

# SL series

## Strap resettable PTC Device



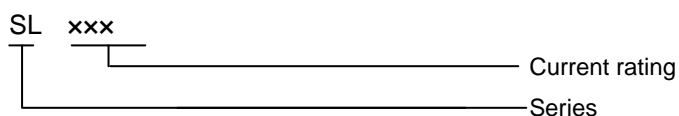
### Feature

- Resettable overcurrent protection
- ROHS complaint
- Very Low resistance
- Fast time-to-trip

### Application

- Mobile phone battery packs
- Cordless phone battery packs
- Mobile radio packs
- Computer battery packs
- Camcorder battery packs
- PDA battery packs

### Part Numbering



### Typical Electrical Characteristics for SL series at 25°C

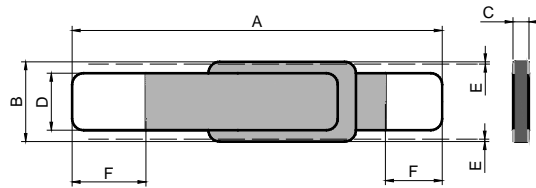
Part number	Hold Current & Trip Current (Amps)		Maximum Voltage (V)	Maximum Current (A)	Maximum Time-to-Trip		Minimum Resistance (Ohms)	Maximum Resistance (Ohms)	One Hour Post Trip Resistance $R_{1max}$ (Ohms)	Tripped State Power Dissipation (Watts)
	hold	trip			(A)	(S)				
SL175	1.75	4.5	6	50	9.0	3.5	0.008	0.017	0.032	1.0
SL190	1.9	4.9	6	50	9.5	3.5	0.007	0.015	0.024	1.0
SL250	2.5	8.0	6	50	12.5	3.5	0.006	0.013	0.020	1.0
SL350	3.5	9.0	6	50	17.5	3.5	0.004	0.009	0.016	1.0
SL370	3.7	9.5	6	50	17.5	3.5	0.003	0.007	0.014	1.0

### Thermal Derating For SL series [Hold Current (A) at Ambient Temperature(°C)]

Part number	Maximum Ambient Temperature										
	-40°C	-20°C	0°C	20°C	25°C	40°C	50°C	60°C	70°C	80°C	
SL175	3.0	2.5	2.2	1.8	1.75	1.5	1.3	1.0	0.8	0.6	
SL190	3.2	2.8	2.4	2.0	1.9	1.6	1.4	1.2	1.0	0.8	
SL250	4.2	3.7	3.2	2.6	2.5	2.1	1.8	1.6	1.3	1.0	
SL350	5.9	5.2	4.4	3.7	3.5	2.9	2.6	2.2	1.8	1.5	
SL370	6.1	5.4	4.6	3.9	3.7	3.0	2.7	2.3	1.9	1.5	

Product Dimensions in Millimeters

Part number	A		B		C		D		E		F	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
SL175	9.7	10.3	2.96	3.06	0.8	1.2	2.2	2.4	0.20	--	1.6	2.6
SL190	9.7	10.3	2.96	3.06	0.8	1.2	2.2	2.4	0.20	--	1.6	2.6
SL250	9.7	10.3	2.96	3.06	0.8	1.2	2.2	2.4	0.20	--	1.6	2.6
SL350	9.7	10.3	2.96	3.06	0.8	1.2	2.2	2.4	0.20	--	1.6	2.6
SL370	9.7	10.3	2.96	3.06	0.8	1.2	2.2	2.4	0.20	--	1.6	2.6



Physical Characteristics

Lead material	0.1mm nominal thickness, 1/2H nickel
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Packaging and Storage

Packaging: Bulk, 1000pcs per bag

Storage: The maximum ambient temperature shall not exceed 40°C. Storage temperatures higher than 40°C could result in the deformation of packaging materials. The maximum relative humidity recommended for storage is 70%. High humidity with high temperature can accelerate the oxidation of the solder plating on the termination and reduce the solderability of the components. Sealed plastic bags with desiccant shall be used to reduce the oxidation of the termination and shall only be opened prior to use. The products shall not be stored in areas where harmful gases containing sulfur or chlorine are present.



**WARNING:**

- Operation beyond the maximum ratings or improper use may result in device damage and possible electrical arcing and flame.
- The devices are intended for protection against occasional overcurrent or overtemperature fault conditions and should not be used when repeated fault conditions or prolonged trip events are anticipated.
- Contamination of the PPTC material with certain silicon based oils or some aggressive solvents can adversely impact the performance of the devices.
- Device performance can be impacted negatively if devices are handled in a manner inconsistent with recommended electronic, thermal and mechanical procedures for electronic components.
- Operation in circuit with a large inductance can generate a circuit voltage (L di/dt) above the rated voltage of the resettable device.