

PRCP

POLYMER RESETTABLE CIRCUIT PROTECTORS

■ PRECAUTIONS BEFORE USING

- PRCP devices are intended for the use of protection against the overcurrent fault, and should not be used where repeated or continuous fault conditions for the trip are expected.
- PRCP devices may be damaged by the abnormal heat generation caused by the application of the voltage greater than the maximum voltage.
- PRCP devices trip at the temperature of about 125 °C . The devices may trip at the lower current than the expected I trip if the heat generating components are in the neighborhood or may not trip even at the I trip value if the surrounding high-temperature condition is super excellent.

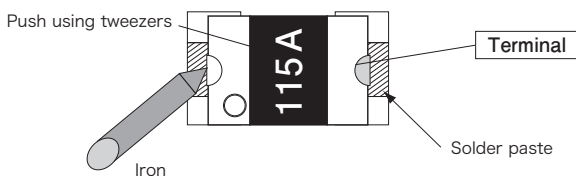
• Hand- held soldering

It is not recommended for the SMD type of PRCP using hand-held soldering at mounting.

At the experimental production using hand-held soldering, please pay the attention for the following items.

- At the case of hand soldering, it is very difficult to control the quantity of solder using the wire type solder material. Please use the solder paste and print or dispense it to the board in order to control the quantity of solder appropriately.

Please attach the solder iron tip to the terminal of PRCP and heat & melt the solder paste.



• Parallel connection

It is not able to recommend for parallel connection of PRCP because there is the possibility that does not act trip operation simultaneously, from the reason that the each currents differ by the difference of the resistance value of each device.

■ SELECTION GUIDE FOR THE OPTIMUM PRCP DEVICE

To select the optimum PRCP device, you have to consider the relations between the device parameters and operating conditions

Step for selection

- Step 1: Select a suitable PRCP model which has the maximum voltage greater than the maximum circuit voltage.
- Step 2: Select a suitable PRCP model which has the Ihold current greater than “Normal operating current” at “Operating Temperature” by using the “Thermal Derating chart - Ihold, I trip” .
- Step 3: Check the time to tripped state using the “Typical Time to trip at 23 °C” for selected model.

Operation condition	Device parameter
Maximum circuit voltage (V)	V max: Maximum voltage
Normal operating current (A)	I hold: Hold current (A)
Fault current (A)	I trip: Trip current (V)
Operating Temperature (°C)	Thermal derating chart (I hold, I trip)