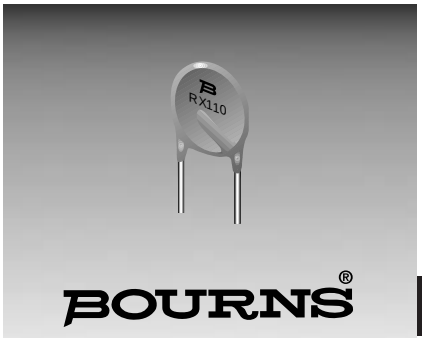


Features

- Radial Leaded Devices
- Cured, flame retardant epoxy polymer insulating material meets UL 94V-0 requirements
- Bulk packaging, tape and reel and Ammo-Pak available on most models
- Agency recognition: UL, TÜV & CSA (pending)

Applications

Almost anywhere there is a low voltage power supply, up to 60V and a load to be protected, including:

- Security and fire alarm systems
- Loud speakers
- Power transformers

MF-RX Series - PTC Resettable Fuses

Electrical Characteristics

Model	V max. Volts	I max. Amps	I_{hold}	I_{trip}	Initial Resistance		1 Hour (R_1) Post-Trip Resistance	Max. Time To Trip at 5*I_h	Tripped Power Dissipation
			Amperes at 23°C		Ohms at 23°C		Ohms at 23°C	Seconds at 23°C	Watts at 23°C
			Hold	Trip	Min.	Max.	Max.		
MF-RX110	60	40	1.10	2.20	0.15	0.25	0.38	8.2	1.50
MF-RX135	60	40	1.35	2.70	0.12	0.19	0.30	9.6	1.70
MF-RX160	60	40	1.60	3.20	0.09	0.14	0.22	11.4	1.90
MF-RX185	60	40	1.85	3.70	0.08	0.12	0.19	12.6	2.10
MF-RX250	60	40	2.50	5.00	0.05	0.08	0.13	15.6	2.50
MF-RX300	60	40	3.00	6.00	0.04	0.06	0.10	19.8	2.80
MF-RX375	60	40	3.75	7.50	0.03	0.05	0.08	24.0	3.20

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
Humidity Aging.....+85°C, 85% R.H. 1000 hours.....±5% typical resistance change
Thermal Shock.....MIL-STD-202F, Method 107G, ...±10% typical resistance change
+125°C to -40°C,10 times
Mechanical Shock .....MIL-STD-202, Method 213, ...No resistance change
Condition 1 (100g, 6 seconds)
Solvent Resistance .....MIL-STD-202, Method 215 .....No change
Vibration.....MIL-STD-883C, Method 2007.1, ...No change
Condition A

Test Procedures And Requirements For Model MF-RX Series

Test	Test Conditions	Accept/Reject Criteria
Visual/Mech.	Verify dimensions and materials	Per MF physical description
Resistance	In still air @ 23°C	Rmin ≤ R ≤ Rmax
Time to Trip	5 times Ihold, Vmax, 23°C	T ≤ max. time to trip (seconds)
Hold Current	30 min. at Ihold	No trip
Trip Cycle Life	Vmax, Imax, 100 cycles	No arcing or burning
Trip Endurance	Vmax, 48 hours	No arcing or burning

Thermal Derating Chart - I_{hold} (Amps)

Part No.	Ambient Operating Temperature								
	-40˚C	-20˚C	0˚C	23˚C	40˚C	50˚C	60˚C	70˚C	85˚C
MF-RX110	1.71	1.50	1.31	1.10	0.89	0.79	0.69	0.59	0.44
MF-RX135	2.09	1.84	1.61	1.35	1.09	0.97	0.85	0.73	0.54
MF-RX160	2.48	2.18	1.90	1.60	1.30	1.15	1.01	0.86	0.64
MF-RX185	2.87	2.52	2.20	1.85	1.50	1.33	1.17	1.00	0.74
MF-RX250	3.88	3.40	2.98	2.50	2.03	1.80	1.58	1.35	1.00
MF-RX300	4.65	4.08	3.57	3.00	2.43	2.16	1.89	1.62	1.20
MF-RX375	5.81	5.10	4.46	3.75	3.04	2.70	2.36	2.03	1.50

