

Thermal Cutoffs (TCO)/ Thermal-links

- EYP** Series: **N**
 Series: **F**
 Series: **E**
 Series: **H**
 Series: **MP**
 Series: **MU**



Features

- Small and Insulation Type
TCO is compact and insulated, featuring quick temperature response, and mountable in a small space without insulation or protection.
- High Reliability
TCO opens reliably when the equipment becomes abnormal, and is not resettable.
- Solid Structure
Uniquely formed lead provides reliable TCO connection and provides easy assembly handling. (Axial lead type only)
- Thin Type
Thick is less than 0.8 mm (MP series), available for spot welding (MP and MU series)
- Halogen-free (Thin type MP and MU series)
The thin type fuses with a part number listed in this catalog contain no halogen other than any that may exist as an impurity.
- RoHS compliant

Approved Safety Standards

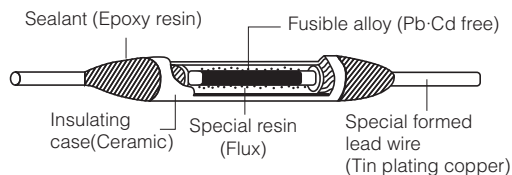
- (Japan) : Approved by JET
 - UL, C-UL (U.S.A.) : E60271
 - CSA (Canada) : 1□□□□□□ (LR67163)
 - VDE (Germany) : 481106-1171-□□□□
 - BEAB (U.K.) : C□□□□
 - CCC (China) : 20020102050042□□
- See Ratings in details.

Recommended Applications

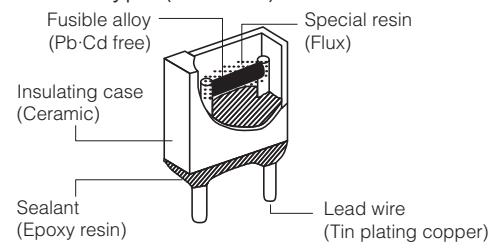
- Transformers, Solenoids, Ventilation fans, Electric fans, Small electric motors, Driers, Gas home appliances, Fluorescent lights, Electric shavers, Adaptors, Heating devices, ICs, Batteries, etc. The TCO can also be used for overheating protection.

Construction

- Axial lead type (N, F and E series)

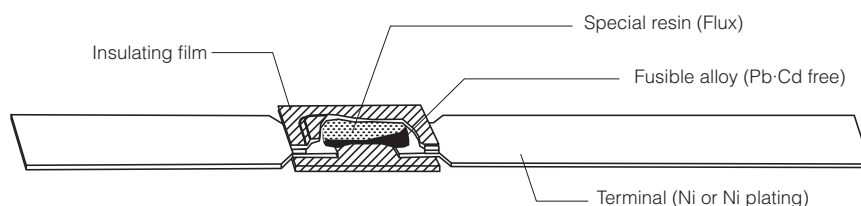


- Radial lead type (H series)



- Thin type (MP and MU series)

* Thin type is not to be soldered.



Ratings

● N series

| Part No. | Type No. of Approved Standards | Rated Functioning Temp. : Tf *1 (°C) | Functioning Temp. *2 (°C) | Electrical Rating | | | Maximum Operating Temp. *3 (°C) | Holding Temp. : Th*4 (°C) | Maximum Temp. Limit : Tm*5 (°C) | Approved Safety Standards | | | | | | |
|-----------|--------------------------------|--------------------------------------|---------------------------------|-------------------|-----------|----------|---------------------------------|---------------------------|---------------------------------|---------------------------|----|-----|-----|------|-----|---|
| | | | | AC/DC | Volt. (V) | Amp. (A) | | | | | UL | CSA | VDE | BEAB | CCC | |
| EYP2BN082 | N082 | 86 | 82±2 | AC | 250 | 2 | 60 | 60 | 200 | | ○ | ○ | ○ | ○ | ○ | ○ |
| | | | | AC | 125 | 3 | 52 | 56 | | — | ○ | ○ | ○ | ○ | ○ | — |
| | | | | DC | 50 | 4 | 45 | 50 | | — | ○ | ○ | ○ | ○ | ○ | — |
| EYP2BN099 | N099 | 102 | 98 ⁺⁴ ₋₃ | AC | 250 | 2 | 65 | 75 | 200 | | ○ | ○ | ○ | ○ | ○ | ○ |
| | | | | AC | 125 | 3 | 60 | 70 | | — | ○ | ○ | ○ | ○ | ○ | — |
| | | | | DC | 50 | 4 | 55 | 65 | | — | ○ | ○ | ○ | ○ | ○ | — |
| EYP2BN109 | N109 | 114 | 110±3 | AC | 250 | 2 | 80 | 90 | 200 | | ○ | ○ | ○ | ○ | ○ | ○ |
| | | | | AC | 125 | 3 | 76 | 86 | | — | ○ | ○ | ○ | ○ | ○ | — |
| | | | | DC | 50 | 5 | 65 | 74 | | — | ○ | ○ | ○ | ○ | ○ | — |
| EYP2BN110 | N110 | 115 | 110 ⁺³ ₋₂ | AC | 250 | 2 | 80 | 90 | 200 | | ○ | ○ | ○ | ○ | ○ | ○ |
| | | | | AC | 125 | 3 | 76 | 86 | | — | ○ | ○ | ○ | ○ | ○ | — |
| | | | | DC | 50 | 5 | 65 | 74 | | — | ○ | ○ | ○ | ○ | ○ | — |
| EYP2BN127 | N127 | 134 | 129±4 | AC | 250 | 2 | 90 | 100 | 200 | | ○ | ○ | ○ | ○ | ○ | ○ |
| | | | | AC | 125 | 3 | 75 | 90 | | — | ○ | ○ | ○ | ○ | ○ | — |
| | | | | DC | 50 | 4 | 65 | 80 | | — | ○ | ○ | ○ | ○ | ○ | — |
| EYP2BN134 | N134 | 139 | 135±3 | AC | 250 | 2 | 100 | 110 | 200 | | ○ | ○ | ○ | ○ | ○ | ○ |
| | | | | AC | 125 | 3 | 85 | 100 | | — | ○ | ○ | ○ | ○ | ○ | — |
| | | | | DC | 50 | 6 | 60 | 70 | | — | ○ | ○ | ○ | ○ | ○ | — |
| EYP2BN143 | N143 | 145 | 141±2 | AC | 250 | 2 | 110 | 120 | 200 | | ○ | ○ | ○ | ○ | ○ | ○ |
| | | | | AC | 125 | 3 | 105 | 115 | | — | ○ | ○ | ○ | ○ | ○ | — |
| | | | | DC | 50 | 6 | 80 | 90 | | — | ○ | ○ | ○ | ○ | ○ | — |

