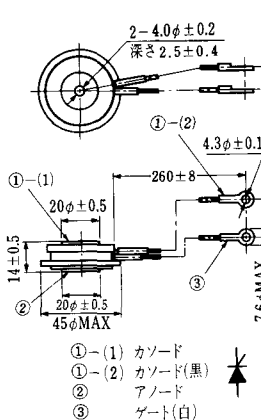
1. ゲート
2. カソード
3. アノード(ケース)



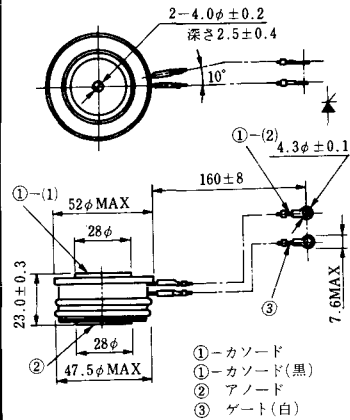
T-17 (13-42A1A)



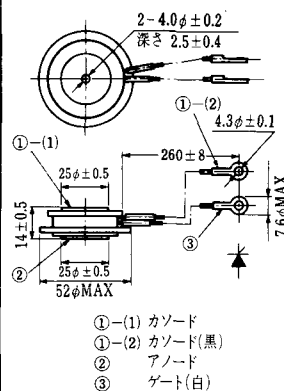
T-18 (13-45D1A)



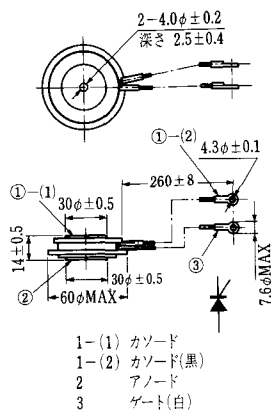
T-19 (13-52B1A)



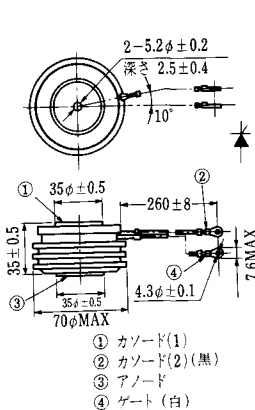
T-20 (13-52C1A)



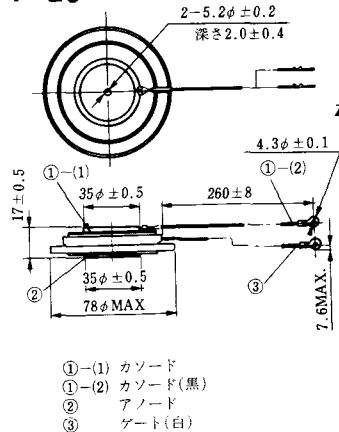
T-21 (13-60A1A)



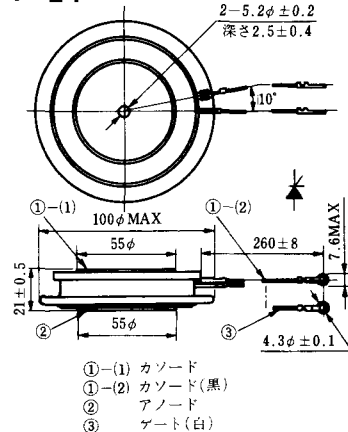
T-22 (13-70C1A)



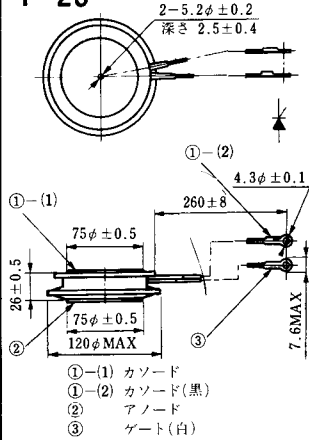
T-23 (13-78A1A)



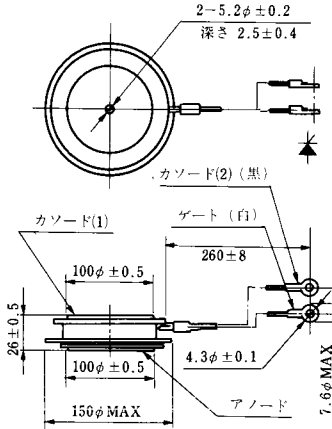
T-24 (13-100C1A)



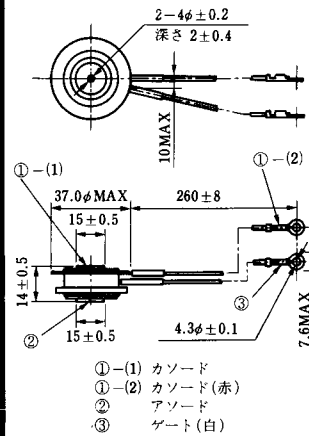
**T-25** (13-120A2A)



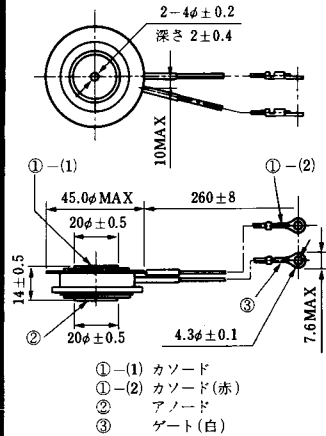
**T-26** (13-150A1A)



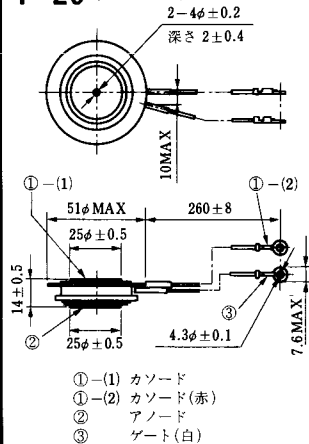
**T-27** (13-37A1A)



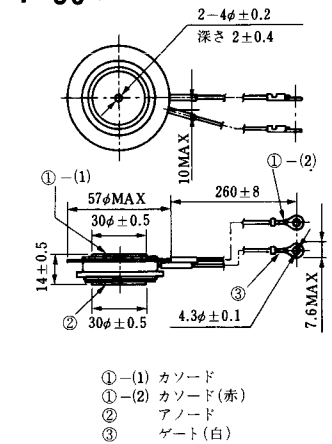
**T-28** (13-45E1A)



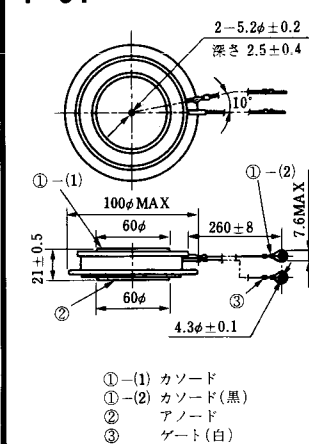
**T-29** (13-51A1A)



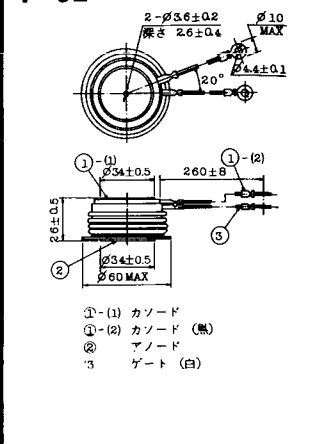
**T-30** (13-57A1A)



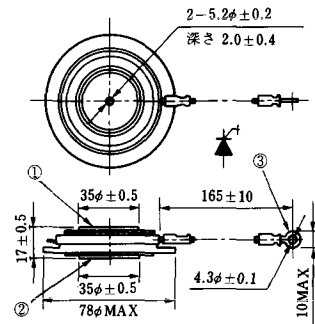
**T-31** (13-100E1A)



