

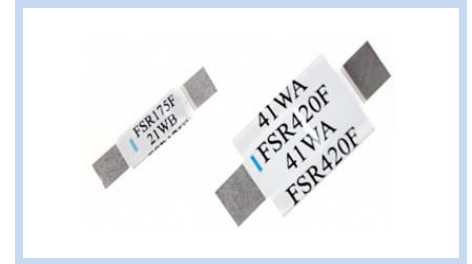
PTC Resettable Fuse Strap Type 1.2A to 4.2A

MPSR Series

MERITEK

FEATURE

- Operation Current: 1.2A to 4.2A
- Maximum Operating Voltage: 15V and 30V
- Temperature Range: -40°C to 85°C
- Low profile, Solid state
- Electronic applications: Rechargeable battery packs, Lithium cell, battery packs and laptop computer
- UL/cUL safety approved: certification No: E223037



PART NUMBERING SYSTEM

MPSR 120
(1) (2)



No	Item	Digit	Description	Series Reference
(1)	Meritek Series	MPSR	Polymer Resettable Fuse Series	Strap Type
(2)	Current Rating	120	120: 1.2A	200: 2.0A

ELECTRICAL CHARACTERISTICS AT 23°C

Item	Value	Characteristics
Hold Current	1.2A	I_H =Hold current-maximum current at which the device will not trip at 23°C still air.
Trip Current	2.7A	I_T =Trip current-minimum current at which the device will always trip at 23°C still air.
Rated Voltage	15V _{DC}	V_{MAX} =Maximum voltage device can withstand without damage at its rated current (I_{MAX}).
Max Current	100A	I_{MAX} = Maximum fault current device can withstand without damage at rated voltage (V_{MAX}).
Typical Power	1.2W	P_d =Typical power dissipated-type amount of power dissipated by the device when in the tripped state in 23°C still air environment.
T_{MAX} to Trip	5.0Sec.	Device response time, at current of 5 X Hold Current: 6.0A
Resistance	R_{MIN}	0.085 Ω R_{MIN} =Minimum device resistance at 23°C prior to tripping.
	R_{MAX}	0.160 Ω R_{MAX} =Maximum device resistance at 23°C prior to tripping.
	$R1_{MAX}$	0.220 Ω $R1_{MAX}$ =Maximum device resistance at 23°C measured 1 hour after tripping or reflow soldering of 260°C for 20 seconds.

- * Lead material: 0.13mm nominal thickness, quarter-hard nickel
- * Insulating material: Polyester tape.

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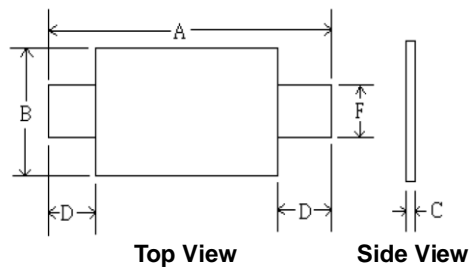
MPSR Series

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ELECTRICAL CHARACTERISTICS AT 23°C