Additional Features

■ Resettable circuit protection

MF-RX Series - PTC Resettable Fuses

BOURNS®

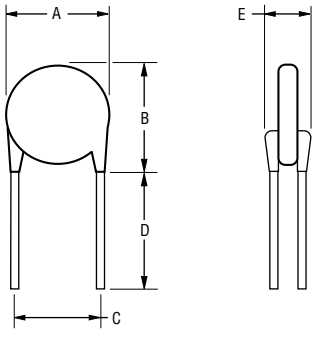
Product Dimensions

Model	A	B	C		D	E	Physical Characteristics		
	Max.	Max.	Nom.	Tol. ±	Min.	Max.	Style	Lead	Material
MF-RX110	13.0	18.0	5.1	0.7	7.6	3.1	1	0.81 dia.	Sn/Cu
MF-RX135	14.5	19.6	5.1	0.7	7.6	3.1	1	0.81 dia.	Sn/Cu
MF-RX160	16.3	21.3	5.1	0.7	7.6	3.1	1	0.81 dia.	Sn/Cu
MF-RX185	17.8	22.9	5.1	0.7	7.6	3.1	1	0.81 dia.	Sn/Cu
MF-RX250	21.3	26.4	10.2	0.7	7.6	3.1	1	0.81 dia.	Sn/Cu
MF-RX300	24.9	30.0	10.2	0.7	7.6	3.1	1	0.81 dia.	Sn/Cu
MF-RX375	28.4	33.5	10.2	0.7	7.6	3.1	1	0.81 dia.	Sn/Cu

DIMENSIONS = MM

Packaging options:
BULK: All models = 100 pcs. per bag.
TAPE & REEL: MF-RX110 – MF-RX160 = 1500 pcs. per reel; MF-RX185 = 1000 pcs. per reel
AMMO-PACK: MF-RX110 – MF-RX160 = 1000 pcs. per reel; MF-RX185 = 500 pcs. per reel

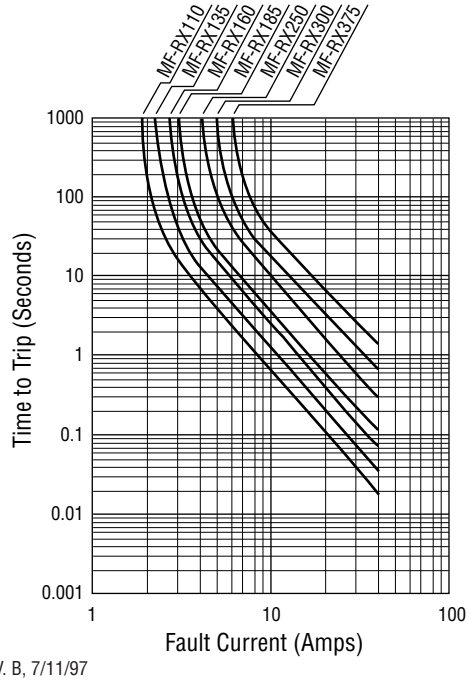
Package 1



Lead Material
0.81 dia. (20AWG)

NOTE: Kinked lead option is available for board standoff. Contact factory for details.

Typical Time to Trip at 23°C



How to Order

MF - RX 110 -

Multifuse® Product Designator

Style
- R = Radial Leaded Component
- RX = Radial Leaded Component
- S = Axial Leaded "Strap" Component
- LS = Low Temperature Axial Leaded "Strap" Component
- SM = Surface Mount Component
- MSM = 4.5mm SMD
- D = Uncoated, Unleaded "Disk" Component

Hold Current, I_{hold}
110-375 (1.10 Amps - 3.75 Amps)

Packaging Options
- __ = Bulk Packaging
- 2 = Tape and Reel*
- AP = Ammo-Pak*

*Packaged per EIA 486-B

Typical Part Marking

Represents total content. Layout may vary.