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

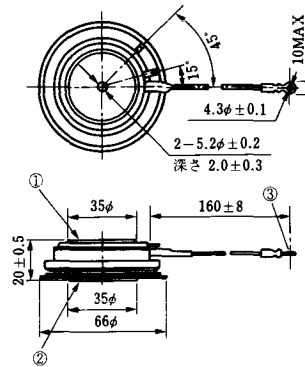


**T-33** (13-78B1A)



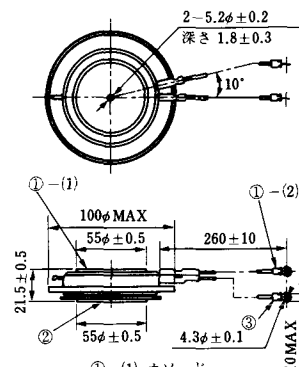
- ① カソード
- ② アノード
- ③ ゲート

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



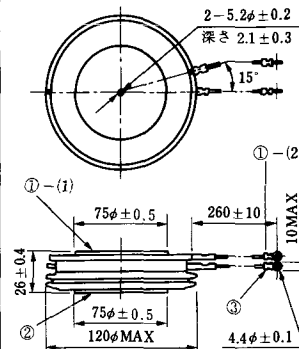
- ① カソード
- ② アノード
- ③ ゲート

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



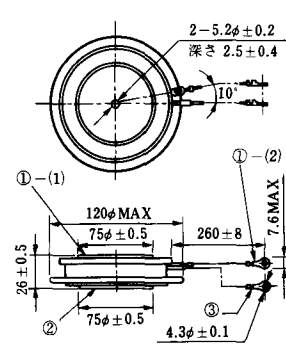
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

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



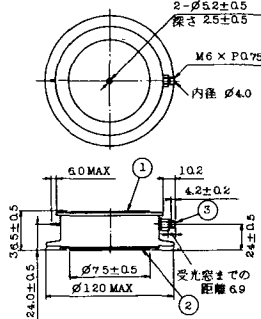
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

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



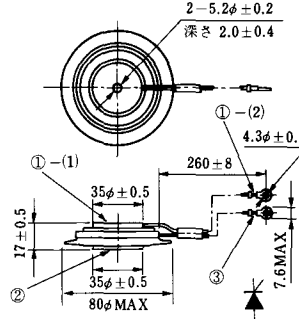
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

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



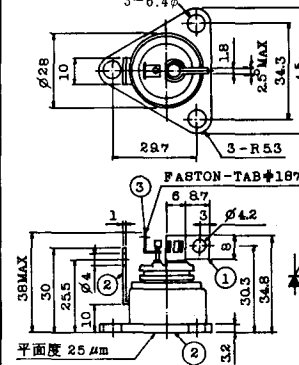
- ① カソード
- ② アノード
- ③ ゲート

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



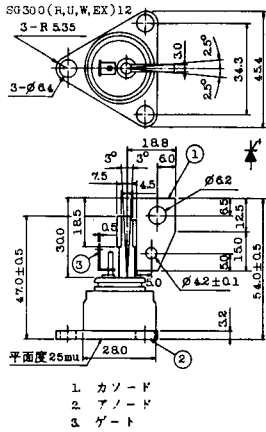
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

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

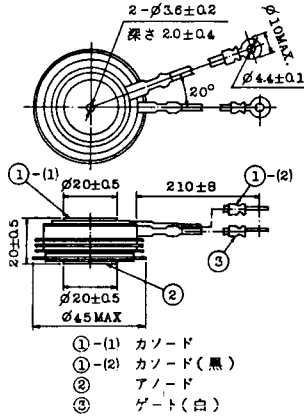


- 1. カソード
- 2. アノード
- 3. ゲート

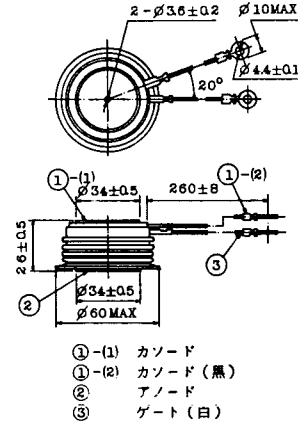
### T-41 (13-28A2A)



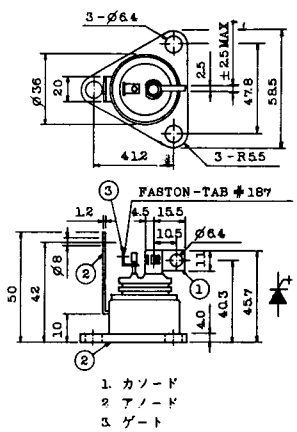
### T-42 (13-45F1A)



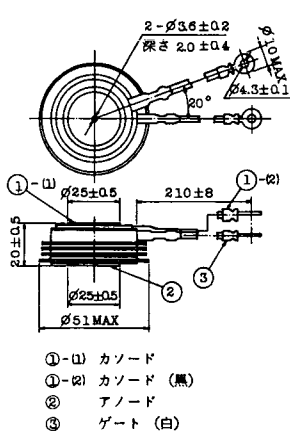
### T-43 (13-60E2A)



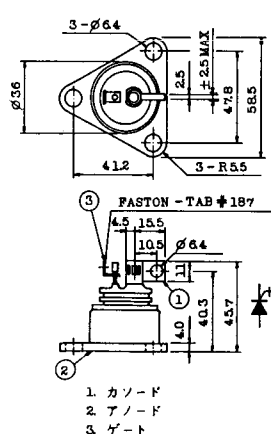
### T-44 (13-36A1A)



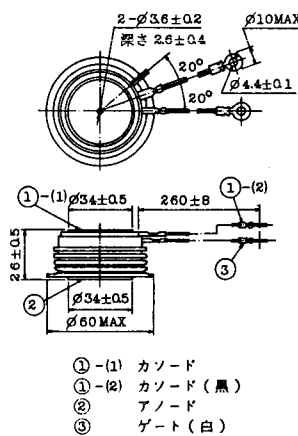
### T-45 (13-51B1A)



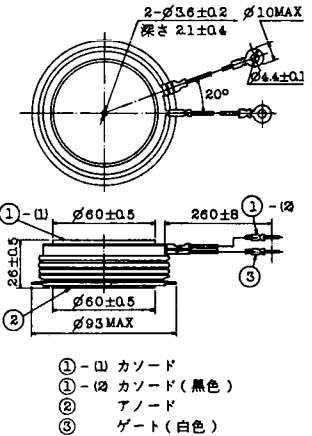
### T-46 (13-36B1A)



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



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



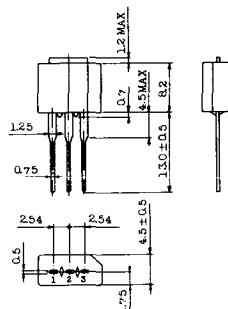


**T-49** (13-75A1A)



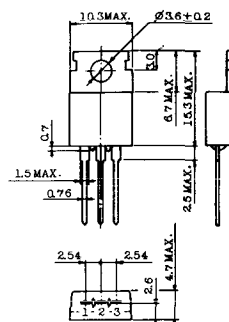
- 1-(1) カソード
- 1-(2) カソード (黒)
- 2 アノード
- 3 ゲート (白)

**T-50** (13-10A3A)



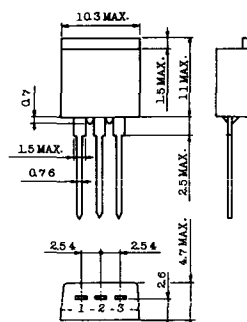
- 1 カソード
- 2 アノード
- 3 ゲート

**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)



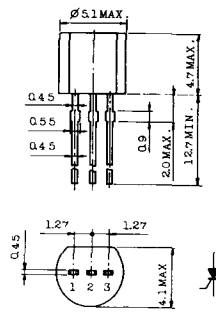
- 1 カソード
- 2 アノード
- 3 ゲート

**T-54** (13-10F1B)



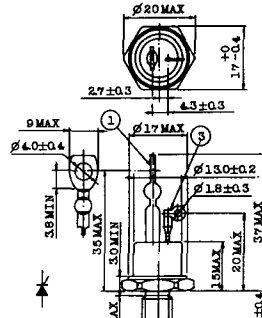
- 1 カソード
- 2 アノード
- 3 ゲート

**T-55** (13-5A1D)



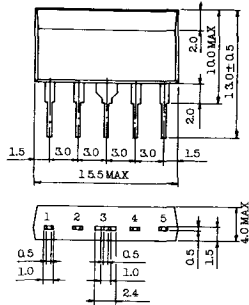
- 1 カソード
- 2 アノード
- 3 アノード

**T-56** (13-13C1A)



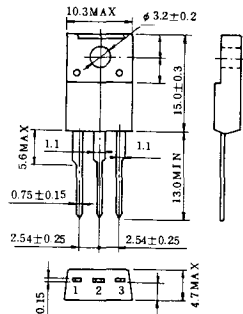
- 1 カソード
- 2 アノード
- 3 ゲート

T-57 (12-16C1A)



