

3x8.4mm Fast-acting Fuses for hazardous applications

A030807 Series



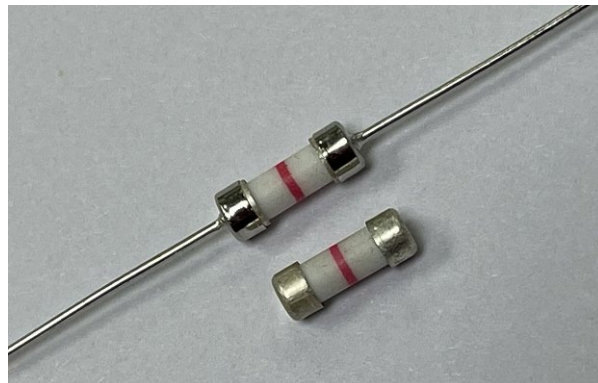
Description

The A030807 Series fuse is designed for barrier circuits in intrinsic safety applications relating to Hazardous Locations. Ranging from 40mA to 250mA, the A030807 Series provides overcurrent protection solutions to fit many Hazardous Location barrier applications.

Features

A compact 3mm x 8mm fuse provides a space saving alternative to conventional fuse solutions with high interrupting rating for primary and secondary circuit protection up to 250Vac/dc and 250mA

- Meets electrical performance specifications for intrinsically safe(EN60079-11) applications
- Fast-acting,high interrupting rating of 4000A at 250Vac/dc
- Ceramic tube,silver plated brass end cap construction
- Available in both axial lead and surface mount.
- RoHS compliant and Halogen-free.



Electrical characteristics

Electrical Characteristics		
1.1 In	3.0In	10.0In
4 hours min.	10 sec max.	0.002 sec max.

Specifications

Specification						
Part No.	Rated Voltage Vac/dc	Rated Current	Breaking Capacity	Typical Cold Resistance (Ω)	Typical Pre-Arcing I ² t	color coding
A030807.0.04	250V	40mA	1500A@250Vac 4000A@250Vac/dc	14.2	0.00006	Grey
A030807.0.05		50mA		9.40	0.00010	Red
A030807.0.063		63mA		8.80	0.00012	Pink
A030807.0.08		80mA		5.10	0.00018	Green
A030807.0.1		100mA		3.10	0.00087	Yellow
A030807.0.125		125mA		2.20	0.00134	Orange
A030807.0.16		160mA		2.05	0.00166	Violet
A030807.0.2		200mA		1.01	0.00237	Brown
A030807.0.25		250mA		0.71	0.00530	Black

1. DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25°C
2. Typical Pre-arcing I²t are measured at 10In Current

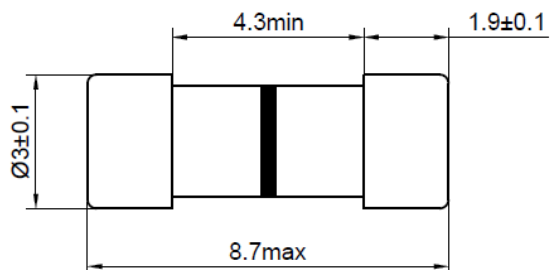
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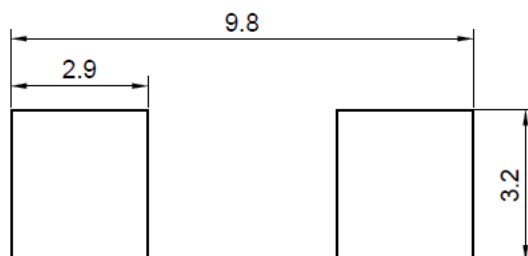
Dimension

Drawing not to scale (Unit: mm)

