

# 400M Series - 0603 Low Resistance Fast Acting Fuse

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

### **Additional Information**



### 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

- Operating temperature from -55°C to 150°C
- Suitable for both leaded and lead-free soldering

RoHS 🗭 HF

• 100% Lead-free, RoHS compliant, and Halogenfree

### Applications

• Burn-in Test

Electrical Specifications by Item							
Ampere Rating (A)	Amp Code	Max. Voltage Rating (V)	Interrupting Rating	Nominal Resistance (Ohms)	Nominal Melting l²t (A²Sec.)	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.

## Surface Mount Fuses

Ceramic Chip Fuse > 400M Series





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	
	-Temperature Min (T <sub>s(min)</sub> )	150°C	
Pre Heat	-Temperature Max (T <sub>s(max)</sub> )	200°C	
	-Time (Min to Max) (t <sub>s</sub> )	60 – 180 seconds	
Average Ramp-up Rate (LiquidusTemp (T <sub>L</sub> ) to peak)		5°C/second max.	
T <sub>S(max)</sub> to T <sub>L</sub> - Ramp-up Rate		5°C/second max.	
D (1	-Temperature (T <sub>L</sub> ) (Liquidus)	217°C	
Reflow	-Temperature (t <sub>L</sub> )	60 – 150 seconds	
PeakTemperature (T <sub>P</sub> )		260+0/-5 °C	
Time within 5°C of actual peak Temperature (t <sub>p</sub> )		20 – 40 seconds	
Ramp-down Rate		5°C/second max.	
Time 25°C to peak Temperature (T <sub>P</sub> )		8 minutes max.	
Do not exceed		260°C	





### **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,G 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

### Part Marking System

Amp Code	Marking Code
0025	F
0026	К



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

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