

SL LoRho Battery Strap Series



Agency Approvals

AGENCY	AGENCY FILE NUMBER
	E183209
	R50119583

Description

The new Littelfuse SL LoRho Battery Strap Series PPTC (polymer positive temperature coefficient) is designed with a proprietary conductive polymer material, to provide both over-current and over-temperature protection for rechargeable battery cells. This series features a slim, low profile and low resistance design to install directly on the latest generations of battery cells for a longer battery run time.

Features

- Low Profile
- Lo Rho (low resistance at normal operating hold current)
- Installs Directly on battery cell
- RoHS Compliant, lead-free and halogen-free

Applications

- Rechargeable battery cell protection

Electrical Characteristics

Part Number	I_{hold} (A)	I_{trip} (A)	V_{max} (Vdc)	I_{max} (A)	P_d max. (W)	Maximum Time To Trip		Resistance			Agency Approvals	
						Current (A)	Time (Sec.)	R_{min} (Ω)	R_{max} (Ω)	R_{1max} (Ω)		
06SL190G	1.9	4.9	6	50	1.0	9.5	3.00	0.006	0.013	0.024	X	X
06SL370G	3.7	9.0	6	50	1.2	18.5	5.00	0.005	0.013	0.020	X	X

I_{hold} = Hold current: maximum current device will pass without tripping in 20°C still air.

I_{trip} = Trip current: minimum current at which the device will trip in 20°C still air.

V_{max} = Maximum voltage device can withstand without damage at rated current (I_{max})

I_{max} = Maximum fault current device can withstand without damage at rated voltage (V_{max})

P_d = Power dissipated from device when in the tripped state at 20°C still air.

R_{min} = Minimum resistance of device in initial (un-soldered) state.

R_{max} = Maximum resistance of device in initial (un-soldered) state.

R_{1max} = Maximum resistance of device at 20°C measured one hour after tripping

Caution: Operation beyond the specified rating may result in damage and possible arcing and flame.

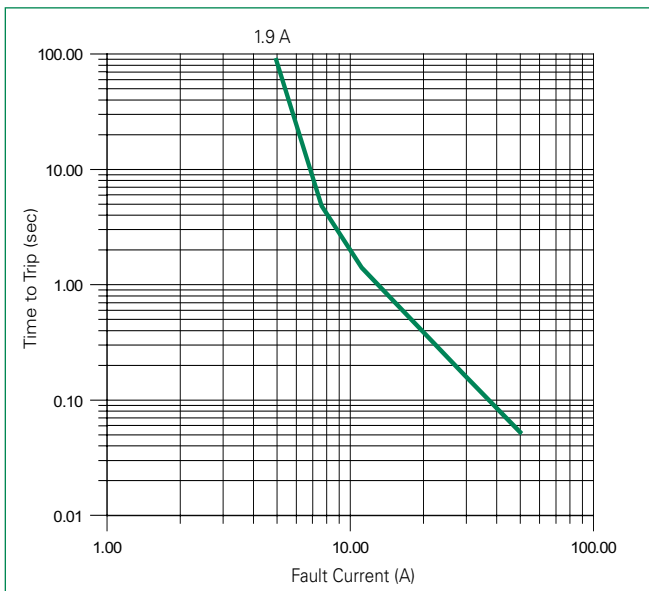
Temperature Derating

Part Number	Ambient Operation Temperature								
	-40°C	-20°C	0°C	20°C	40°C	50°C	60°C	70°C	85°C
Part Number	Hold Current (A)								
	06SL190G	06SL370G	06SL190G	06SL370G	06SL190G	06SL370G	06SL190G	06SL370G	06SL190G
06SL190G	3.40	3.00	2.60	1.90	1.70	1.40	1.20	1.00	0.70
06SL370G	5.90	5.20	4.80	3.70	3.10	2.80	2.20	1.70	1.20

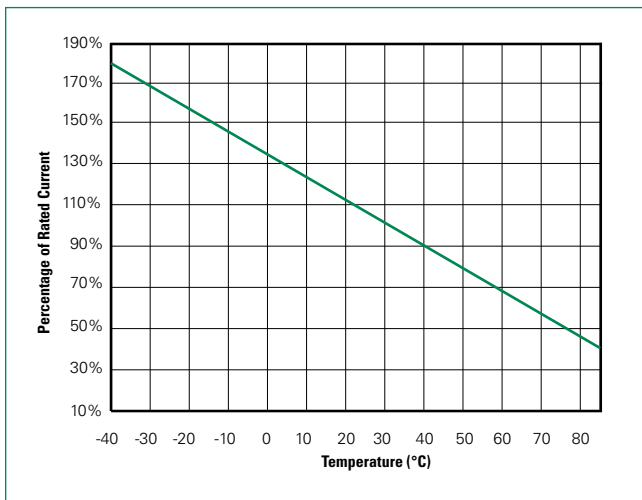
WARNING

- Users shall independently assess the suitability of these devices for each of their applications
- Operation of these devices beyond the stated maximum ratings could result in damage to the devices and lead to electrical arcing and/or fire
- These devices are intended to protect against the effects of temporary over-current or over-temperature conditions and are not intended to perform as protective devices where such conditions are expected to be repetitive or prolonged in duration
- Exposure to silicon-based oils, solvents, electrolytes, acids, and similar materials can adversely affect the performance of these PPTC devices
- These devices undergo thermal expansion under fault conditions, and thus shall be provided with adequate space and be protected against mechanical stresses
- Circuits with inductance may generate a voltage ($L di/dt$) above the rated voltage of the PPTC device.

Average Time Current Curves



Temperature Derating Curve



Additional Information



Datasheet



Resources



Samples

Order Numbering System

06 SL 190G M

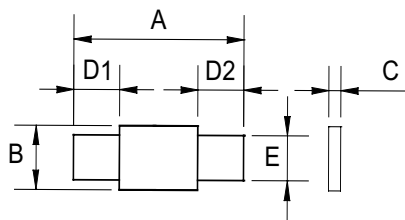
VOLTAGE RATING (VDC)

SERIES

HOLD CURRENT
(VALUE DIVIDED BY 100 =
HOLD CURRENT IN AMPS)

QUANTITY CODE M: 1000

Dimensions (mm)



A				B				C				D1				D2				E			
Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
0.36	0.43	9.2	10.8	0.12	0.14	3.15	3.45	0.02	0.04	0.55	0.95	0.09	0.13	2.15	3.25	0.09	0.13	2.15	3.25	0.087	0.094	2.2	2.4

Packaging

Part Number	Ordering Number	I _{hold} (A)	I _{hold} Code	Packaging Option Bulk	Quantity	Quantity & Packaging Code
06SL190G	06SL190GM	1.9	190	Bulk	1000	M
06SL370G	06SL370GM	3.7	370	Bulk	1000	M