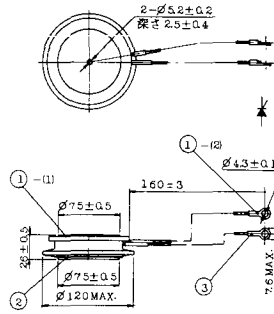
1. アノード (主)
2. ゲート (主)
3. カソード (共通)
4. ゲート (補助)
5. アノード (補助)

T-58 (13-10H1B)



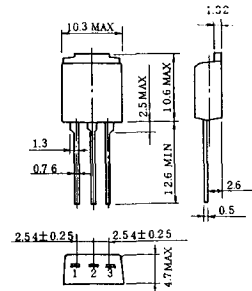
1. カソード
2. アノード
3. ゲート

T-59 (13-120A1A)



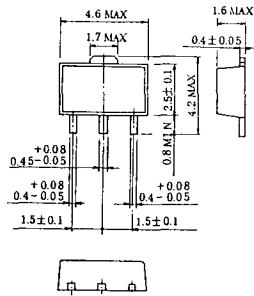
- 1-(1) カソード
- 1-(2) カソード (黒)
- 2 アノード
- 3 ゲート (白)

T-60



1. カソード
2. アノード
3. ゲート

T-61 (13-5B1A)



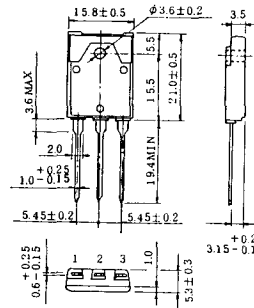
1. ゲート
2. アノード
3. カソード

T-62 (13-10H1A)

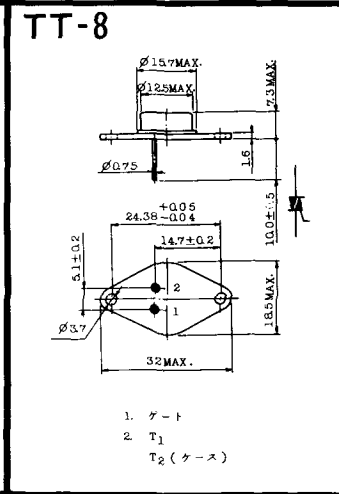
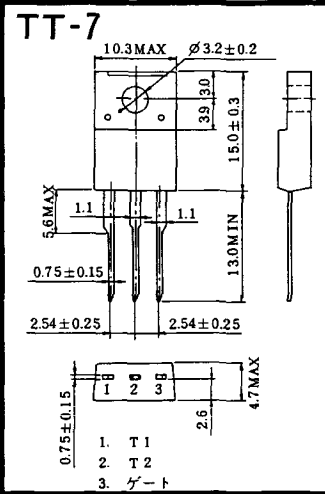
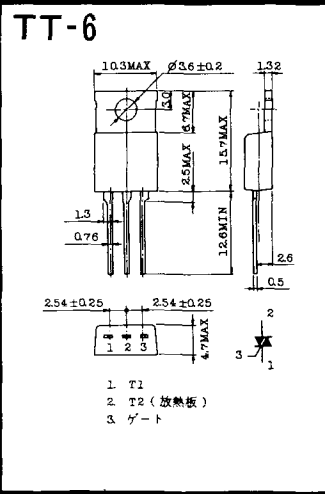
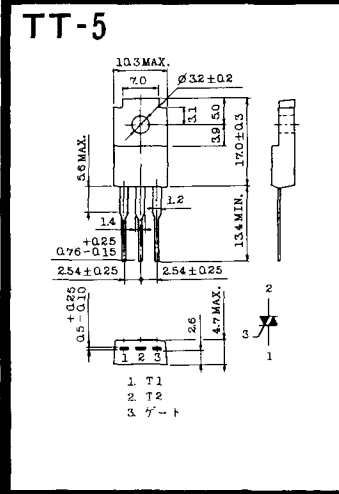
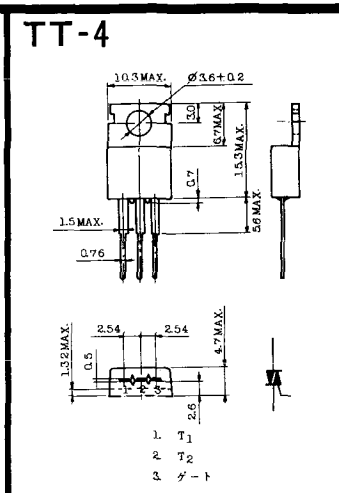
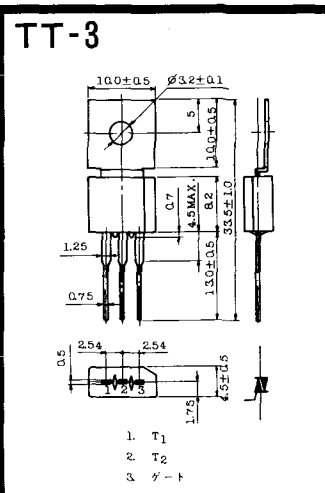
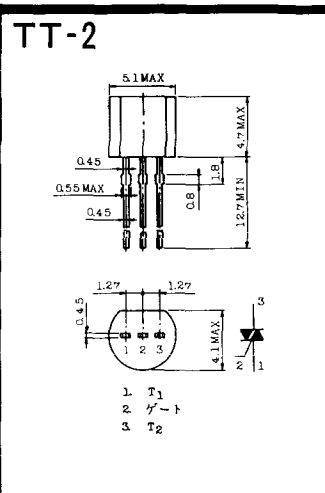
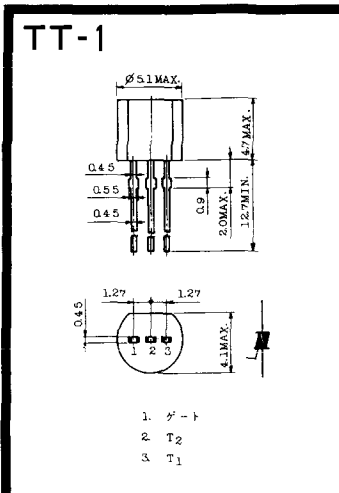


