

Polymeric PTC

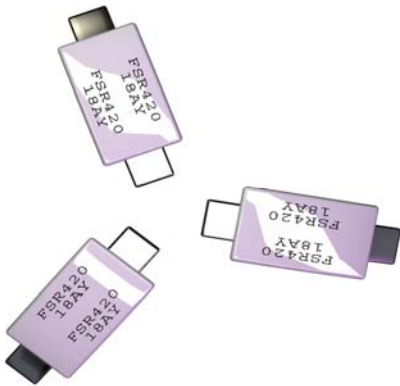


MPSR Series	MERITEK
--------------------	----------------

Feature and Applications

UL E223037

- ROHS Compliant (Lead Free) Product
- Electronic applications: Rechargeable battery packs, Lithium cell and battery packs
- Low profile, Solid state
- Operation Current: 1.2A to 4.2A
- Maximum Operating Voltage: 15V and 30V
- Temperature Range: -40°C to 85°C



PART NUMBERING SYSTEM





Electrical Characteristics (23°C)

Part Number	Hold Current	Trip Current	Max. Time to Trip	Rated Voltage	Maximum Current	Typical Power	Resistance Tolerance		
							RMIN	RMAX	R1MAX
	I _H , A	I _T , A	at 5xI _H , S	V _{MAX} , Vdc	I _{MAX} , A	P _d , W	ohms	ohms	ohms
MPSR120	1.20	2.70	5.0	15	100	1.2	0.085	0.160	0.220
MPSR175	1.75	3.80	5.0	15	100	1.5	0.050	0.090	0.120
MPSR200	2.00	4.40	4.0	30	100	1.9	0.030	0.060	0.100
MPSR350	3.50	6.30	3.0	30	100	2.5	0.017	0.031	0.050
MPSR420	4.20	7.60	6.0	30	100	2.9	0.012	0.024	0.040

I_H=Hold current-maximum current at which the device will not trip at 23°C still air.

I_T=Trip current-minimum current at which the device will always trip at 23°C still air.

V_{MAX}=Maximum voltage device can withstand without damage at its rated current.

I_{MAX}= Maximum fault current device can withstand without damage at rated voltage (V_{MAX}).

P_d=Maximum power dissipated from device when in tripped state in 23°C still air environment.

R_{MIN}=Minimum device resistance at 23°C.

R1_{MAX}=Maximum device resistance at 23°C, 1 hour after tripping.

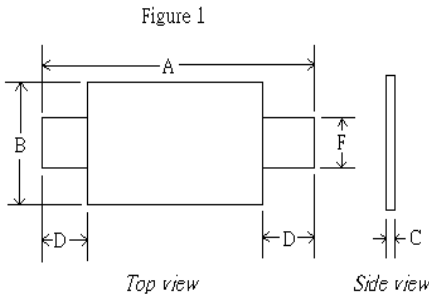
Physical specifications:

Lead material: 0.13mm nominal thickness, quarter-hard nickel.

Insulating material: Polyester tape



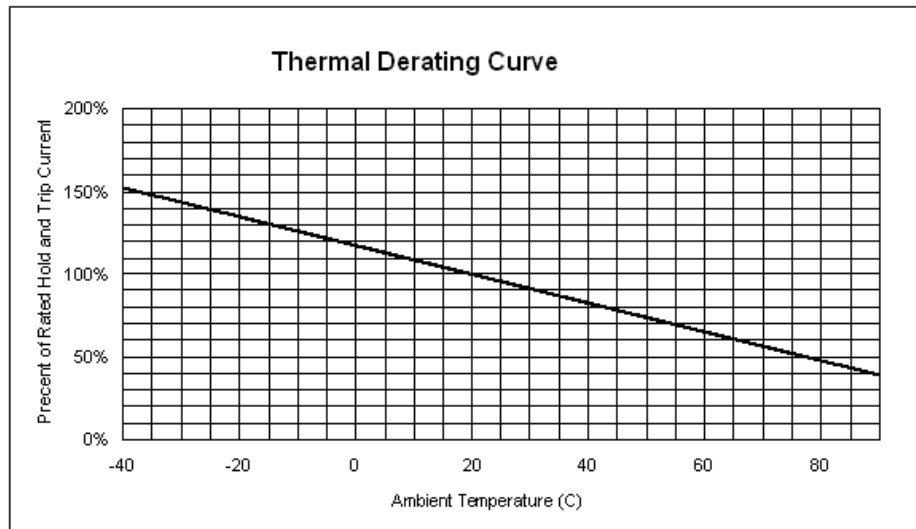
Product Dimensions (Millimeters)



Part Number	A		B		C		D		F	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
MPSR120	19.9	22.1	4.9	5.2	0.6	1.0	5.5	7.5	3.9	4.1
MPSR175	20.9	23.1	4.9	5.2	0.6	1.0	4.1	5.5	3.9	4.1
MPSR200	21.3	23.4	10.2	11.0	0.5	1.1	5.0	7.6	4.8	5.4
MPSR350	28.4	31.8	13.0	13.5	0.5	1.1	6.3	8.9	6.0	6.6
MPSR420	30.6	32.4	12.9	13.6	0.5	1.1	5.0	7.5	6.0	6.7



Thermal Derating Curve



Typical Time-To-Trip at 23°C

- A = MPSR120
- B = MPSR175
- C = MPSR200
- D = MPSR350
- E = MPSR420