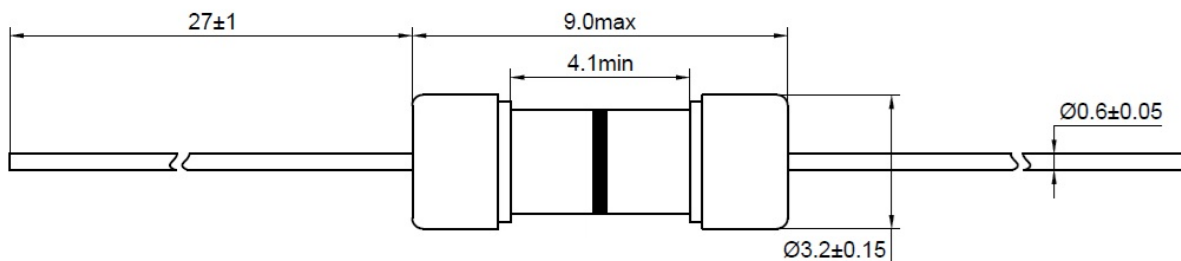
A030807.x.xxx



Recommended land pattern



A030807.x.xxxP

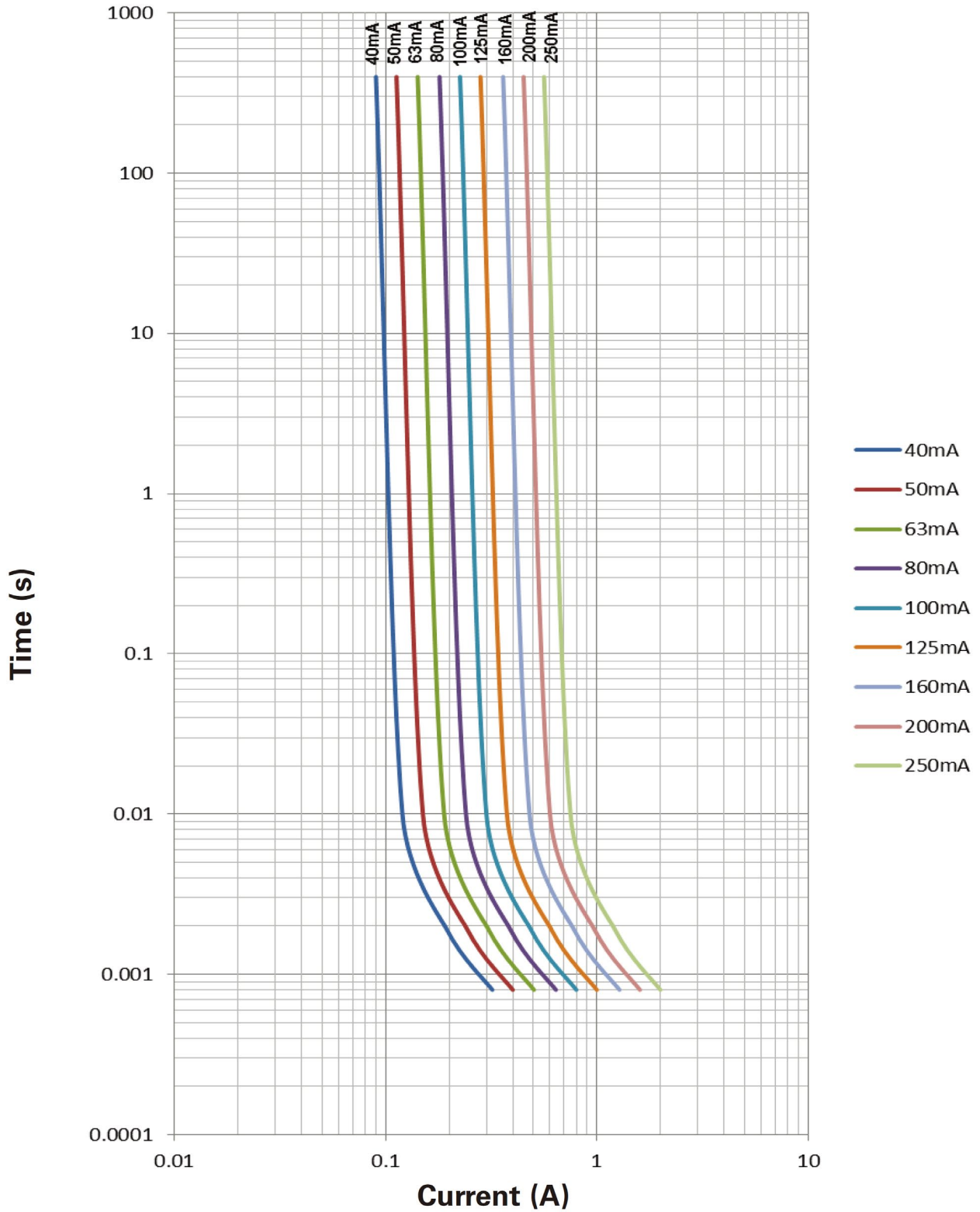


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Time-Current curves



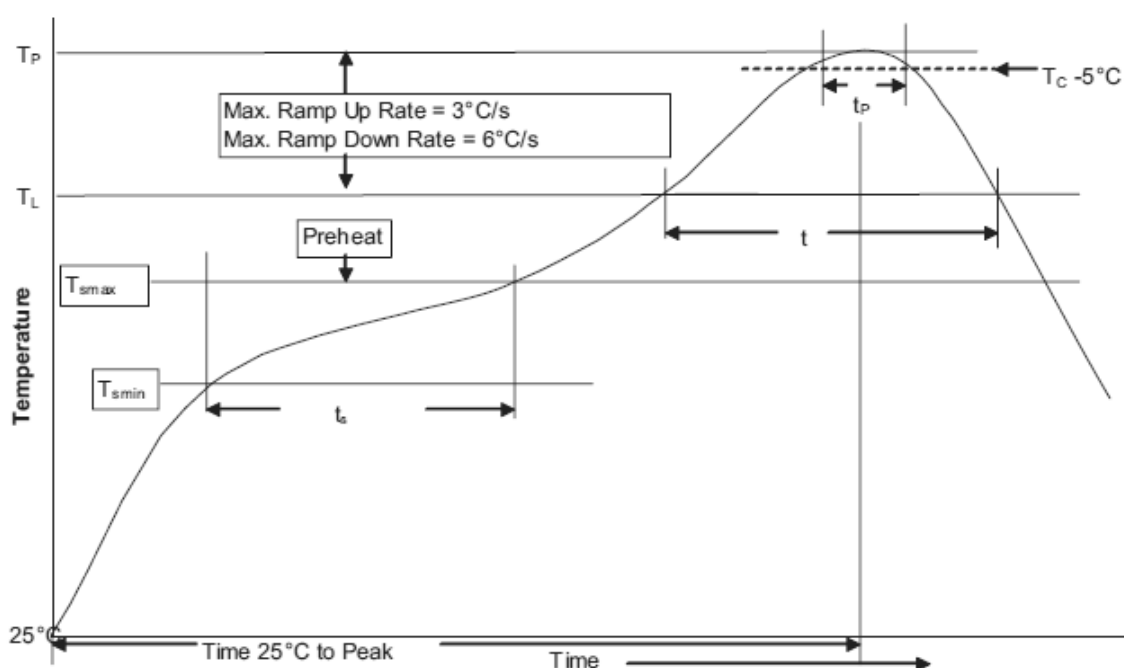
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Wave Soldering method (Axial lead)

- Wave solder
 - Reservoir temperature: 260°C
 - Time in reservoir: 10 seconds maximum

Solder reflow profile (Ferrule)



Profile Feature		Lead(Pb) free solder
Preheat and soak	• Temperature min. (T_{smin})	150°C
	• Temperature max. (T_{smax})	200°C
	• Time (T_{smin} to T_{smax}) (t_s)	60 - 120 Seconds
Average ramp up rate T_{smax} to T_P		3°C / Second Max.
Liquidous temperature (T_L)		217°C
