

Circuit protection elements

●Circuit protection elements

Rohm's circuit protectors have a very reliable current cut-off capability that protects ICs and their circuits from accidental short circuit loads. Whether operated in AC or DC circuits, these circuit protectors have a very low internal resistance in normal operation, but safely and rapidly break the circuit when the current cutoff level is exceeded.

●Features

- 1) Cutoff is sharp and repeatable.
- 2) Low internal resistance and minimal voltage drop.
- 3) Incombustible.
- 4) Compact.
- 5) Rated for continuous use.
- 6) Good temperature characteristics.
- 7) Withstands surges well.
- 8) UL certified (UL certification number E107856).

●Application

Current surge protection

●Operation notes

Do not use this product on the primary side of commercial power supplies. Arcs that result after cutoff may damage the molding.

Surface mounting Type

●ICP-S series

| Product name | Rated current (A) | Cutoff characteristics | Internal resistance Typ.(Ω) | Rated voltage (V) | Operating temperature (°C) | Storage temperature (°C) |
|--------------|-------------------|------------------------|-----------------------------|-------------------|----------------------------|--------------------------|
| ICP-S0.5 | 0.5 | Fig.1 | 0.150 | 50 | -55 to +125 | -55 to +125 |
| ICP-S0.7 | 0.7 | Fig.2 | 0.084 | | | |
| ICP-S1.0 | 1.0 | Fig.3 | 0.061 | | | |
| ICP-S1.2 | 1.2 | Fig.4 | 0.048 | | | |

Overcurrent Protection Elements

●Cutoff characteristics

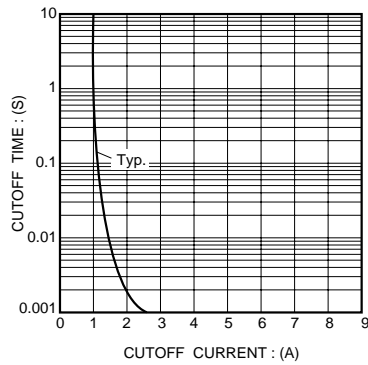


Fig.1 ICP-S0.5

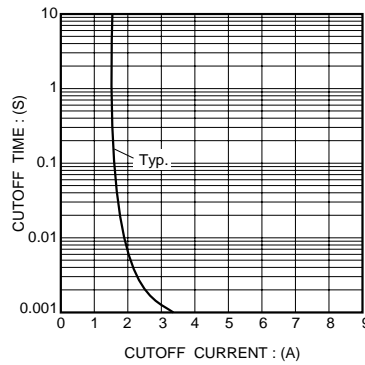


Fig.2 ICP-S0.7

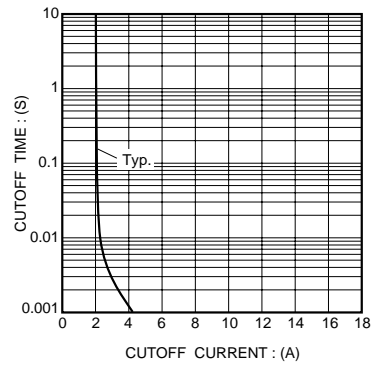


Fig.3 ICP-S1.0

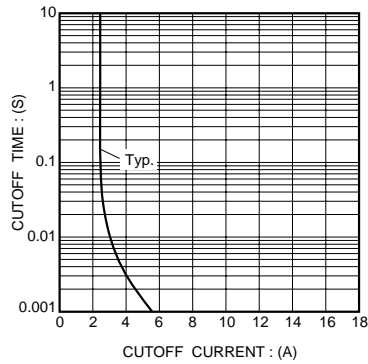
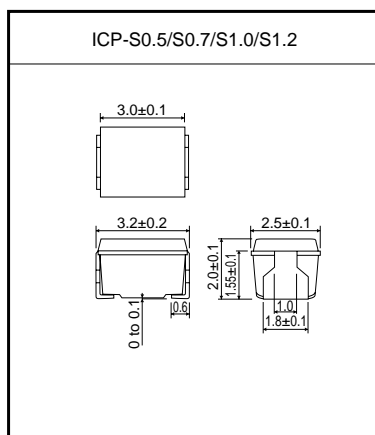


Fig.4 ICP-S1.2

The cutoff characteristics shown are typical. For further details of how to use these protectors, please request the technical documentation from your Rohm representative.

