Please confirm the parameters according to the following questions.
The best selection is the product that matches three parameters.

● Confirmation Items

What is the potential maximum voltage applied to POSISTOR®?	How much current flows in the circuit at normal conditions?	How much current flows in the circuit at abnormal conditions?

● Example

Line Voltage 140V	Usual Current 200mA	Abnormal Current 580mA

● Selection Standards

Line voltage ≦ Maximum voltage of POSISTOR®	Usual current ≦ Hold current of POSISTOR®	Abnormal current ≧ Trip current of POSISTOR®

Part Number	Max. Voltage (V)	Hold Current at +60°C (mA)	Trip Current at -10°C (mA)	Max. Current (A)	Resistance (at 25°C) (ohm)
PTGL18AR4R7M6B72B0	125	360	900	1.7	4.7 ±20%
PTGL18AR3R3M6B72B0	125	420	1050	2.0	3.3 ±20%
PTGL07AR330M6A51B0	140	100	230	0.5	33 ±20%
PTGL09AR220M6C61B0	140	140	330	1.0	22 ±20%
PTGL10AR150M6C61B0	140	170	400	1.0	15 ±20%
→ **PTGL12AR100M6C01B0**	140	220	510	1.0	10 ±20%
PTGL13AR6R8M6C01B0	140	290	670	1.0	6.8 ±20%
PTGL16AR5R6M6C01B0	140	340	780	2.0	5.6 ±20%

PTGL12AR100M6C01B0 is the best selection in this case.

Technical Terms

1. Protective Threshold Current

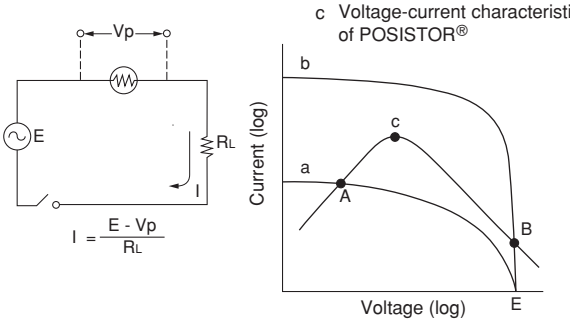
The maximum current value is called the "Protective Threshold Current" for Voltage vs. Current characteristics (static).

When smaller than the protective threshold current flows in POSISTOR®, it reaches its stability (as shown in figure on right) at the intersection (A) of the load curve (a) and voltage-current characteristics of POSISTOR®(c). And POSISTOR® works as a normal fixed resistor.

However, when larger than protective threshold current flows, it stabilizes at the intersection (B) with the load curve (b).

Load Curve of Circuit and Voltage - Current Characteristics of POSISTOR®

a Load curve in normal state (normal current)
b Load curve in abnormal state (abnormal current)
c Voltage-current characteristics of POSISTOR®

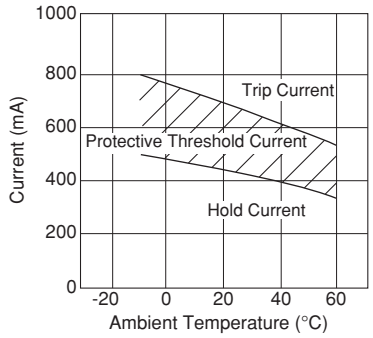


2. Protective Threshold Current Range

Protective threshold current varies depending on the ambient temperature, resistance value, temperature characteristics and shape. (see Figure on right) The maximum value of trip current and the minimum value of the hold current are in the range of ambient temperature -10 to +60°C.

That is, when a current is smaller than the hold current, POSISTOR® works only as a fixed resistor. When larger than the trip current flows, however, POSISTOR® protects the circuit from overload.

Protective Threshold Current Range



3. Operating Time

A period starting from the voltage input to the moment current itself sharply attenuates is called "Operating Time." Conventionally, operation time (t_0) is determined to be the period until inrush current (I_0) decreases to a level one half the original inrush current ($I_0/2$).

Operating Current