

# 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)

Part Number	Hold Current	Trip Current	Max. Time to Trip	Rated Voltage	Max Current	Typical Power	Resistance Tolerance		
							R <sub>MIN</sub>	R <sub>MAX</sub>	R <sub>1MAX</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
<b>RASR-120</b>	1.20	2.70	5.0	15	100	1.2	0.085	0.160	0.220
<b>RASR-175</b>	1.75	3.80	5.0	15	100	1.5	0.050	0.090	0.120
<b>RASR-200</b>	2.00	4.40	4.0	30	100	1.9	0.030	0.060	0.100
<b>RASR-350</b>	3.50	6.30	3.0	30	100	2.5	0.017	0.031	0.050
<b>RASR-420</b>	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<sub>T</sub>** = Trip Current – Minimum current at which the device will always trip at 23°C still air.

**V<sub>MAX</sub>** = 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.

**R<sub>1MAX</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.

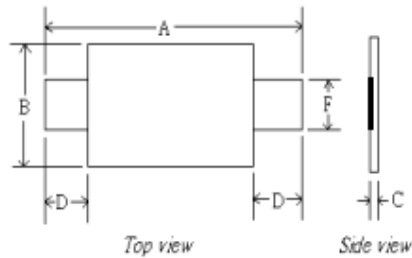
Rev B 11/2012 - Page: 1/3  
Code F01-01H

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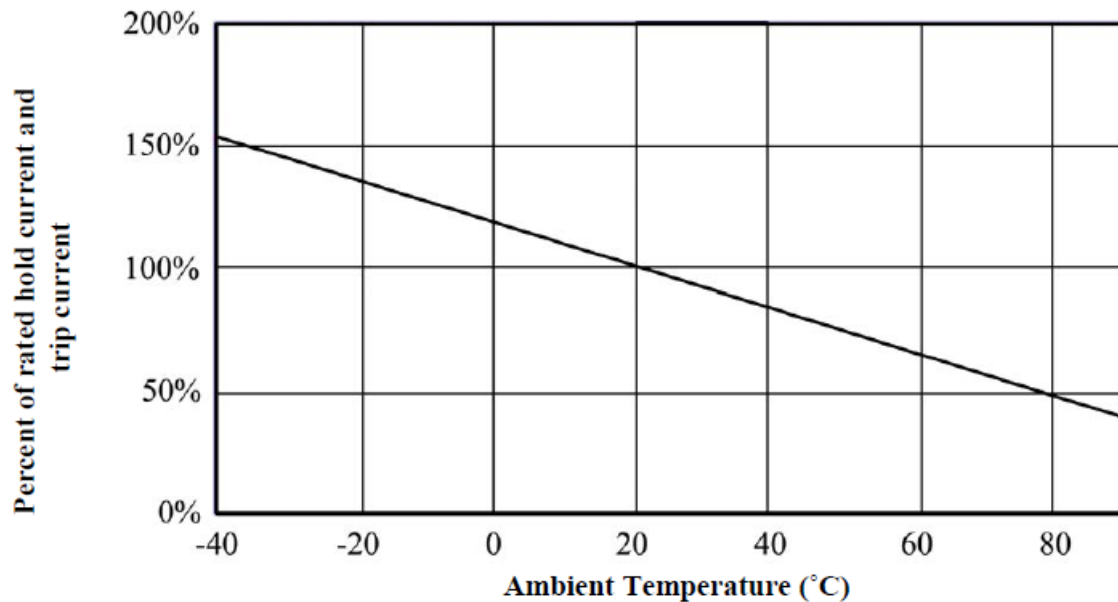
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## RASR Product Dimensions (millimeters)



Part Number	A		B		C		D		F	
	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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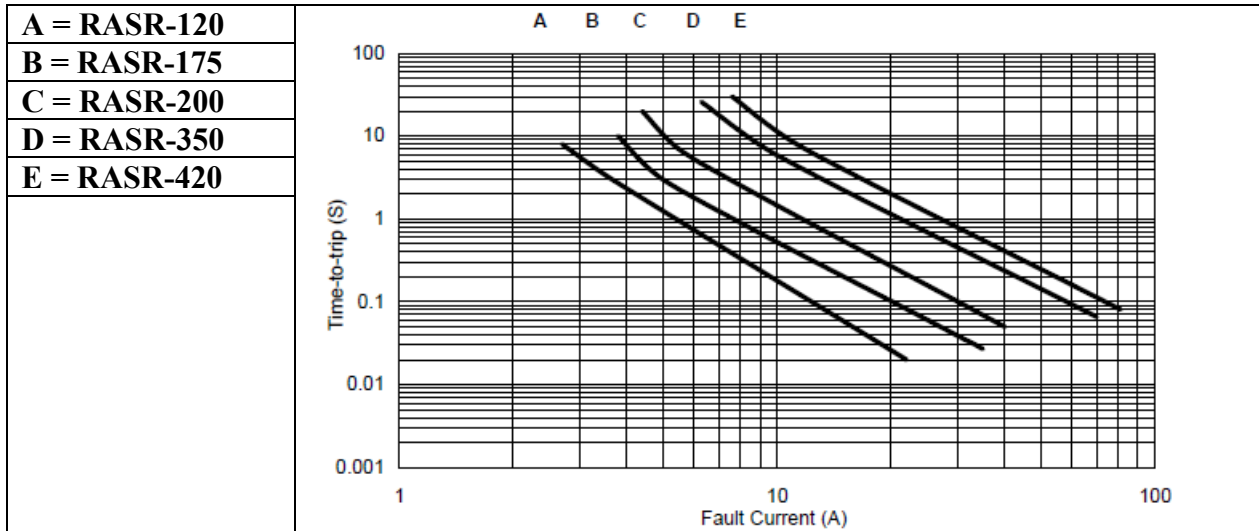
Rev B 11/2012 - Page: 2/3  
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## Typical Time-To-Trip at 23°C



## Standard Package

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

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