Axial Leaded PTC FSR Series

FUZETEC

Application:

Rechargeable battery packs

Lithium cell and battery packs

Product Features:

Low profile, Solid state

Operation Current: 1.2A~4.2 A

Maximum Voltage: 15V& 30V

Temperature Range: -40℃ to 85℃

Agency Approvals:UL(E211981),

C-UL(pending)

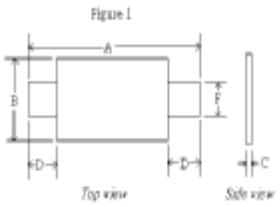
TÜV(R3-50004084)

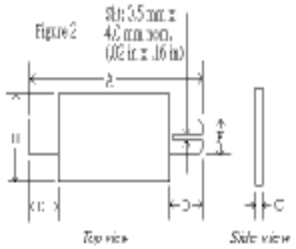
Electrical Characteristics(23℃)

Part Number	Fig	Hold Current	Trip Current	Rated Voltage	Maximum Current	Typical Power	Resistance Tolerance		
							R_{MIN}	R_{MAX}	$R1_{MAX}$
		I_H,A	I_T,A	V_{MAX}, Vdc	I_{MAX}, A	Pd, W	Ω	Ω	Ω
FSR120	1	1.2	2.7	15	100	1.2	0.085	0.160	0.220
FSR120S	2	1.2	2.7	15	100	1.2	0.085	0.160	0.220
FSR175	1	1.75	3.8	15	100	1.5	0.050	0.090	0.120
FSR175S	2	1.75	3.8	15	100	1.5	0.050	0.090	0.120
FSR200	1	2.0	4.4	30	100	1.9	0.030	0.060	0.100
FSR350	1	3.5	6.3	30	100	2.5	0.017	0.031	0.050
FSR420	1	4.2	7.6	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℃ still air.
I_T=Trip current-minimum current at which the device will always trip at 23℃ 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).
Pd=Maximum power dissipated from device when in the tripped state in 23℃ still air environment.
R_{MIN}=Minimum device resistance at 23℃.
$R1_{MAX}$=Maximum device resistance at 23℃, 1 hour after tripping.
Physical specifications:
Lead material:0.13mm nominal thickness, quarter-hard nickel.
Insulating material:Polyester tape.

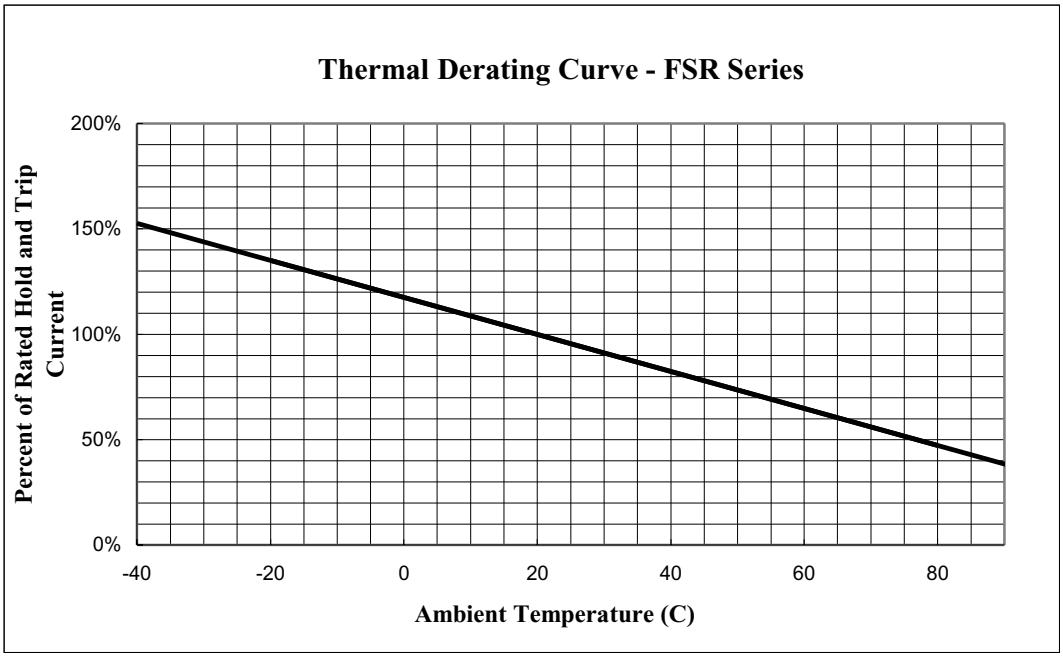
FSR Product Dimensions (Millimeters)