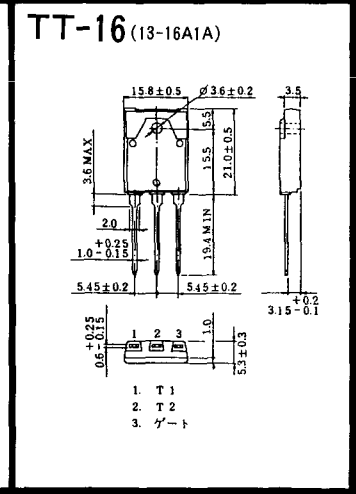
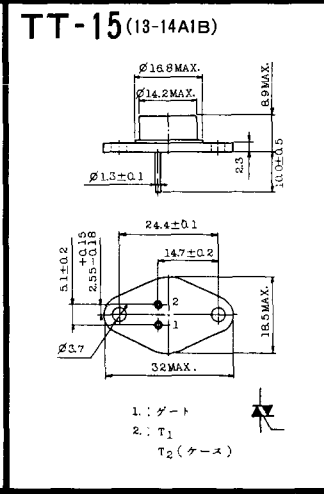
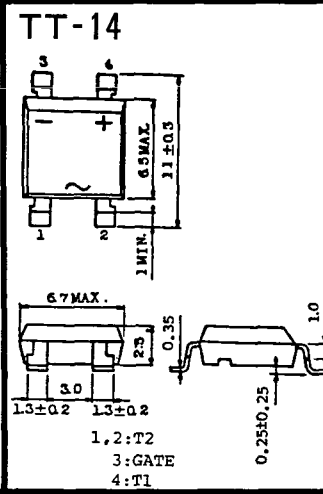
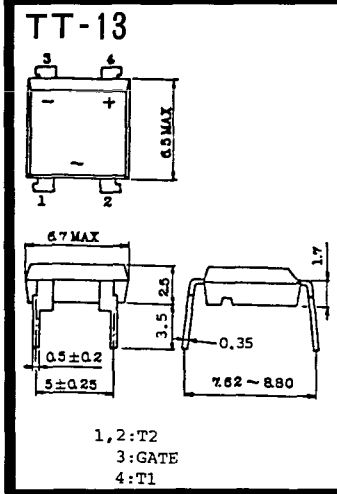
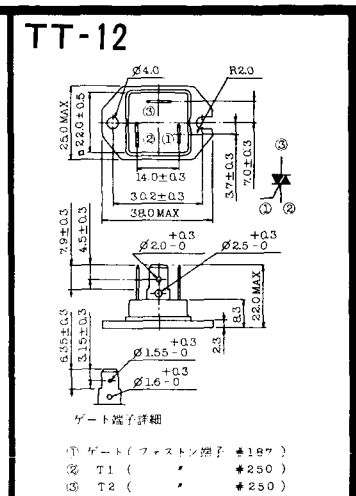
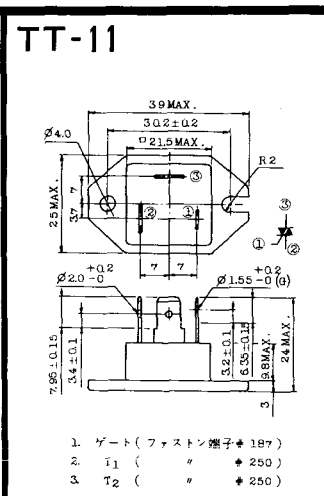
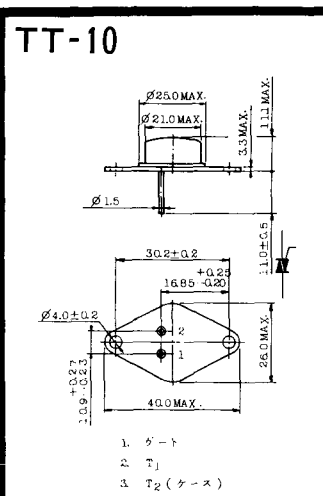
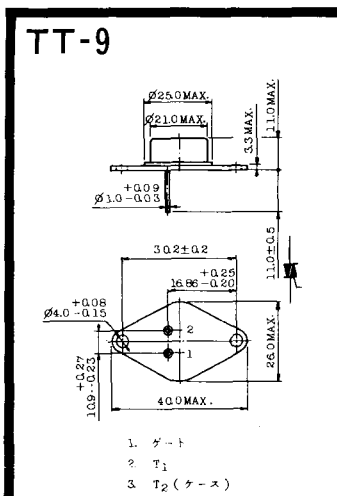
1. カソード
2. アノード
3. ゲート

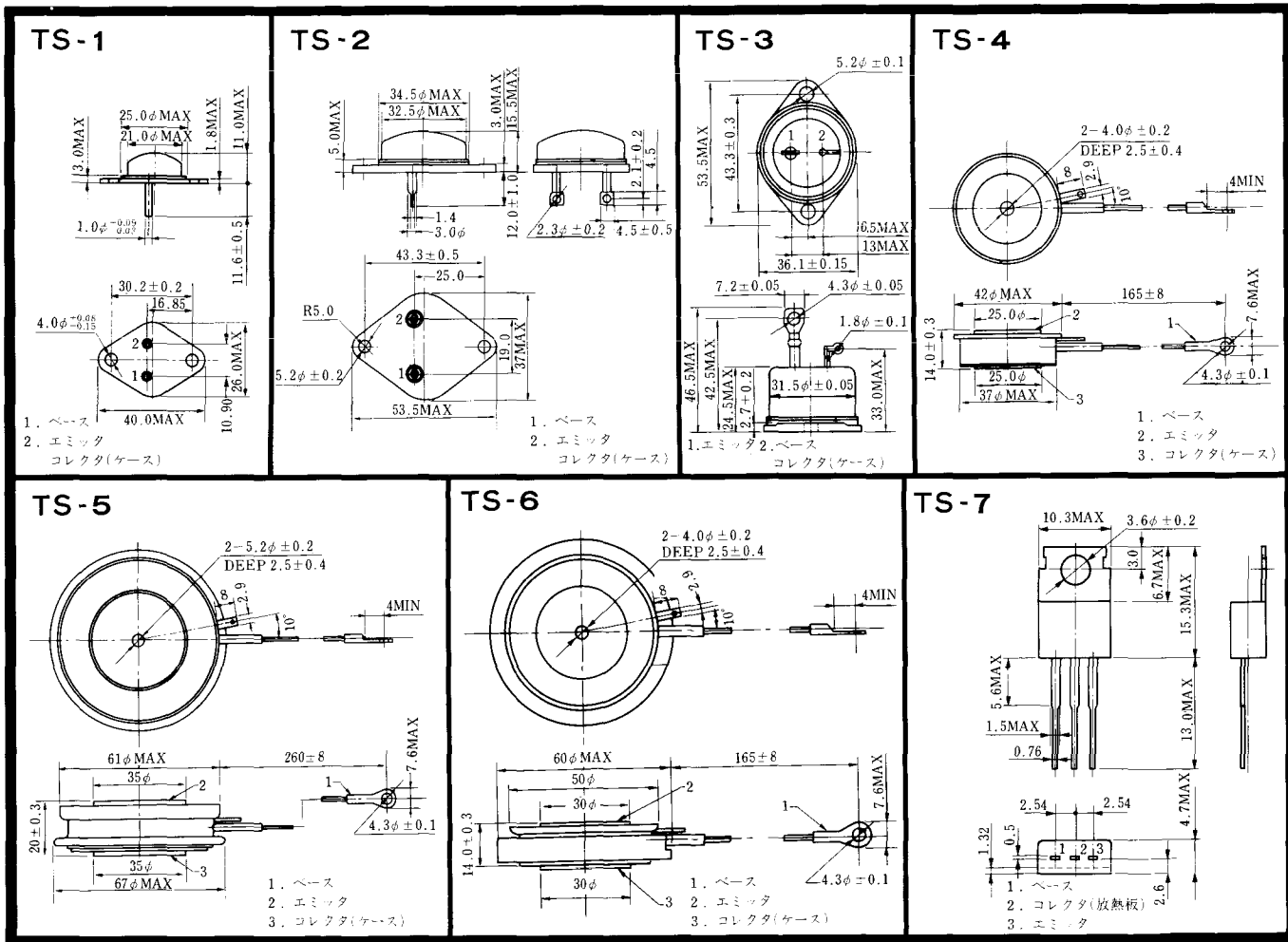
T-63 (13-16A1B)



1. カソード
2. アノード
3. ゲート

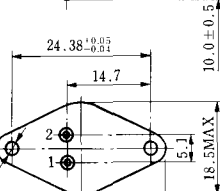
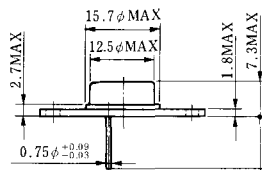






《寸法図単位：mm》

# TS-8



- 1. ベース
- 2. エミッタ  
コレクタ  
(ケース)

