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

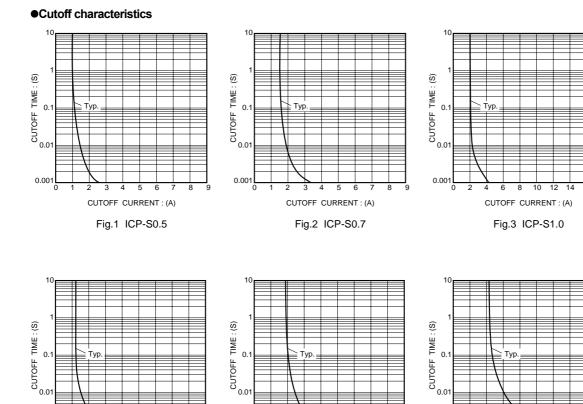
Do not use this product on the primary side of commercial power supplies. Arcs that result after cutoff may damage the molding.

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			-55 to +125
ICP-S0.7	0.7	Fig.2	0.084			
ICP-S1.0	1.0	Fig.3	0.061	50	FF to : 10F	
ICP-S1.2	1.2	Fig.4	0.048	50	–55 to +125	
ICP-S1.8	1.8	Fig.5	0.032			
ICP-S2.3	2.3	Fig.6	0.026			





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

CUTOFF CURRENT: (A)

Fig.5 ICP-S1.8

0.001

CUTOFF CURRENT: (A)

Fig.6 ICP-S2.3

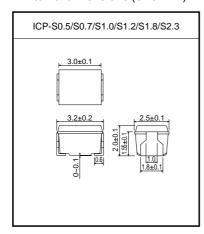
0.001

●External dimensions (Unit : mm)

CUTOFF CURRENT: (A)

Fig.4 ICP-S1.2

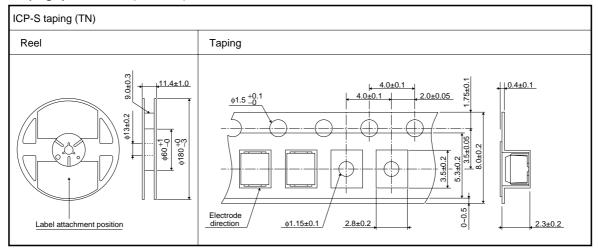
0.001



●Packaging specifications

	Package type	Taping
ICP-S	Symbol	TN
Туре	Basic ordering unit (pieces)	2000
ICP-S0.5		0
ICP-S0.7		0
ICP-S1.0		0
ICP-S1.2		0
ICP-S1.8		0
ICP-S2.3		0

●Taping specifications (Unit : mm)

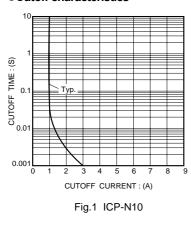


Leaded type

ICP-N series

Product name	Rated current (A)	Cutoff characteristics	Internal resistance Typ.(Ω)		Operating temperature (°C)	Storage temperature(°C)
ICP-N10	0.4	Fig.1	0.220			
ICP-N15	0.6	Fig.2	0.135			
ICP-N20	0.8	Fig.3	0.100			
ICP-N25	1.0	Fig.4	0.070	50	-55 to +125	-55 to +125
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



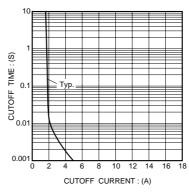


Fig.2 ICP-N15

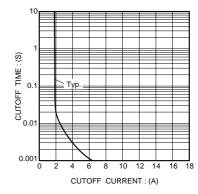


Fig.3 ICP-N20

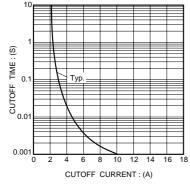


Fig.4 ICP-N25

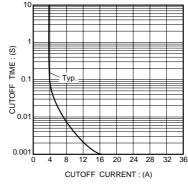


Fig.5 ICP-N38

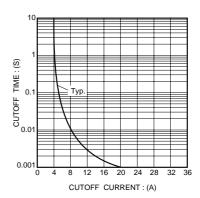


Fig.6 ICP-N50

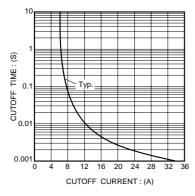
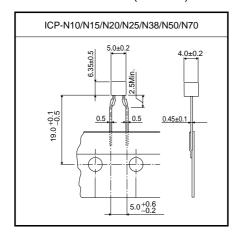


Fig.7 ICP-N70

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

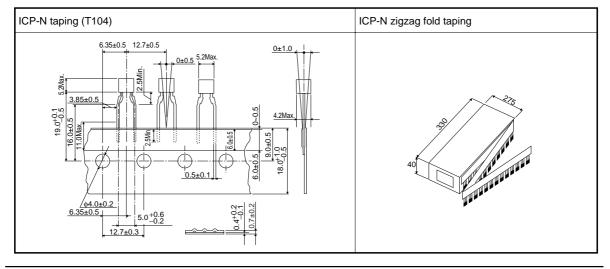
●External dimensions (Unit : mm)



Packaging specifications

	Packaging type	Taping
ICP-N	Symbol	T104
Type	Basic ordering unit (pieces)	3000
ICP-N10/N	0	

●Taping specifications (Unit : mm)





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