



Features

- Axial leaded
- Fully compatible with current industry standards
- Weldable nickel terminals
- Very low internal resistance
- Operating currents to 7.3 Amps
- Available in lead-free version

Agency recognition:

Applications

- Any application that requires protection at low resistances
- Rechargeable battery packs
- Cellular phones
- Laptop computers

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.			
MF-LR190	15	100	1.90	3.90	0.039	0.072	0.102	9.5	5.0	1.2
MF-LR190S	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	0.063	13.0	5.0	1.3
MF-LR260S	15	100	2.60	5.80	0.020	0.042	0.063	13.0	5.0	2.5
MF-LR380	15	100	3.80	8.30	0.013	0.026	0.037	19.0	5.0	2.5
MF-LR450	10	100	4.50	8.90	0.011	0.020	0.028	22.5	5.0	2.5
MF-LR550	10	100	5.50	10.50	0.009	0.019	0.022	27.5	5.0	2.8
MF-LR600	10	100	6.00	11.70	0.007	0.014	0.016	30.0	5.0	2.8
MF-LR730	10	100	7.3	14.1	0.006	0.012	0.015	30.0	5.0	3.3

Environmental Characteristics

Operating/Storage Temperature-40°C to +85°C
Maximum Device Surface Temperature
in Tripped State125°C
Passive Aging.....+70°C, 1000 hours±10% typical resistance change
Humidity Aging.....+85°C, 85% R.H. 7 days±10% typical resistance change
VibrationMIL-STD-883C,No change
Condition A

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	R _{min} ≤ R ≤ R _{max}
Time to Trip	At specified current, V _{max} , 23°C	T ≤ 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 NumberE 174545S
CSA File NumberCA 110338
TUV File NumberR2057213

Thermal Derating Chart - I_{hold} / I_{trip} (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 / 5.7	2.5 / 5.1	2.3 / 4.7	1.9 / 3.9	1.6 / 3.3	1.5 / 3.1	1.4 / 2.9	1.2 / 2.5	1.0 / 2.1
MF-LR190S	2.8 / 5.7	2.5 / 5.1	2.3 / 4.7	1.9 / 3.9	1.6 / 3.3	1.5 / 3.1	1.4 / 2.9	1.2 / 2.5	1.0 / 2.1
MF-LR260	3.8 / 8.5	3.4 / 7.6	3.1 / 6.9	2.6 / 5.8	2.2 / 4.9	2.0 / 4.5	1.9 / 4.2	1.7 / 3.8	1.4 / 3.1
MF-LR260S	3.8 / 8.5	3.4 / 7.6	3.1 / 6.9	2.6 / 5.8	2.2 / 4.9	2.0 / 4.5	1.9 / 4.2	1.7 / 3.8	1.4 / 3.1
MF-LR380	5.5 / 12.0	4.9 / 10.7	4.4 / 9.6	3.8 / 8.3	3.3 / 7.2	3.0 / 6.6	2.8 / 6.1	2.5 / 5.5	2.1 / 4.6
MF-LR450	6.5 / 12.9	5.8 / 11.5	5.3 / 10.5	4.5 / 8.9	3.9 / 7.7	3.6 / 7.1	3.3 / 6.5	2.9 / 5.7	2.5 / 4.9
MF-LR550	8.0 / 15.3	7.1 / 13.6	6.2 / 11.8	5.5 / 10.5	4.7 / 9.0	4.3 / 8.2	4.0 / 7.6	3.6 / 6.9	3.0 / 5.7
MF-LR600	8.7 / 17.0	7.8 / 15.2	7.1 / 13.8	6.0 / 11.7	5.2 / 10.1	4.7 / 9.2	4.4 / 8.6	3.9 / 7.6	3.3 / 6.4
MF-LR730	10.6 / 20.5	9.5 / 18.3	8.6 / 16.6	7.3 / 14.1	6.3 / 12.2	5.7 / 11.0	5.4 / 10.4	4.7 / 9.1	4.0 / 7.7

MF-LR Series - PTC Resettable Fuses

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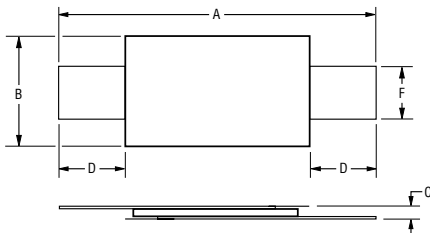
Product Dimensions

Model	A		B		C		D		F		Pkg. Style
	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)	Std.
MF-LR190S	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)	S
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)	Std.
MF-LR260S	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)	S
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)	Std.
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)	Std.
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)	Std.
MF-LR600	24.0 (0.945)	26.0 (1.024)	13.9 (0.548)	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)	Std.
MF-LR730	26.0 (1.024)	29.1 (1.146)	13.9 (0.548)	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)	Std.