### S-62A1A



### S-80A1A



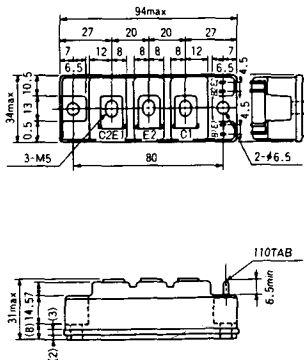
### S-88D1A



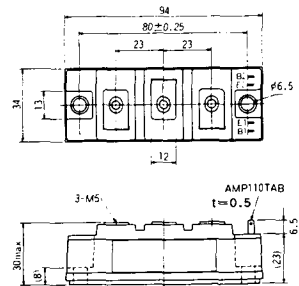
### S-92B1A



### S-94B1A



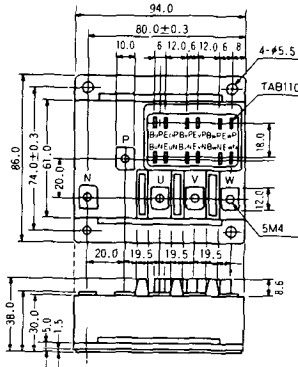
### S-94B1B



### S-94B2A



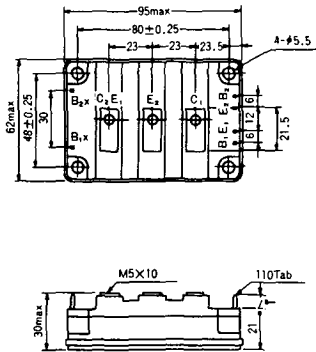
### S-94D1A



### S-95A1A



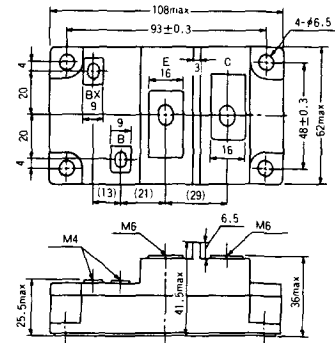
### S-95B1A



### S-98B1B

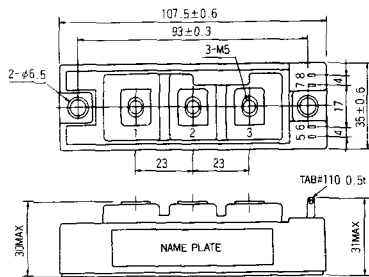


### S-108A2A

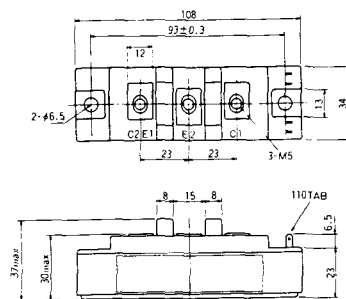




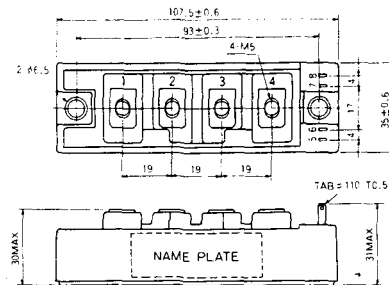
S-108B1A



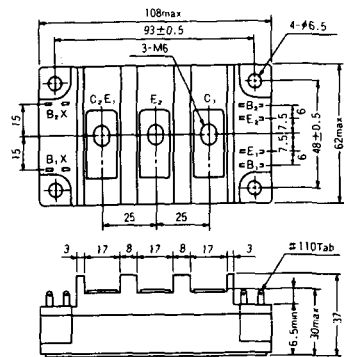
S-108B1B



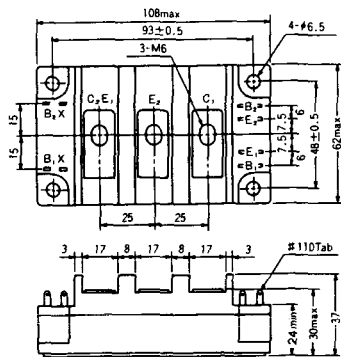
S-108B1C



S-108B2A



S-108B2B



### 2-22B1A



### 2-27A4A



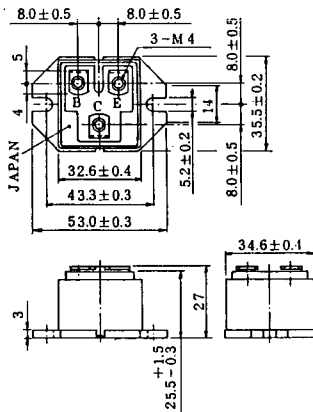
### 2-33C1A



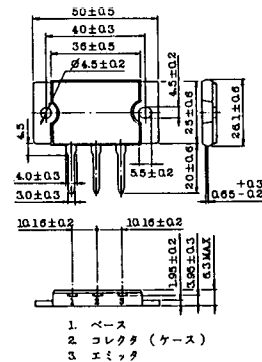
### 2-33D1A



### 2-33F1A



### 2-37A1A



2-48A3A



2-48A3B



2-48A4A



2-64A2A



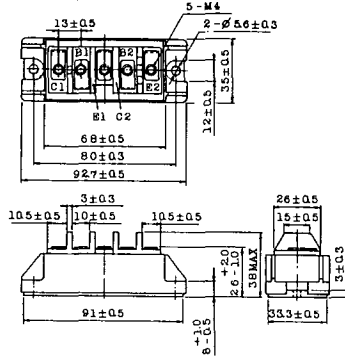
2-64A2B



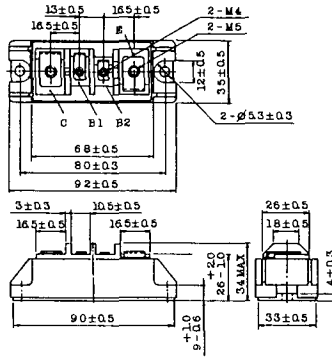
2-68A2A



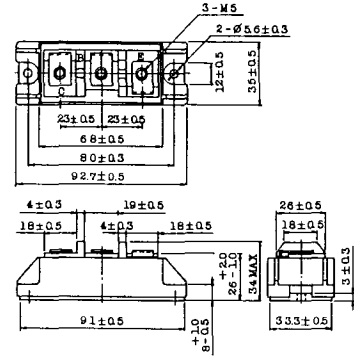
2-68B2A



2-68C1A



2-68D2A



2-72A3A



2-80A1A



2-80B1A





### 2-94D1A



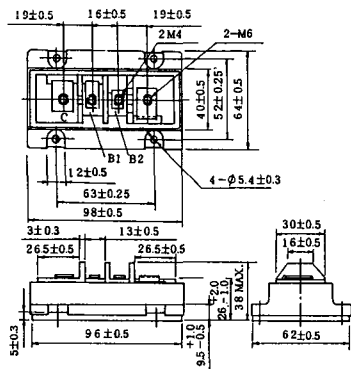
### 2-96A3A



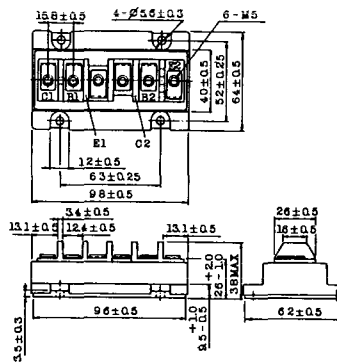
### 2-96A4A



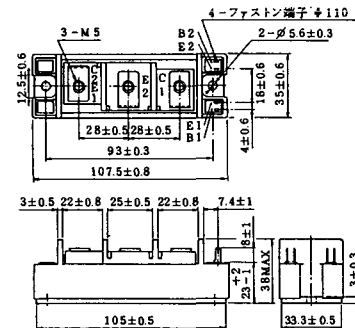
### 2-98B1A



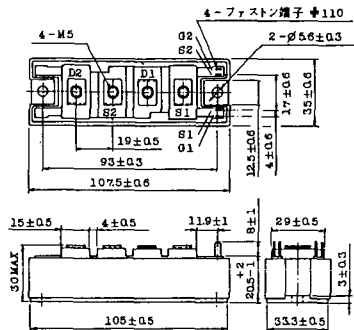
### 2-98C2A



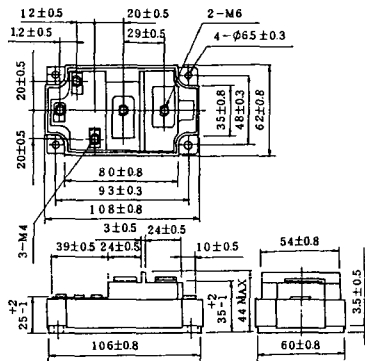
