# Type RASR Resettable Fuse (PTC's) Battery Strap



www.optifuse.com

(619) 593-5050

#### **Application:**

Rechargeable battery packs Lithium cell and battery packs

#### **Product Features:**

Low profile, Solid State

Operation Current: 1.2A ~ 4.2A Maximum Voltage: 15V & 30V Temperature Range: -40°C to 85°C Agency Standards and Listings:





#### Electrical Characteristics (23°C)

	Hold	Trip	Max. Time	Rated	Max	Typical	Resistance Tolerance		
Part Number	Current	Current	to Trip	Voltage	Current	Power	R <sub>MIN</sub>	R <sub>MAX</sub>	R <sub>1</sub> <sub>MAX</sub>
	I <sub>H</sub> , A	I <sub>T</sub> , A	at 5xI <sub>H</sub> ,s	V <sub>MAX</sub> , Vdc	I <sub>MAX</sub> , A	Pd, W	Ω	Ω	Ω
RASR-120	1.20	2.70	5.0	15	100	1.2	0.085	0.160	0.220
RASR-175	1.75	3.80	5.0	15	100	1.5	0.050	0.090	0.120
RASR-200	2.00	4.40	4.0	30	100	1.9	0.030	0.060	0.100
RASR-350	3.50	6.30	3.0	30	100	2.5	0.017	0.031	0.050
RASR-420	4.20	7.60	6.0	30	100	2.9	0.012	0.024	0.040

I<sub>H</sub> = 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 it's rated current.

I<sub>MAX</sub> = 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°C still air environment.

**R**<sub>MIN</sub> = Minimum device resistance at 23°C.

R1<sub>MAX</sub> = Maximum device resistance at 23°C, 1 hour after tripping.

### **Physical Specifications:**

**Lead Material:** 0.13mm nominal thickness, quarter hard nickel **Soldering Characteristics:** MIL-STD-202, method 208E

**Insulating Material:** Polyester tape

Note: All specifications subject to change without notice.

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Code F01-01H

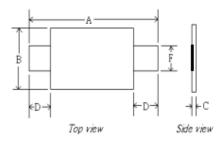
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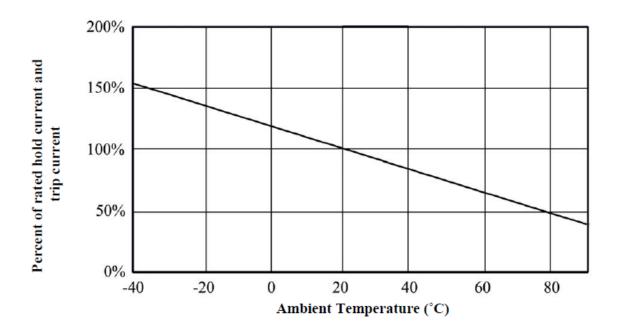
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## **RASR Product Dimensions (millimeters)**



Part	A		В		C		D		F	
Number	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
RASR-120	19.9	22.1	4.9	5.2	0.6	1.0	5.5	7.5	3.9	4.1
RASR-175	20.9	23.1	4.9	5.2	0.6	1.0	4.1	5.5	3.9	4.1
RASR-200	21.3	23.4	10.2	11.0	0.5	1.1	5.0	7.6	4.8	5.4
RASR-350	28.4	31.8	13.0	13.5	0.5	1.1	6.3	8.9	6.0	6.6
RASR-420	30.6	32.4	12.9	13.6	0.5	1.1	5.0	7.5	6.0	6.7

## Thermal Derating Curve – RASR Series



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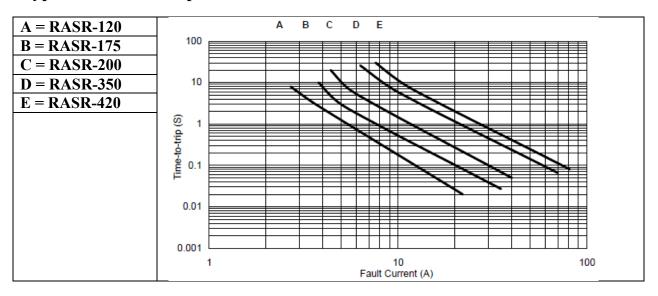
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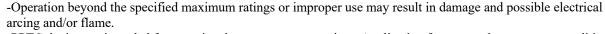
### Typical Time-To-Trip at 23°C



### **Standard Package**

Part Number	Pcs/Bag
RASR-120	1K
RASR-175	1K
RASR-200	500
RASR-350	500
RASR-420	500

Warning:



<sup>-</sup>PPTC device are intended for occasional overcurrent protection. Application for repeated overcurrent condition and/or prolonged trip are not anticipated.

-Avoid contact of PPTC device with chemical solvent. Prolonged contact will damage the device performance.