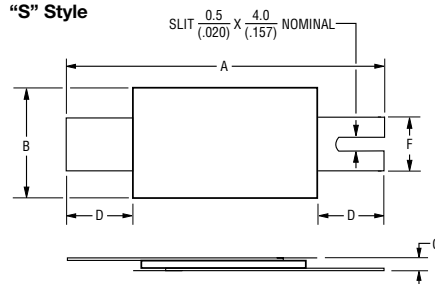
Packaging: Bulk - 500 pcs. per bag. Tape and Reel - Consult factory.

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

Standard Style

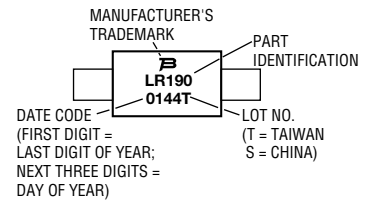


"S" Style



Typical Part Marking

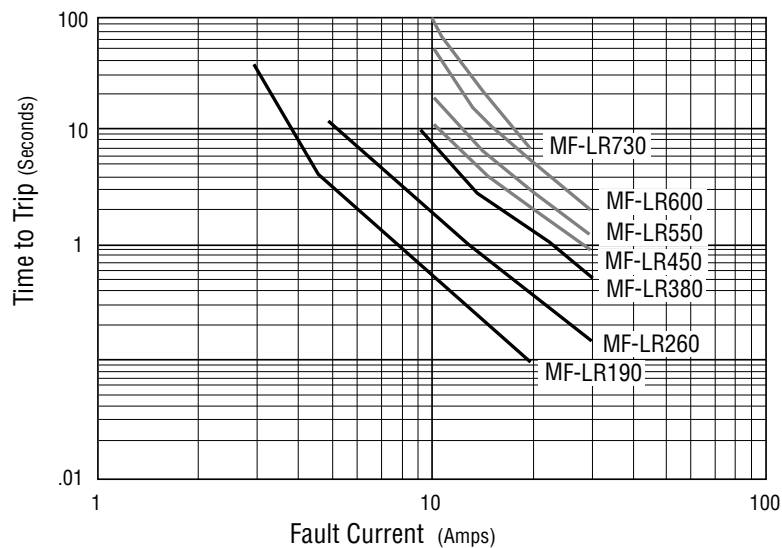
Represents total content. Layout may vary.



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Typical Time to Trip at 23°C

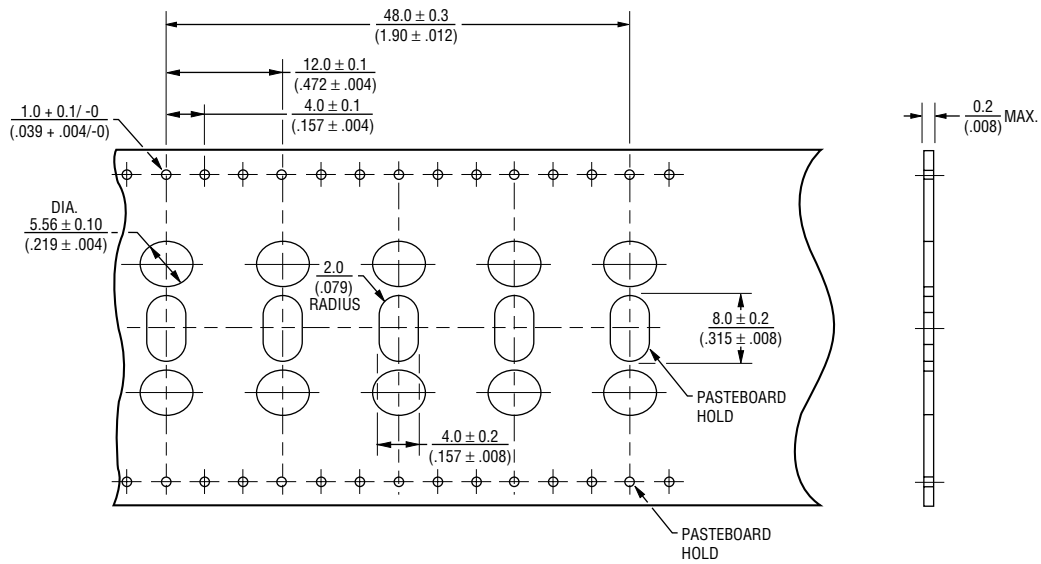


How To Order

MF - LR 190 S -
 Multifuse® Product Designator _____
 Series _____
 LR = Axial Leaded "Strap" Component
 Hold Current, I_{hold} _____
 190-730 (1.90 Amps - 7.30 Amps)
 Lead Option _____
 S = Slotted Lead Option
 Packaging Options _____
 - = Bulk Packaging
 -2 = Tape and Reel*
 *Packaged per EIA 486-B

MF-S, MF-LS, MF-LR and MF-VS Series Tape and Reel Specifications **BOURNS®**

Taped Component Dimensions



Reel Dimensions

