




Features

- Radial Leaded Devices
- Maximum 600 VAC interrupt fault rating
- Available in matched resistance "bins"
- Ability to withstand lightning surges
- Ability to withstand AC power cross conditions
- Agency recognition:   

Applications

Customer Premise Equipment (CPE):

- Modems
- Cable modems
- Fax machines
- POS equipment
- Security equipment
- Set top boxes

MF-R/600 Series - Telecom PTC Resettable Fuses

Electrical Characteristics

Model	Max. Operating Voltage	Max. Interrupt Ratings		Hold Current	Trip Current	Initial Resistance		One Hour Post-Trip Resistance	Max. Time To Trip @ 1 A	Tripped Power Dissipation
		Volts	Amps	Amps at 23 °C	Amps at 23 °C	Ohms at 23 °C	Ohms at 23 °C	Ohms at 23 °C	Seconds at 23 °C	Watts at 23 °C
		Max.	Max.			Min.	Max.	Max.		Typ.
MF-R015/600	60	600	3	0.15	0.30	6.0	12.0	22.0	5.0	1.0
MF-R015/600-A	60	600	3	0.15	0.30	7.0	10.0	20.0	5.0	1.0
MF-R015/600-B	60	600	3	0.15	0.30	9.0	12.0	22.0	5.0	1.0
MF-R015/600-F	60	600	3	0.15	0.30	7.0	12.0	22.0	5.0	1.0
MF-R016/600	60	600	3	0.16	0.32	4.0	10.0	18.0	7.0	1.0
MF-R016/600-A	60	600	3	0.16	0.32	4.0	7.0	16.0	7.0	1.0
MF-R016/600-1	60	600	3	0.16	0.32	4.0	8.0	17.0	7.0	1.0

Environmental Characteristics

Operating/Storage Temperature	-40 °C to +85 °C
Maximum Device Surface Temperature in Tripped State	125 °C
Passive Aging	+85 °C, 1000 hours ±5 % typical resistance change +60 °C, 1000 hours ±5 % typical resistance change
Humidity Aging	+85 °C, 85 % R.H. 500 hours ±5 % typical resistance change
Thermal Shock	MIL-STD-202F, Method 107G, ±10 % typical resistance change +125 °C to -55 °C, 10 times ±15 % typical resistance change
Solvent Resistance	MIL-STD-202, Method 215B No change
Lead Solderability	ANSI/J-STD-002
Flammability	IEC 695-2-2 No Flame for 60 secs.
Vibration	MIL-STD-883C, Method 2007.1, Condition A No change

Test Procedures And Requirements For Model MF-R/600 Series

Test	Test Conditions	Accept/Reject Criteria
Visual/Mech.	Verify dimensions and materials	Per MF physical description
Resistance	In still air @ 23 °C	$R_{min} \leq R \leq R_{max}$
Time to Trip	5 times I_{hold} , V_{max} , 23 °C	$T \leq$ max. time to trip (seconds)
Hold Current	30 min. at I_{hold}	No trip
Trip Cycle Life	V_{max} , I_{max} , 100 cycles	No arcing or burning
Trip Endurance	V_{max} , 48 hours	No arcing or burning
UL File Number	E 174545S	
CSA File Number	CA 110338	
TUV File Number	R2057213	

Thermal Derating Chart - I_{hold} (Amps)

Model	Ambient Operating Temperature								
	-40 °C	-20 °C	0 °C	23 °C	40 °C	50 °C	60 °C	70 °C	85 °C
MF-R015/600	0.233	0.206	0.178	0.150	0.124	0.110	0.096	0.083	0.062
MF-R016/600	0.249	0.219	0.190	0.160	0.132	0.117	0.103	0.088	0.066

I_{trip} is approximately two times I_{hold} .

