

400M Series

0603 Low Resistance Fast Acting Fuse



Description

The 400M Series is an 0603 fast acting fuse that is best suited for applications that require relatively low resistance. The part is 100% Lead-free, RoHS compliant, and Halogen-free fuse. It is designed to provide over-current protection to circuits that operate under high operating temperatures of up to 150°C.

Features and Benefits

- Operating temperature from -55°C to 150°C
- 100% Lead-free, RoHS compliant, and Halogenfree
- Suitable for both leaded and lead-free soldering

Applications

- Burn-in Test

Additional Information



Resources



Accessories



Samples

Electrical Characteristics

% of Ampere Rating	Opening Time at 25°C
100%	4 Hours Minimum
200%	5 Seconds Maximum

Electrical Specifications by Item

Ampere Rating (A)	Amp Code	Max. Voltage Rating (V)	Interrupting Rating	Nominal Resistance (Ohms) ¹	Nominal Melting I ² t (A ² Sec.) ²	Nominal Voltage Drop at Rated Current (mV)	Nominal Power Dissipation at Rated Current (W)
0.5	0025	5	50A @ 5VDC	0.325	0.00169	189	0.095
1.5	0026	5		0.095	0.03	161	0.242

Notes:

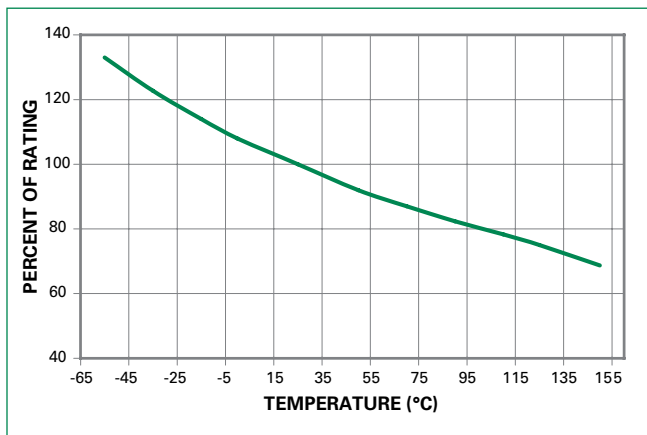
1. Cold resistance measured at less than 10% of rated current at 23°C.

2. I²t values stated for 1msec opening time.

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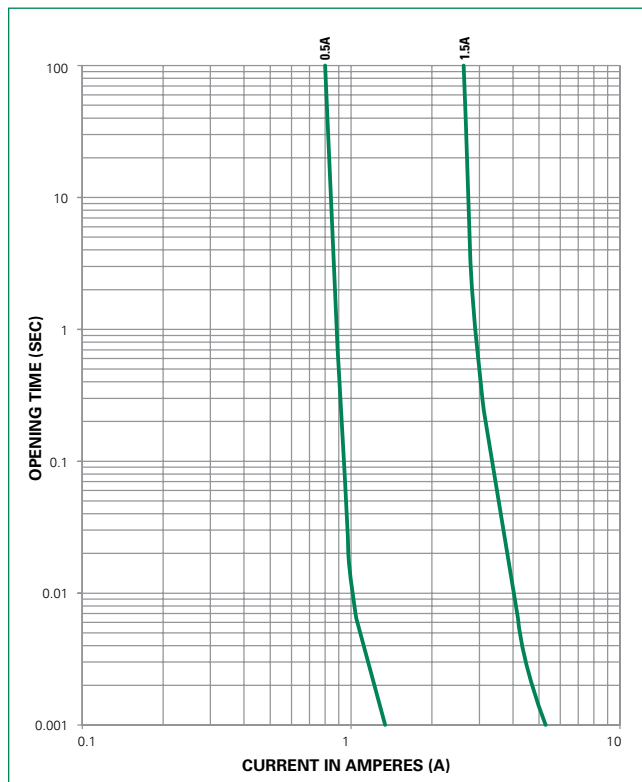
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Temperature Re-rating Curve



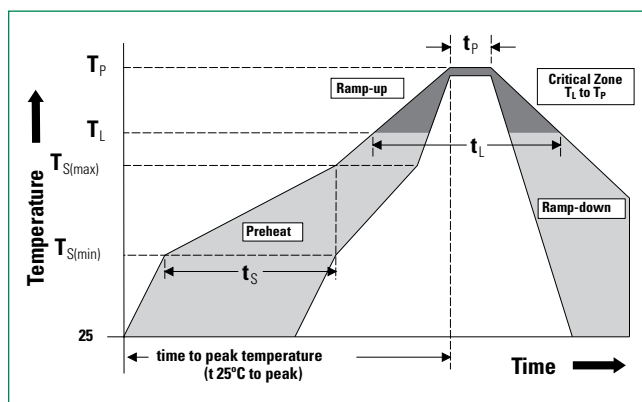
Note: Re-rating depicted in this curve is in addition to the standard re-rating of 20% for continuous operation.