Note: (1) For long lead types add the letter "L" at the end of the part number.

(2) The information of the Approved Safety Standards is furnished as of Jun. 2010.

Approved Safety Standards File No. UL:E60271, CSA:1687496(LR67163), VDE:481106-1171-0001, BEAB:C1144, CCC:2011010205464841

● F series

| Part No. | Type No. of Approved Standards | Rated Functioning Temp. : Tf *1 (°C) | Functioning Temp. *2 (°C) | Electrical Rating | | | Maximum Operating Temp. *3 (°C) | Holding Temp. : Th*4 (°C) | Maximum Temp. Limit : Tm*5 (°C) | Approved Safety Standards | | | | | | |
|-----------|--------------------------------|--------------------------------------|---------------------------------|-------------------|-----------|----------|---------------------------------|---------------------------|---------------------------------|---------------------------|---------|-----|-----|------|-----|---|
| | | | | AC/DC | Volt. (V) | Amp. (A) | | | | | UL C-UL | CSA | VDE | BEAB | CCC | |
| EYP1BF101 | F101 | 102 | 98±3 | AC | 250 | 1 | 65 | 75 | 200 | | ○ | ○ | ○ | ○ | ○ | ○ |
| | | | | AC | 125 | 2 | 60 | 70 | | — | ○ | ○ | ○ | ○ | ○ | — |
| | | | | DC | 50 | 3.5 | 55 | 65 | | — | ○ | ○ | ○ | ○ | ○ | — |
| EYP1BF115 | F115 | 115 | 110 ⁺³ ₋₂ | AC | 250 | 1 | 80 | 90 | 200 | | ○ | ○ | ○ | ○ | ○ | ○ |
| | | | | AC | 125 | 2 | 76 | 90 | | — | ○ | ○ | ○ | ○ | ○ | — |
| | | | | DC | 50 | 4 | 70 | 80 | | — | ○ | ○ | ○ | ○ | ○ | — |
| EYP1BF134 | F134 | 134 | 129 ⁺⁴ ₋₃ | AC | 250 | 1 | 90 | 105 | 200 | | ○ | ○ | ○ | ○ | ○ | ○ |
| | | | | AC | 125 | 2 | 85 | 100 | | — | ○ | ○ | ○ | ○ | ○ | — |
| | | | | DC | 50 | 4 | 65 | 80 | | — | ○ | ○ | ○ | ○ | ○ | — |
| EYP1BF138 | F138 | 139 | 135±3 | AC | 250 | 1 | 100 | 110 | 200 | | ○ | ○ | ○ | ○ | ○ | ○ |
| | | | | AC | 125 | 2 | 90 | 105 | | — | ○ | ○ | ○ | ○ | ○ | — |
| | | | | DC | 50 | 5 | 65 | 70 | | — | ○ | ○ | ○ | ○ | ○ | — |
| EYP1BF145 | F145 | 145 | 141±2 | AC | 250 | 1 | 110 | 125 | 200 | | ○ | ○ | ○ | ○ | ○ | ○ |
| | | | | AC | 125 | 2 | 110 | 125 | | — | ○ | ○ | ○ | ○ | ○ | — |
| | | | | DC | 50 | 5 | 80 | 95 | | — | ○ | ○ | ○ | ○ | ○ | — |

Note: (1) For long lead types add the letter "L" at the end of the part number.

(2) The information of the Approved Safety Standards is furnished as of Jun. 2010.

Approved Safety Standards File No. UL/C-UL:E60271, CSA:1709436(LR67163), VDE:481106-1171-0003, BEAB:C1133, CCC:2011010205464842