MF-R/600 Series - Telecom PTC Resettable Fuses

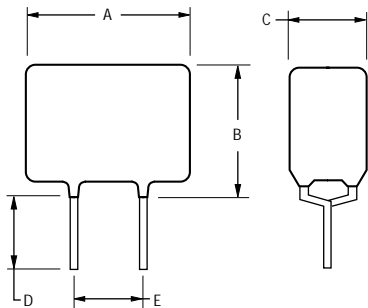


Product Dimensions

Model	A Max. <u>13.5</u> (0.531)	B Max. <u>12.6</u> (0.496)	C Max. <u>6.0</u> (0.236)	D Min. <u>4.7</u> (0.185)	E Nom. <u>5.0</u> (0.197)	Physical Characteristics		
						Style	Lead Dia. <u>0.65</u> (0.026)	Material
MF-R015/600						1		Sn/Cu
MF-R016/600	<u>16.0</u> (0.629)	<u>12.6</u> (0.496)	<u>6.0</u> (0.236)	<u>4.7</u> (0.185)	<u>5.0</u> (0.197)	1	<u>0.65</u> (0.026)	Sn/Cu

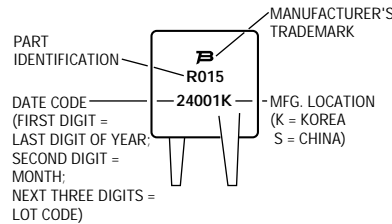
Packaging options: BULK: 500 pcs. per bag. TAPE & REEL: 600 pcs. per reel.
Longer lead lengths available upon request.

DIMENSIONS = $\frac{\text{MM}}{\text{(INCHES)}}$



Typical Part Marking

Represents total content. Layout may vary.



How to Order

MF - R 015/600 - A 05 - 2

Multifuse* _____
Product Designer _____
Series _____
R = Radial Leaded Component

Hold Current, I_{hold} _____
015-016 (0.15 - 0.16 Amps)

Max. Interrupt Voltage, V _____

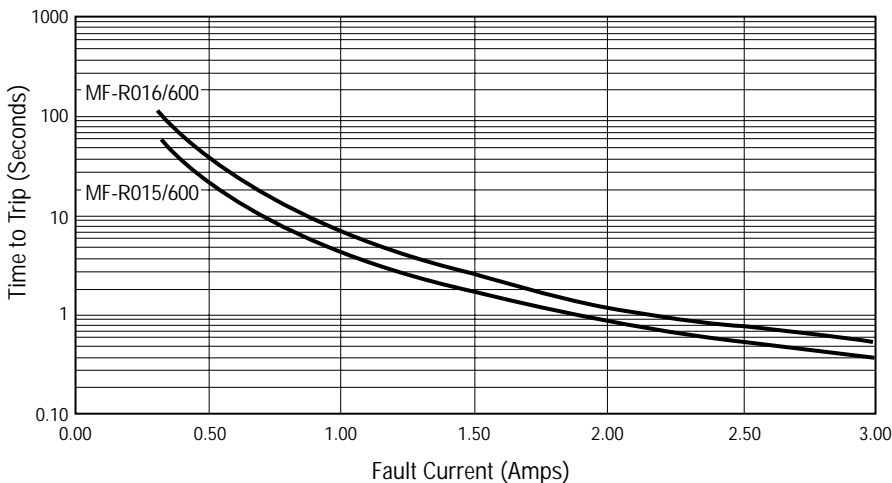
Resistance Range _____
Narrow resistance ranges are available on all models as defined in Electrical Characteristics.

Resistance Bins _____
Narrow resistance ranges can be separated into packages where each device is within 0.5 ohms of each other.

Packaging Options _____
- 0 = Bulk Packaging
- 2 = Tape and Reel*

*Packaged per EIA486-B

Maximum Time to Trip at 23 °C



Resistance Options

Model	Rmin.	Rmax.	R1Max.	Bin
MF-R015/600	6.0	12.0	22.0	N/A
MF-R015/600-A	7.0	10.0	20.0	0.5
MF-R015/600-B	9.0	12.0	22.0	0.5
MF-R015/600-F	7.0	12.0	22.0	0.5
MF-R016/600	4.0	10.0	18.0	N/A
MF-R016/600-A	4.0	7.0	16.0	0.5
MF-R016/600-1	4.0	8.0	17.0	0.5



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