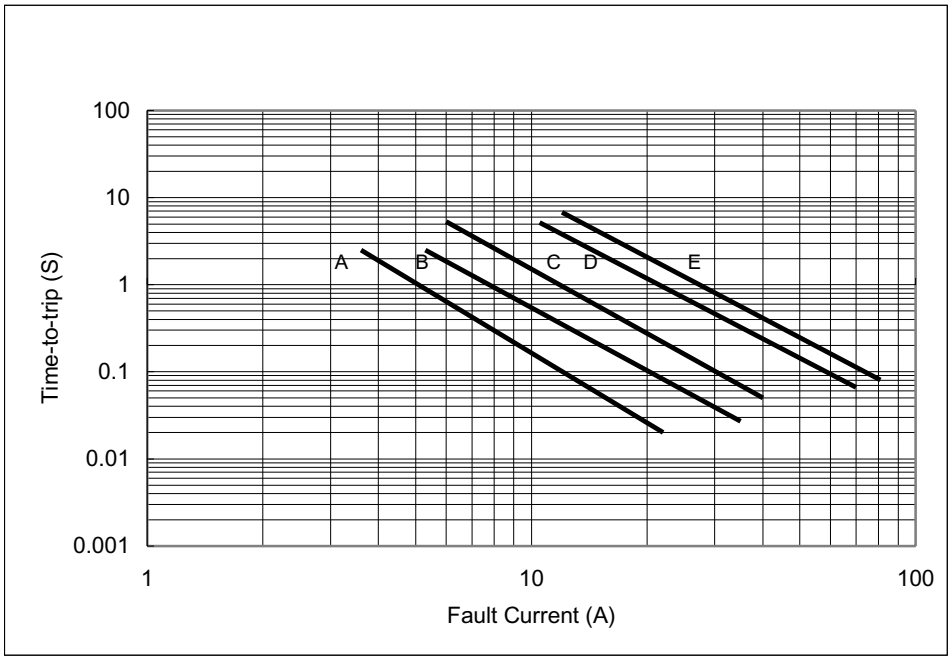
Part Number	Fig	A		B		C		D		F	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
FSR120	1	19.9	22.1	4.9	5.2	0.6	1.0	5.5	7.5	3.9	4.1
FSR120S	2	19.9	22.1	4.9	5.2	0.6	1.0	5.5	7.5	3.9	4.1
FSR175	1	20.9	23.1	4.9	5.2	0.6	1.0	4.1	5.5	3.9	4.1
FSR175S	2	20.9	23.1	4.9	5.2	0.6	1.0	4.1	5.5	3.9	4.1
FSR200	1	21.3	23.4	10.2	11.0	0.5	1.1	5.0	7.6	4.8	5.4
FSR350	1	28.4	31.8	13.0	13.5	0.5	1.1	6.3	8.9	6.0	6.6
FSR420	1	30.6	32.4	12.9	13.6	0.5	1.1	5.0	7.5	6.0	6.7

Thermal Derating Curve

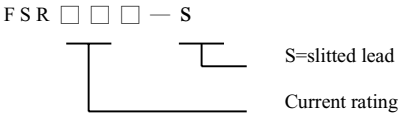


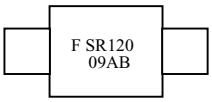
Typical Time-To-Trip at 23℃

A =FSR120/FSR120S
B =FSR175/FSR175S
C =FSR200
D =FSR350
E =FSR420



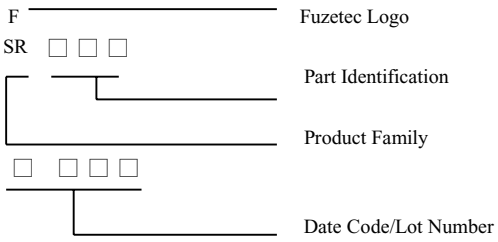
Part Numbering System





Example

Part Marking System



Standard Package

P/N	Pcs /Bag
FSR120	2K
FSR120S	2K
FSR175	2K
FSR175S	2K

P/N	Pcs /Bag
FSR200	2K
FSR350	2K
FSR420	2K