Average Time Current Curves



Soldering Parameters

Reflow Condition		Pb – free assembly
Pre Heat	- Temperature Min ($T_{s(min)}$)	150°C
	- Temperature Max ($T_{s(max)}$)	200°C
	- Time (Min to Max) (t_s)	60 – 180 seconds
Average Ramp-up Rate (Liquidus Temp (T_L) to peak)		5°C/second max.
$T_{s(max)}$ to T_L - Ramp-up Rate		5°C/second max.
Reflow	- Temperature (T_L) (Liquidus)	217°C
	- Temperature (t_l)	60 – 150 seconds
Peak Temperature (T_p)		260 $^{+0/-5}$ °C
Time within 5°C of actual peak Temperature (t_p)		20 – 40 seconds
Ramp-down Rate		5°C/second max.
Time 25°C to peak Temperature (T_p)		8 minutes max.
Do not exceed		260°C



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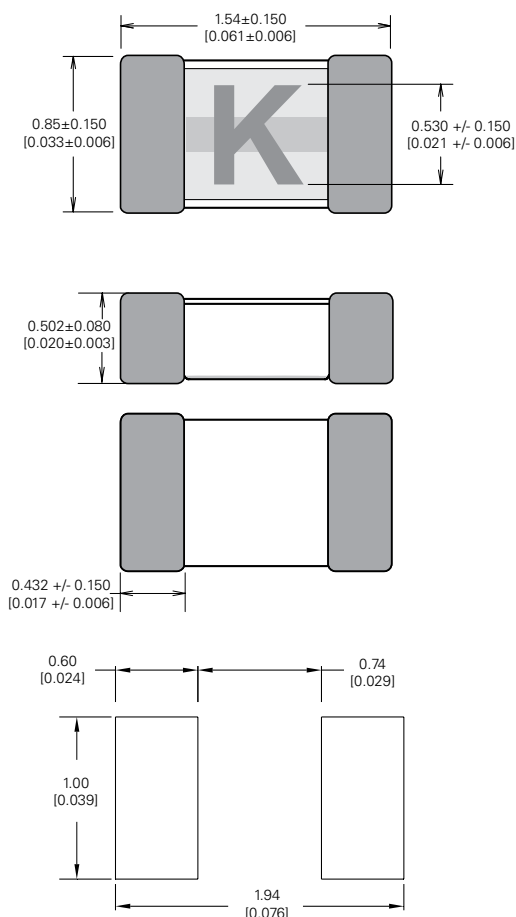
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Product Characteristics

Materials	Body: Advanced Ceramic Terminations: Ag/Ni/Sn (100% Lead-free) Element Cover Coating: Lead-free Glass
Moisture Sensitivity Level	IPC/JEDEC J-STD-020C, Level 1
Solderability	IPC/ECA/JEDEC J-STD-002B, Condition B
Humidity Test	MIL-STD-202, Method 103B, Conditions D
Resistance to Solder Heat	MIL-STD-202, Method 210F, Condition B

Moisture Resistance	MIL-STD-202, Method 106G
Thermal Shock	MIL-STD-202, Method 107, Condition B-3
Mechanical Shock	MIL-STD-202, Method 213B, Condition A
Vibration	MIL-STD-202, Method 201A
Vibration, High Frequency	MIL-STD-202, Method 204D, Condition D
Dissolution of Metallization	IPC/ECA/JEDEC J-STD-002B, Condition D
Terminal Strength	IEC 60127-4

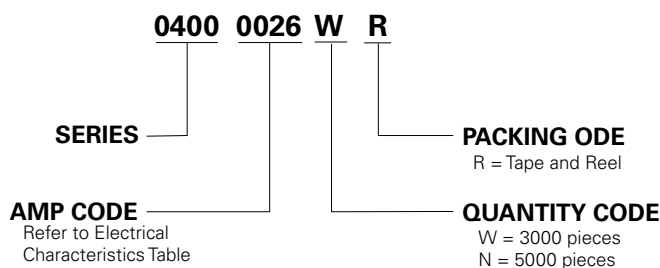
Dimensions mm (inches)



Part Marking System

Amp Code	Marking Code
0025	F
0026	K

Part Numbering System



Packaging

Packaging Option	Form Factor	Packaging Specification	Quantity	Quantity & Packaging Code
8mm Tape and Reel	Surface Mount	EIA-481, IEC 60286-3	3000	WR
8mm Tape and Reel	Surface Mount	EIA-481, IEC 60286-3	5000	NR

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