●External dimensions (Unit : mm)

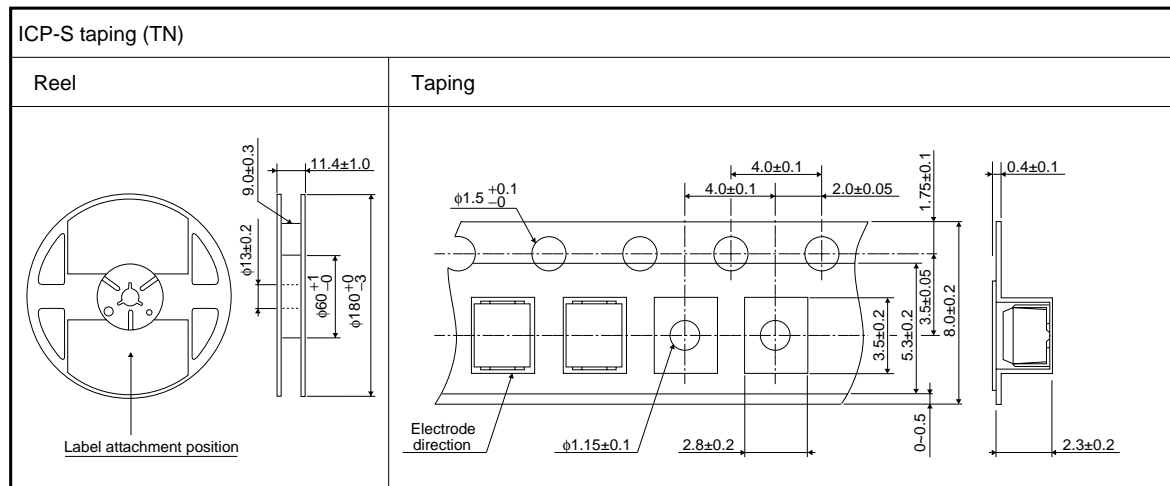


Overcurrent Protection Elements

●Packaging specifications

| | | |
|---------------|------------------------------|--------|
| ICP-S Type | Package type | Taping |
| | Symbol | TN |
| | Basic ordering unit (pieces) | 2000 |
| ICP-S0.5 | | ○ |
| ICP-S0.7 | | ○ |
| ICP-S1.0 | | ○ |
| ICP-S1.2 | | ○ |

●Taping specifications (Unit : mm)



Overcurrent Protection Elements

Leaded type

ICP-N series

| Product name | Rated current (A) | Cutoff characteristics | Internal resistance Typ.(Ω) | Rated voltage (V) | Operating temperature ($^{\circ}\text{C}$) | Storage temperature($^{\circ}\text{C}$) |
|--------------|-------------------|------------------------|--------------------------------------|-------------------|--|---|
| ICP-N10 | 0.4 | Fig.1 | 0.220 | 50 | -55 to +125 | -55 to +125 |
| ICP-N15 | 0.6 | Fig.2 | 0.135 | | | |
| ICP-N20 | 0.8 | Fig.3 | 0.100 | | | |
| ICP-N25 | 1.0 | Fig.4 | 0.070 | | | |
| ICP-N38 | 1.5 | Fig.5 | 0.042 | | | |
| ICP-N50 | 2.0 | Fig.6 | 0.035 | | | |
| ICP-N70 | 2.5 | Fig.7 | 0.023 | | | |

