

# 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) <sup>1</sup>	Nominal Melting I <sup>2</sup> t (A <sup>2</sup> Sec.) <sup>2</sup>	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

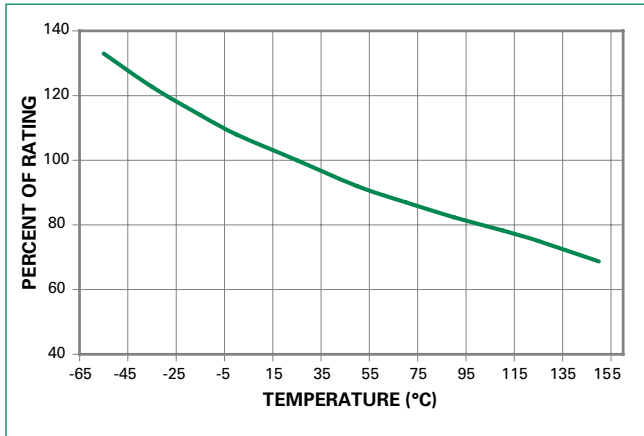
#### Notes:

1. Cold resistance measured at less than 10% of rated current at 23°C.
2. I<sup>2</sup>t values stated for 1msec opening time.

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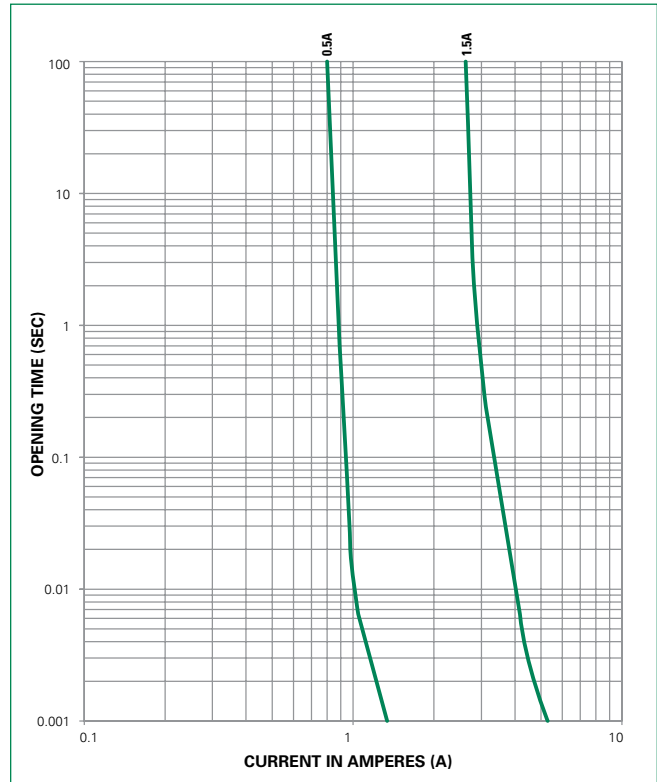
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Temperature Re-rating Curve



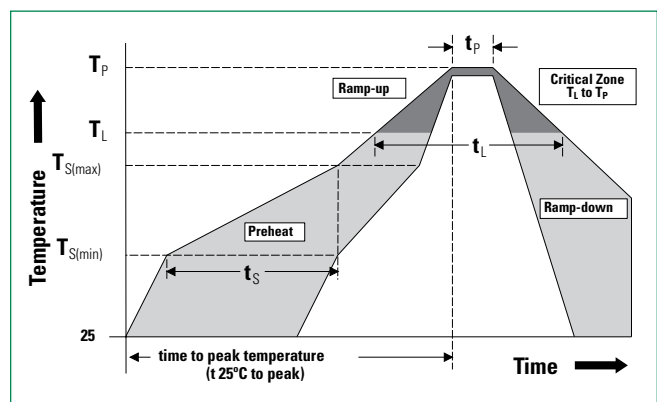
Note: Re-rating depicted in this curve is in addition to the standard re-rating of 20% for continuous operation.

Average Time Current Curves



### Soldering Parameters

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



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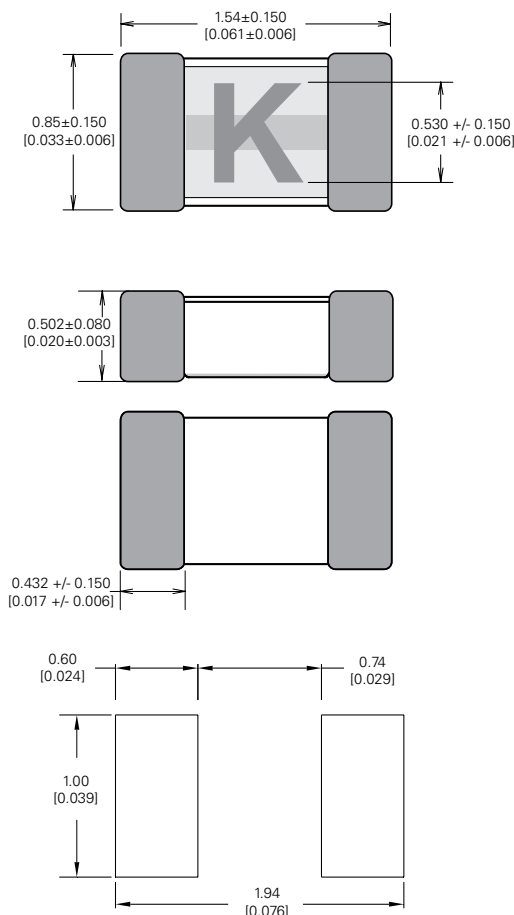
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### Product Characteristics

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

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

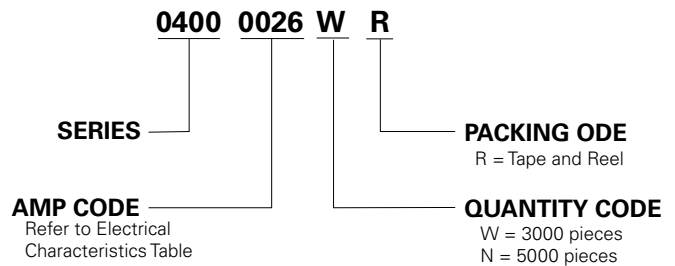
### Dimensions mm (inches)



### 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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