AMETHERM
Circuit Protection Thermistors

DATA SHEET

Part Number: MCL20 500100-A

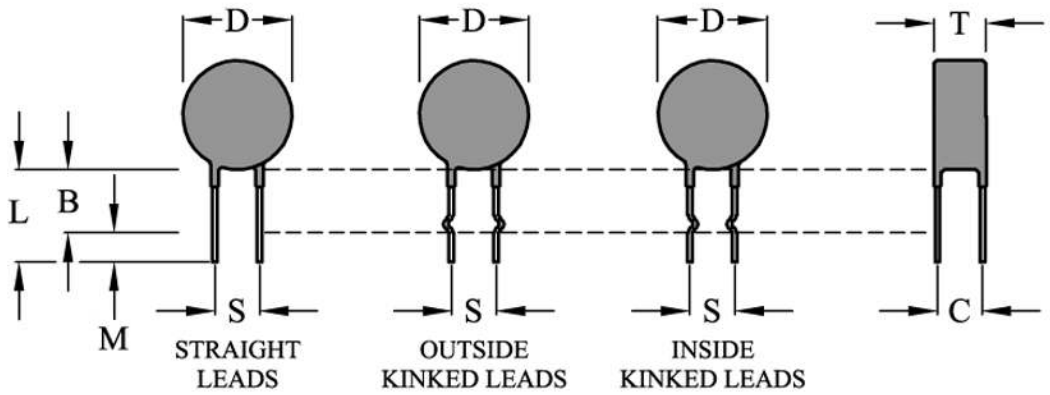
(APC P/N 160-0064-Z) Rev-I

RoHS Compliant

Ordering Different Lead Types:

Inside Kinked Leads	Use-A after Ametherm's part #
Outside Kinked Leads	Use-B after Ametherm's part #

For Example: to order an inside kinked lead use part number MCL20 500100-A



Electrical Specifications

Resistance @ 25° C	50 Ω +20% /-50%
Minimum Switching Current @ 25°C	0.40 A
Max Continuous Current @ 70°C	0.25 A
Max Voltage Rating	680 VRMS
Maximum Inrush Current @ Max Peak Voltage of 680 x 1.414 = 962 V	20.0 Amp
Heat Capacity	5.45 Joules/ °C
Dissipation Constant	55.0 mW/°C
Thermal Time Constant	62 seconds
Switch Temperature	100°C ± 8°C
Operating Temperature	- 50 °C to 150 °C
Storage Temperature	- 50 °C to 120 °C
Leads are copper with nickel underlay and tin plating	
Flammability rating: meets UL94-V0 standard	

Manufacturing Note:

The PTC tends to drop in resistance when exposed to High voltage (> 400VRMS). In addition high temperature wave solder would also cause, the drop in resistance temporarily.

Mechanical Specifications

D	19.0 mm ± 7% (20.33 mm Max.)
T	9.0 mm Max.
Lead Diameter	1.0 mm ± 0.1 mm
S	7.8 mm Nom.
L	16.0 mm Nom.
M	5 mm ± 1.0 mm
B	11.0 mm Nom.

Rev.	Date	Description
A	07/02/07	Dissipation constant changed from 11 mW/°C to 55.0 mW/°C. Heat capacity changed from 3.0 J/°C to 5.45 J/°C
B	07/05/07	Dimension C changed from 3.6 mm to 11.0 mm
C	07/10/07	Added Operating and storage temp., lead material and flammability rating.
D	07/12/07	Dimension T changed from 12.0 mm to 9.0 mm max
E	07/20/07	Dimension B corrected to 12.0 mm Nom., lead spacing changed to 7.8 mm Nom.
F	07/30/07	"T" Dimension changed to 18 mm form 38 mm.
G	07/30/07	"D" Added tolerance and Max Dia
H	08/17/07	Added "M" Dimension & Tolerance
I	02-04-08	Revised the tolerance in resistance to +20%, -50%.

Revision Date: February 5, 2008

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