●Cutoff characteristics

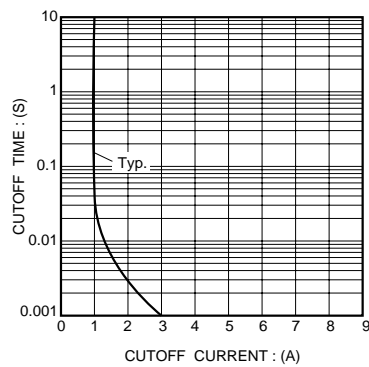


Fig.1 ICP-N10

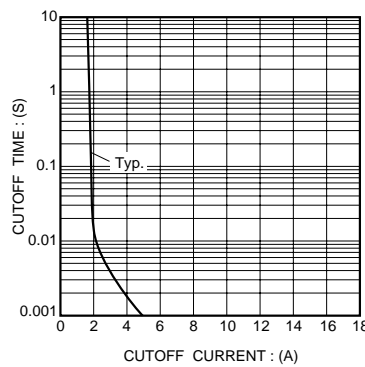


Fig.2 ICP-N15

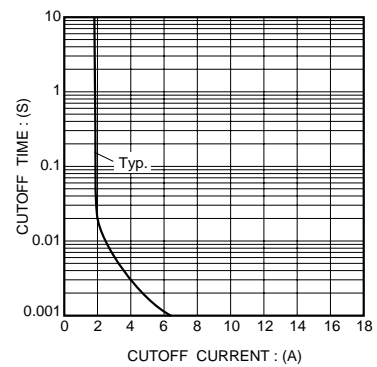


Fig.3 ICP-N20

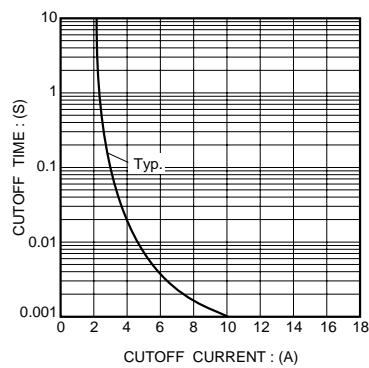


Fig.4 ICP-N25

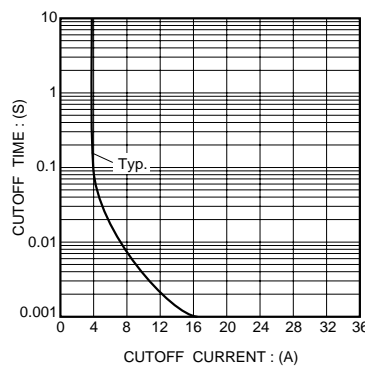


Fig.5 ICP-N38

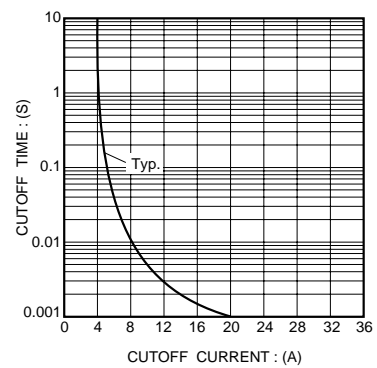


Fig.6 ICP-N50

Overcurrent Protection Elements

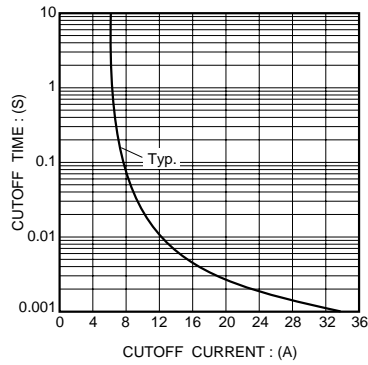
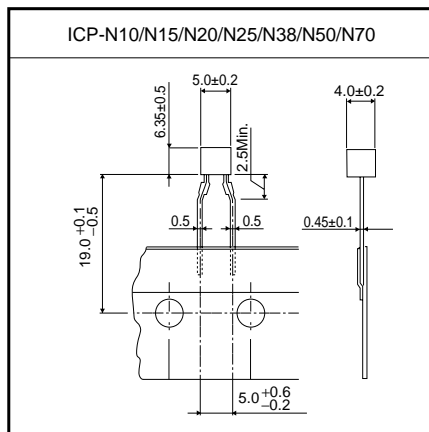


Fig.7 ICP-N70

The cutoff characteristics given represent typical values. Technical documentation regarding ways of using circuit protectors is available from your Rohm representative.

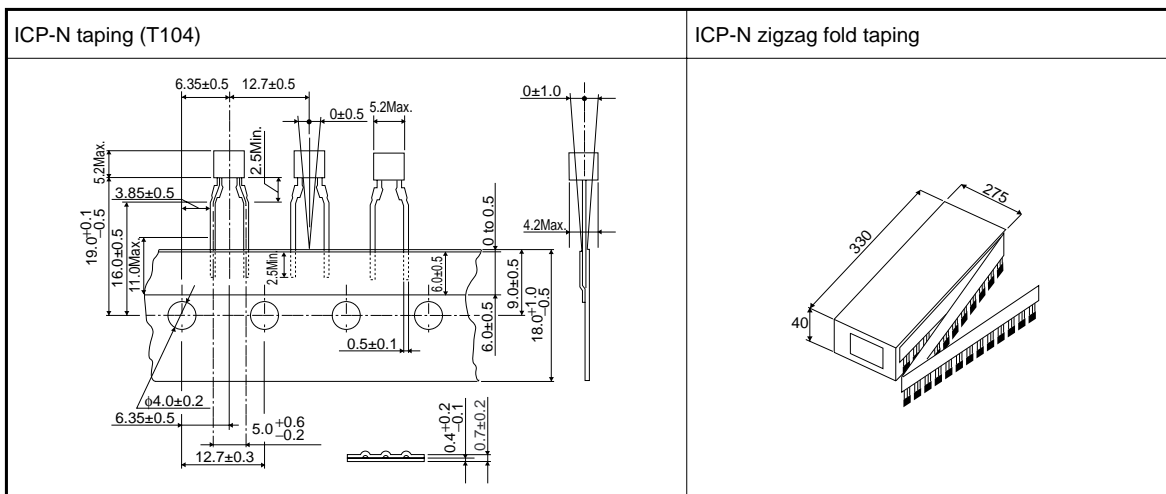
●External dimensions (Unit : mm)



●Packaging specifications

| | | |
|---------------------------------|------------------------------|--------|
| ICP-N | Packaging type | Taping |
| | Symbol | T104 |
| Type | Basic ordering unit (pieces) | 3000 |
| ICP-N10/N15/N20/N25/N38/N50/N70 | | ○ |

●Taping specifications (Unit : mm)



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