Time at liquidous (t_L)		60 - 150 Seconds
Peak package body temperature (T_P)		260°C
Time (t_p) within 5°C of the specified classification temperature (T_C)		30 Seconds
Average ramp-down rate (T_P to T_{smax})		6°C / Second Max.
Time (25°C to Peak Temperature)		8 Minutes Max.

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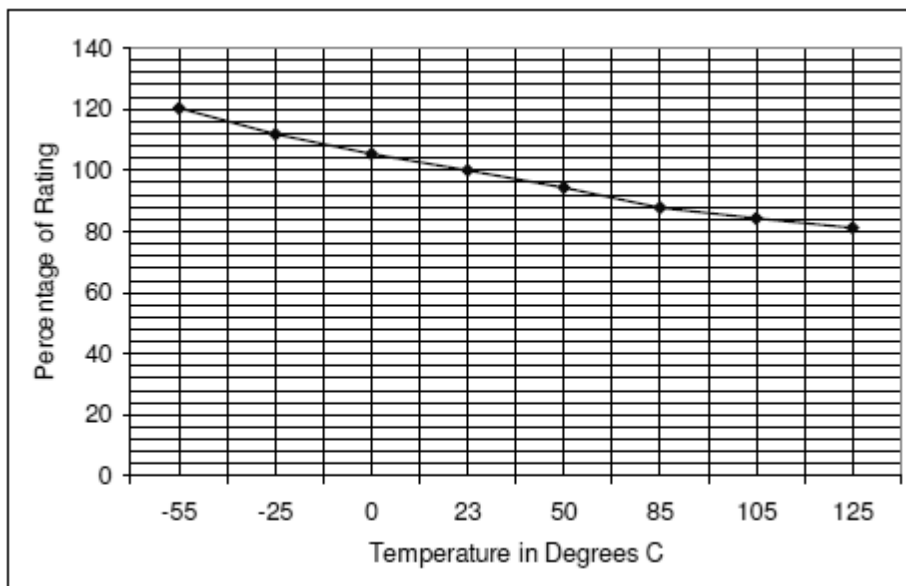
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Temperature Derating Curve

Normal ambient temperature: 23+/-3°C

Operating temperature: -55 ~ 125°C, with proper correction factor applied



Package

A030807.xxx

500 fuses on tape and reel

A030807.xxxP

Axial leaded version, 1500 fuses on tape and reel

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