### 2-108A2A



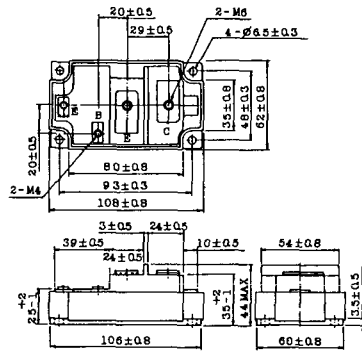
### 2-108B1A



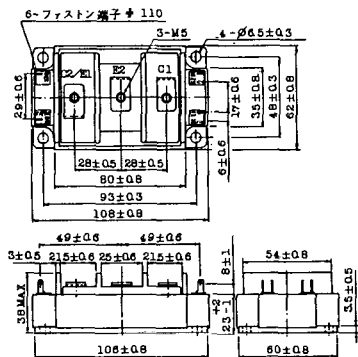
### 2-109A3A



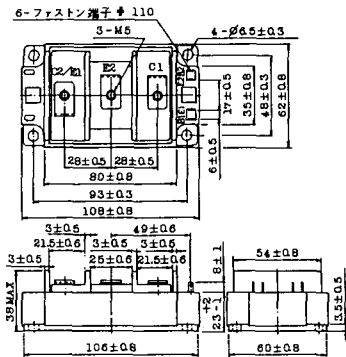
### 2-109A4A



### 2-109B3A



### 2-109B4A



### BBT-II

BBTII  
1D200A-020



### BBT-III

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



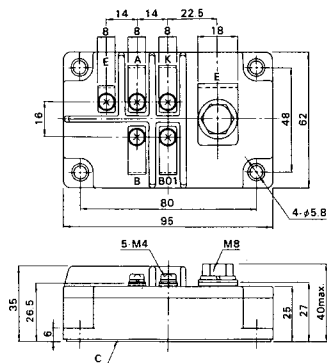
### BBT-III

BBTIII  
ETN01-055  
ET1257



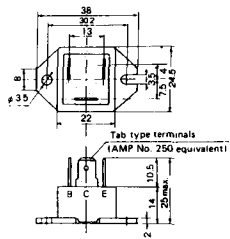
### BBT-IV

BBTIV  
1D500A-030

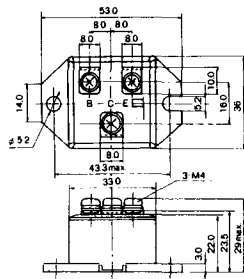




M-101



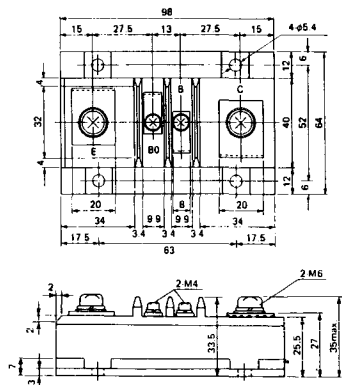
M-102



M-103



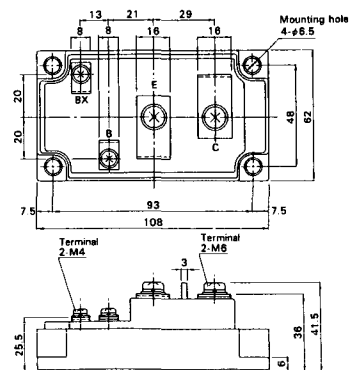
M-104



M-105



M-106



### M-107



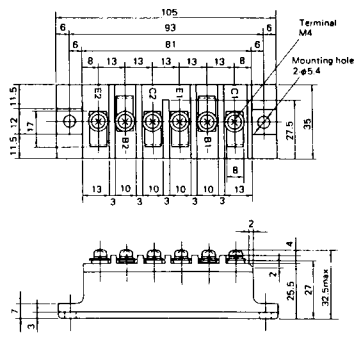
### M-116



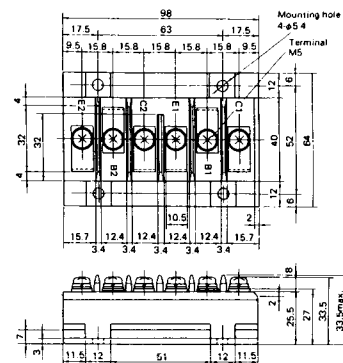
### M-201



### M-202



### M-203



### M-204



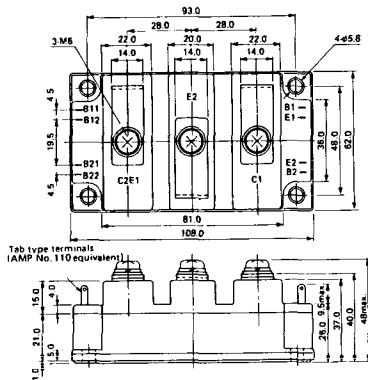
### M-205



### M-206



M-207



M-208



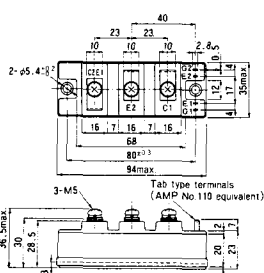
M-209



M-210



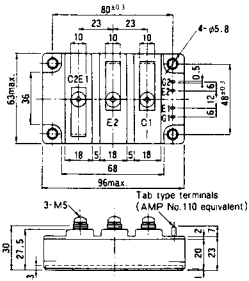
M-211



M-212

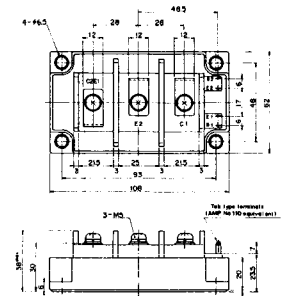


M-213

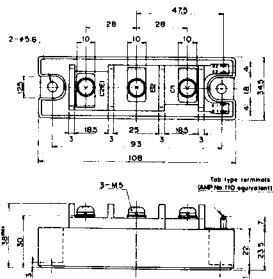


M-214

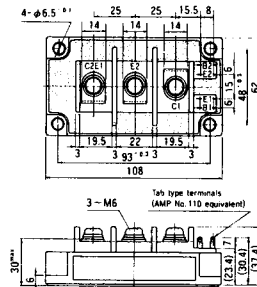
M-215



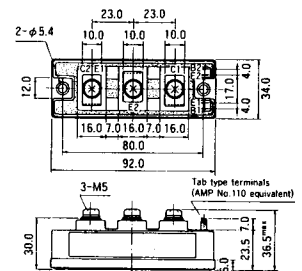
M-216



M-217



M-218



M-219

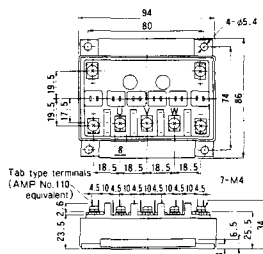




M-607



M-608



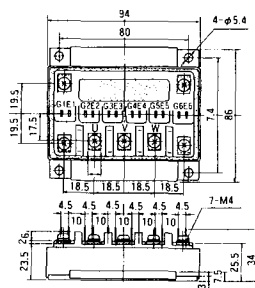
M-609



M-610



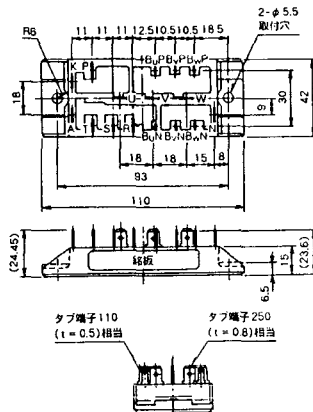