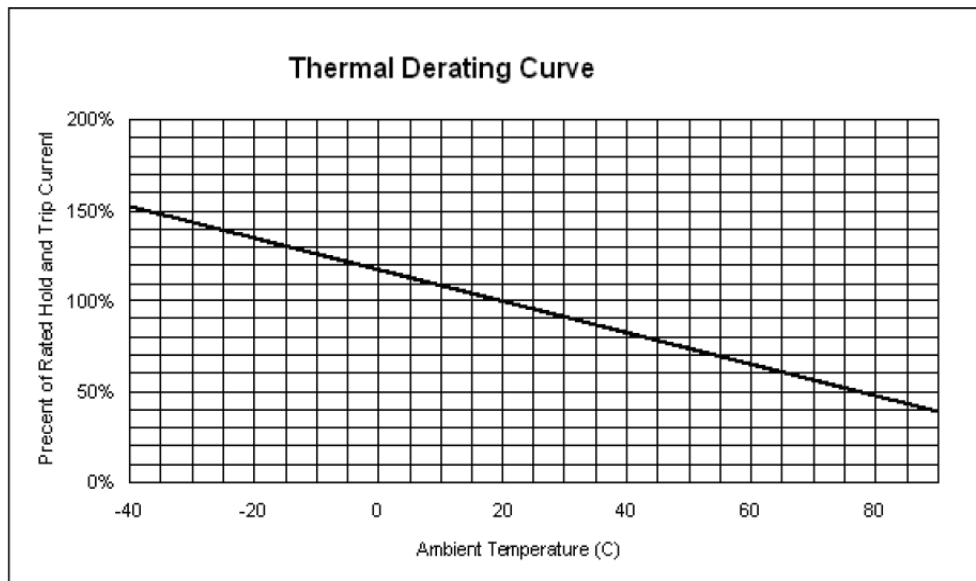
Part Number	Hold Current I_H , A	Trip Current I_T , A	Max. Time to Trip at $5 \times I_H$, S	Maximum Current I_{MAX} , A	Rated Voltage V_{MAX} , V _{DC}	Typical Power P_d , W	Resistance Tolerance		
							R_{MIN} ohms	R_{MAX} ohms	$R1_{MAX}$ ohms
MPSR120	1.20	2.70	5.0	100	15	1.2	0.085	0.160	0.220
MPSR175	1.75	3.80	5.0	100	15	1.5	0.050	0.090	0.120
MPSR200	2.00	4.40	4.0	100	30	1.9	0.030	0.060	0.100
MPSR350	3.50	6.30	3.0	100	30	2.5	0.017	0.031	0.050
MPSR420	4.20	7.60	6.0	100	30	2.9	0.012	0.024	0.040

DIMENSIONS



Part Number	A (mm)		B (mm)		C (mm)		D (mm)		F (mm)	
	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



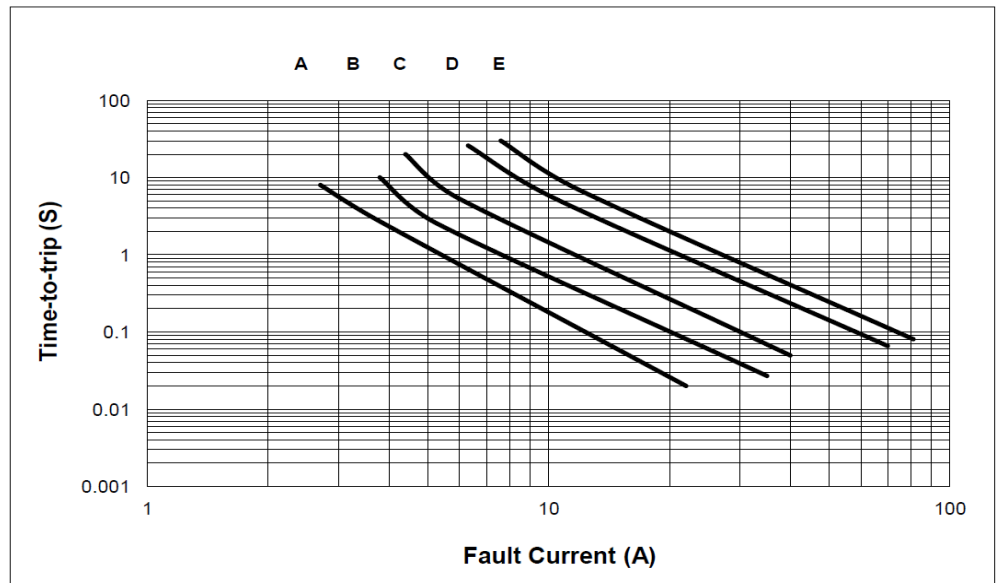
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TYPICAL TIME-TO-TRIP AT 23°C

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



WARNING

- Operation beyond the specified maximum ratings or improper use may result in damage and possible electrical arcing and/or flame.
- PPTC device are intended for occasional overcurrent protection. Application for repeated overcurrent condition and/or prolonged trip is not anticipated.
- Avoid contact of PPTC device with chemical solvent. Prolonged contact will damage the device performance

NOTE: Specification subject to change without notice.