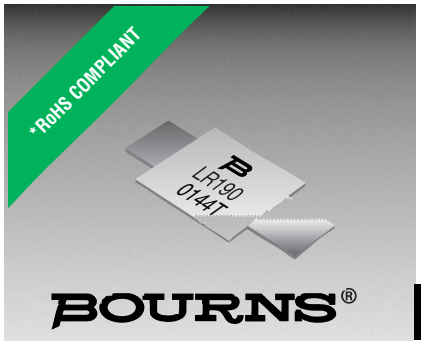


Features

- Axial leaded
- Fully compatible with current industry standards
- Weldable nickel terminals
- Very low internal resistance
- Operating currents to 9.0 amps
- RoHS compliant*
- Agency recognition:

MF-LR 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		Tripped Power Dissipation
			Amperes at 23 °C		Ohms at 23 °C		Ohms at 23 °C	Amperes at 23 °C	Seconds at 23 °C	Watts at 23 °C
			Hold	Trip	Min.	Max.	Max.			Typ.
MF-LR190	15	100	1.90	3.90	0.039	0.072	0.102	9.5	5.0	1.2
MF-LR260	15	100	2.60	5.80	0.020	0.042	0.083	13.0	5.0	1.3
MF-LR380	15	100	3.80	8.30	0.013	0.026	0.037	19.0	5.0	2.5
MF-LR450	16	100	4.50	8.90	0.011	0.020	0.028	22.5	5.0	1.4
MF-LR550	10	100	5.50	10.50	0.009	0.019	0.022	27.5	5.0	1.4
MF-LR600	10	100	6.00	11.70	0.007	0.014	0.019	30.0	5.0	2.8
MF-LR730	10	100	7.30	14.10	0.006	0.012	0.015	30.0	5.0	3.0
MF-LR730/20**	20	100	7.30	14.10	0.006	0.012	0.015	30.0	5.0	3.0
MF-LR900/20**	20	100	9.00	16.70	0.006	0.010	0.014	45.0	5.0	3.0

** TÜV recognition and UL approval pending.

Environmental Characteristics

Operating/Storage Temperature ..... -40 °C to +85 °C
Maximum Device Surface Temperature in Tripped State ..... 125 °C
Passive Aging ..... +70 °C, 1000 hours ..... ±10 % typical resistance change
Humidity Aging ..... +85 °C, 85% R.H. 7 days ..... ±10 % typical resistance change
Vibration ..... MIL-STD-883C, Condition A ..... No change

Test Procedures And Requirements For Model MF-LR 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 ≤ R1max
Time to Trip	At specified current, 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

UL File Number ..... E 174545S
CSA File Number ..... CA 110338
TÜV 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-LR190	2.8	2.5	2.3	1.9	1.6	1.5	1.4	1.2	1.0
MF-LR260	3.8	3.4	3.1	2.6	2.2	2.0	1.9	1.7	1.4
MF-LR380	5.5	4.9	4.4	3.8	3.3	3.0	2.8	2.5	2.1
MF-LR450	6.5	5.8	5.3	4.5	3.9	3.6	3.3	2.9	2.5
MF-LR550	8.0	7.1	6.2	5.5	4.7	4.3	4.0	3.6	3.0
MF-LR600	8.7	7.8	7.1	6.0	5.2	4.7	4.4	3.9	3.3
MF-LR730	10.5	9.5	8.6	7.3	7.4	6.8	6.2	5.5	4.5
MF-LR730/20	10.5	9.5	8.6	7.3	7.4	6.8	6.2	5.5	4.5
MF-LR900/20	12.7	11.4	10.0	9.0	7.5	6.8	6.2	5.5	4.5

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

*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

Applications

Any application that requires protection at low resistances:

- Rechargeable battery pack protection
- Cellular phones
- Laptop computers

MF-LR Series - PTC Resettable Fuses

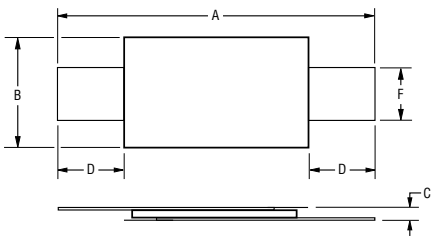
BOURNS®

Product Dimensions

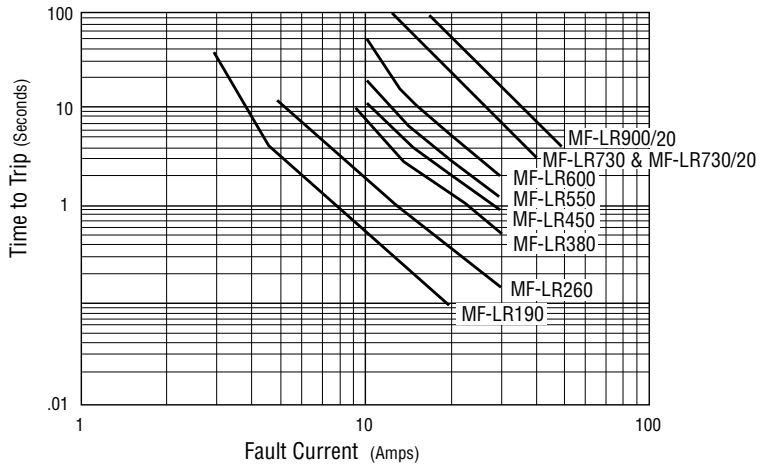
Model	A		B		C		D		F	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
MF-LR190	19.9 (0.783)	22.1 (0.870)	4.9 (0.193)	5.2 (0.205)	0.6 (0.024)	1.0 (0.039)	5.5 (0.217)	7.5 (0.295)	3.9 (0.154)	4.1 (0.161)
MF-LR260	20.9 (0.823)	23.1 (0.909)	4.9 (0.193)	5.2 (0.205)	0.6 (0.024)	1.0 (0.039)	4.1 (0.161)	5.5 (0.217)	3.9 (0.154)	4.1 (0.161)
MF-LR380	24.0 (0.945)	26.0 (1.024)	6.9 (0.272)	7.5 (0.295)	0.6 (0.024)	1.0 (0.039)	4.1 (0.161)	5.5 (0.217)	4.9 (0.193)	5.1 (0.201)
MF-LR450	24.0 (0.945)	26.0 (1.024)	9.9 (0.390)	10.5 (0.414)	0.6 (0.024)	1.0 (0.039)	5.3 (0.209)	6.7 (0.264)	5.9 (0.232)	6.1 (0.240)
MF-LR550	35.0 (1.378)	37.0 (1.457)	6.9 (0.272)	7.5 (0.295)	0.6 (0.024)	1.0 (0.039)	5.3 (0.209)	6.7 (0.264)	4.9 (0.193)	5.1 (0.201)
MF-LR600	24.0 (0.945)	26.0 (1.024)	13.9 (0.547)	15.9 (0.626)	0.6 (0.024)	1.0 (0.039)	4.1 (0.161)	5.5 (0.217)	5.9 (0.232)	6.1 (0.240)
MF-LR730	30.0 (1.18)	29.1 (1.146)	13.9 (0.547)	15.0 (0.590)	0.6 (0.024)	1.0 (0.039)	4.1 (0.161)	5.5 (0.217)	5.9 (0.232)	6.1 (0.240)
MF-LR730/20	27.1 (1.067)	29.1 (1.146)	13.9 (0.547)	14.5 (0.571)	0.6 (0.024)	1.0 (0.039)	4.1 (0.161)	5.5 (0.217)	5.9 (0.232)	6.1 (0.240)
MF-LR900/20	45.4 (1.787)	47.6 (1.874)	7.9 (0.311)	8.5 (0.335)	0.6 (0.024)	1.3 (0.051)	4.6 (0.181)	9.2 (0.362)	5.9 (0.232)	6.1 (0.240)

Packaging: Bulk - 500 pcs. per bag. Tape and Reel - Consult factory.

DIMENSIONS: MM (INCHES)

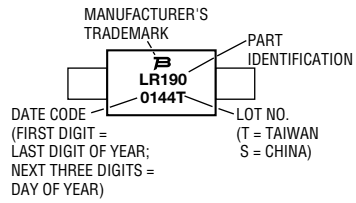


Typical Time to Trip at 23 ˚C



Typical Part Marking

Represents total content. Layout may vary.



How to Order

MF - LR 730/20 - 0

Multifuse® Product Designator

Series
LR = Axial Leaded "Strap" Component

Hold Current, I_{hold}/V_{max}*
190-900 (1.90 Amps - 9.00 Amps)

Packaging Options
- -__ = Bulk Packaging Designator for Models MF-LR190 through MF-LR730
- -0 = Bulk Packaging Designator for Models MF-LR730/20 and MF-LR900/20
- -2 = Tape and Reel**

*Vmax entry applies only to Models MF-LR730/20 & MF-LR900/20.

**Packaged per EIA 486-B