M-616



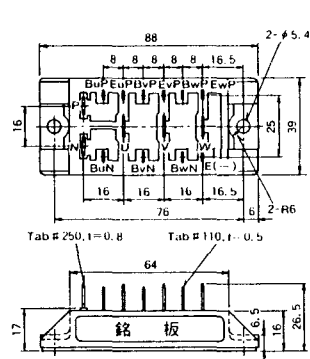




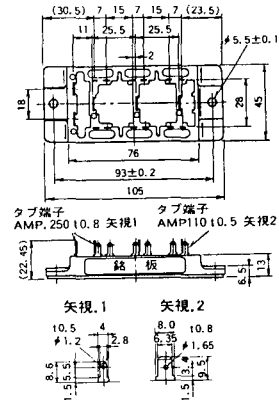
M-2E6A



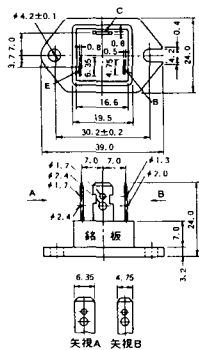
M-2F6A



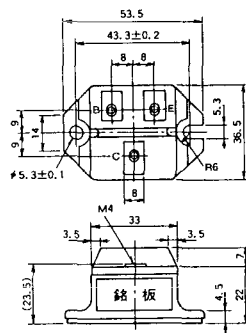
M-2G6A



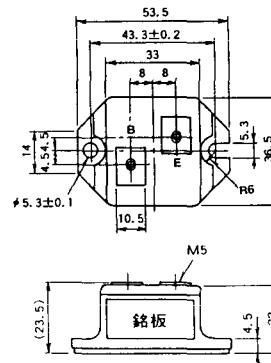
M-3A1A



M-3B1A



M-3B1B



《 寸法図単位:mm 》

M-3C1A



M-3D6A



M-3E6A



M-4A1A



M-4A2A



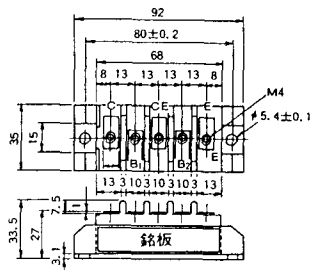
M-4A1B



M-4A2B



M-4B2A



M-5A1A



M-5A1B



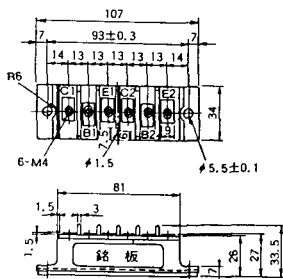
M-5A2A



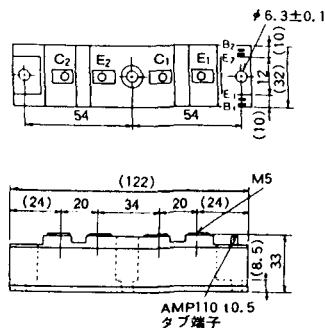
M-5B2A



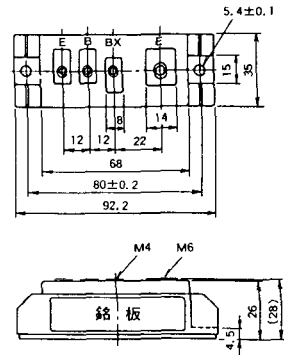
M-5C2A



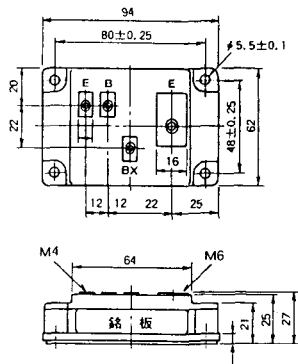
M-5D2A



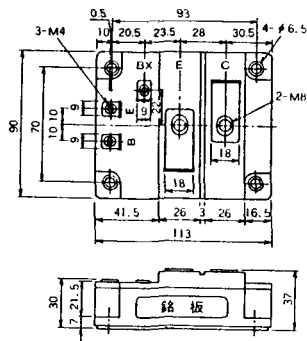
M-6A1A



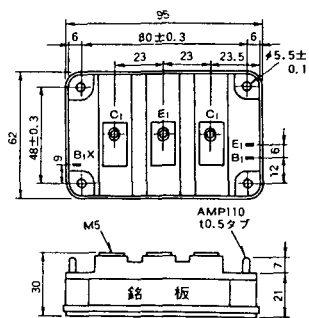
M-7A1A



M-7B1A



M-8A1A



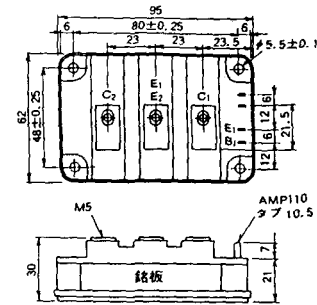
M-8A1B



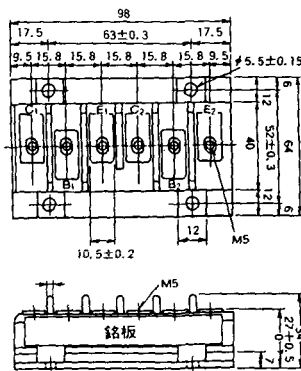
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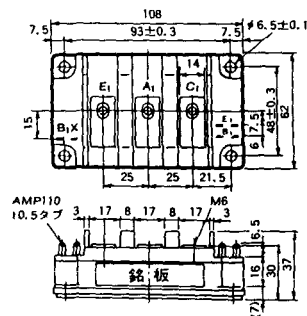
M-8A2B



M-8B2A



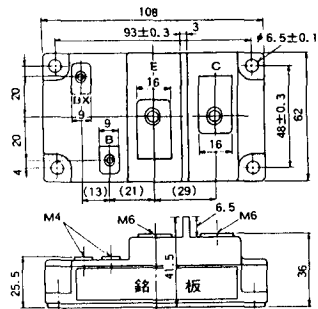
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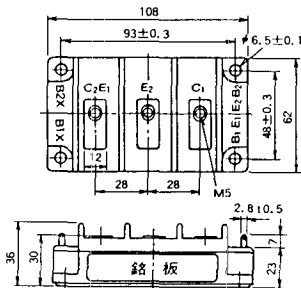
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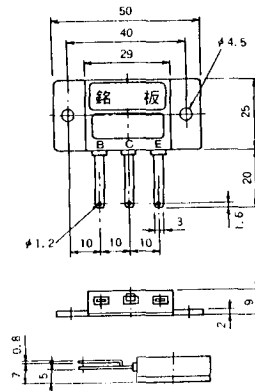
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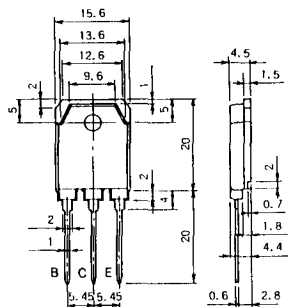
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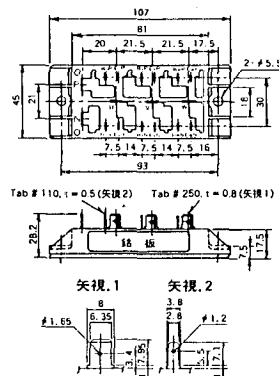
M-1A1B



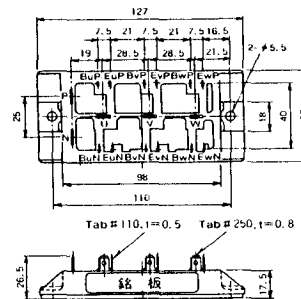
M-1A1C



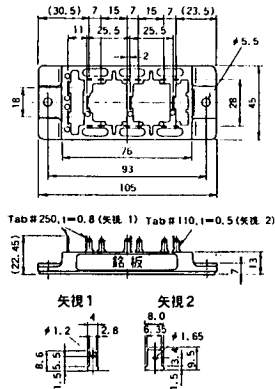
M-2E6B



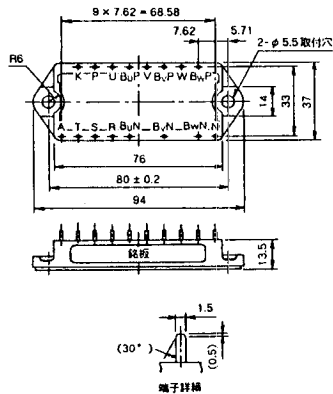
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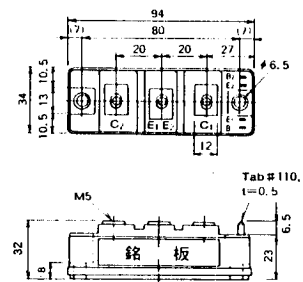
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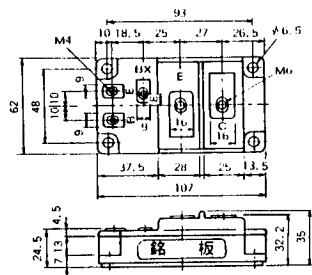
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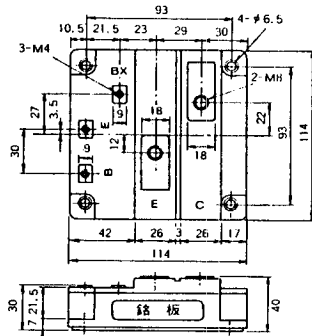
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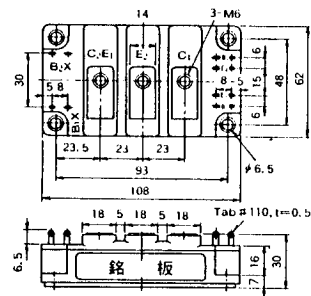
### M-7A1B



### M-7C1A

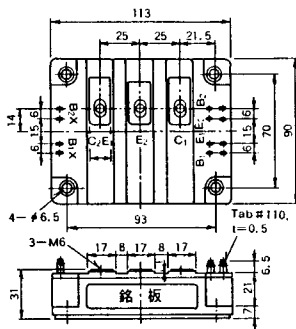


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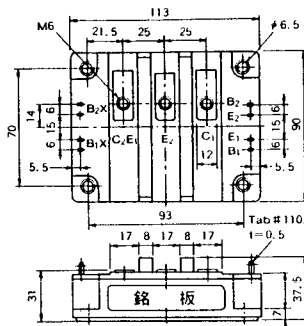




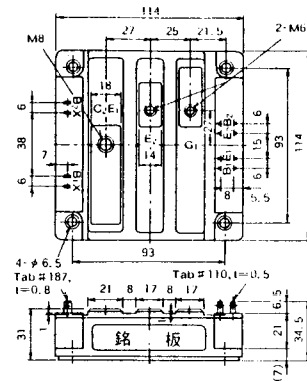
M-10A2A



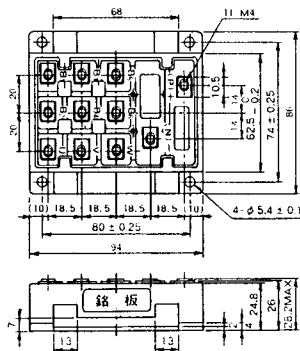
M-10A2B



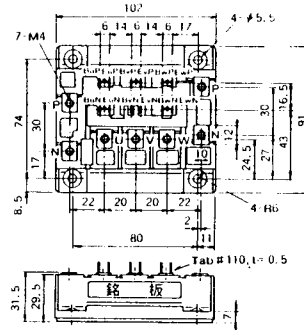
M-11A2A



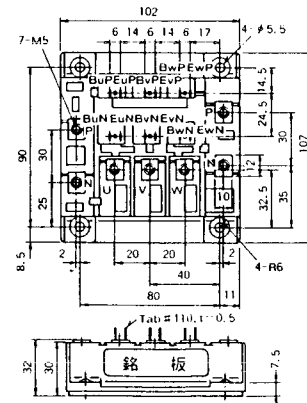
M-12A6A



M-12B6A



M-12B6B





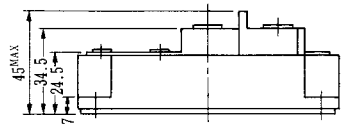
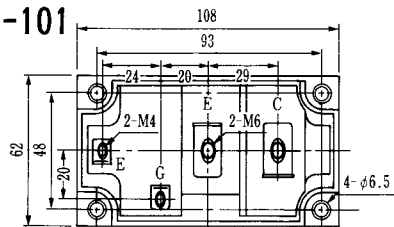
M-9D2B



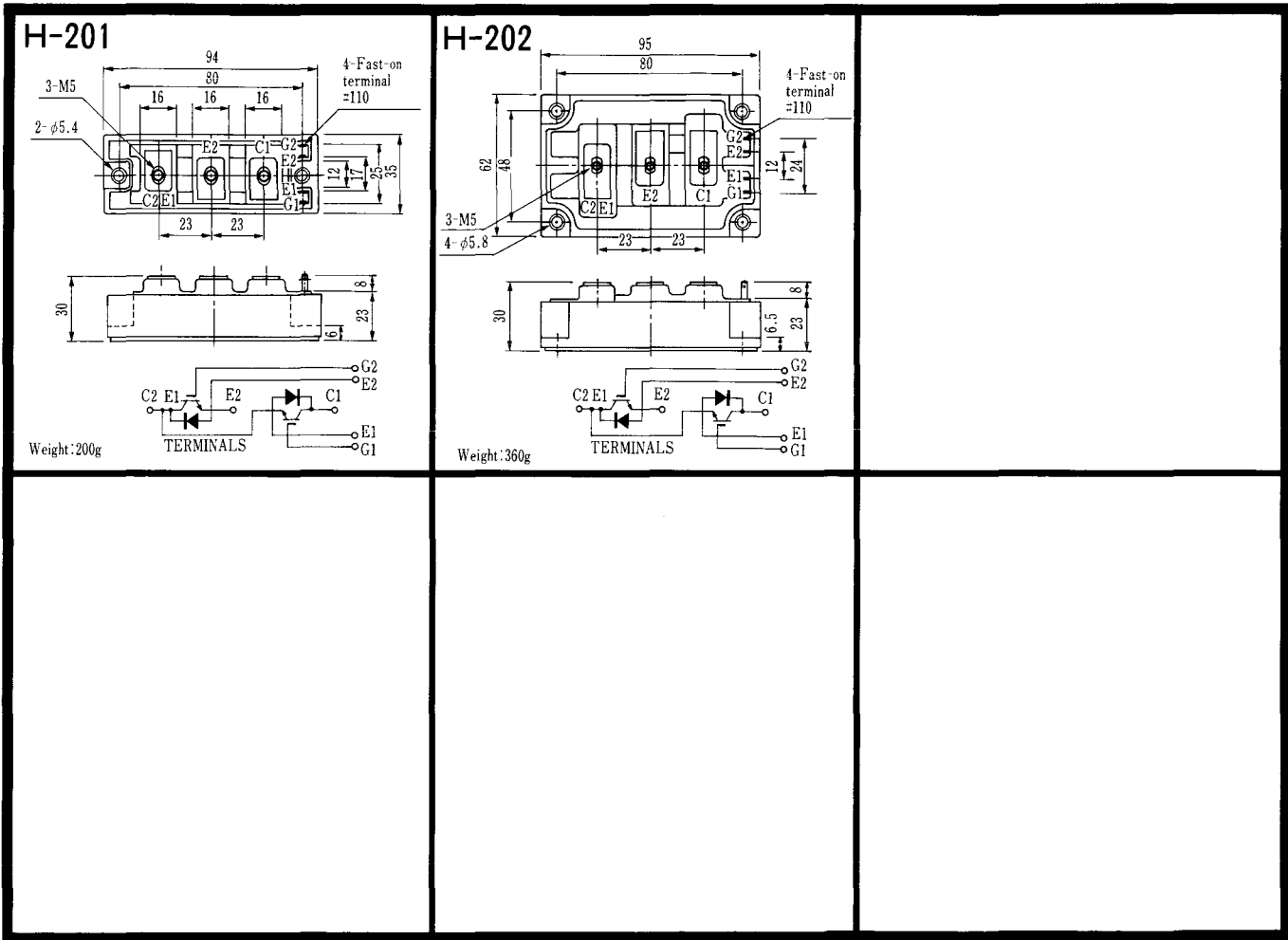
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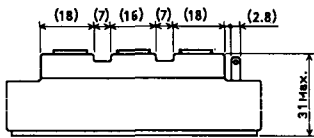
H-101



Weight :480g



### LF-J



### LF-K



