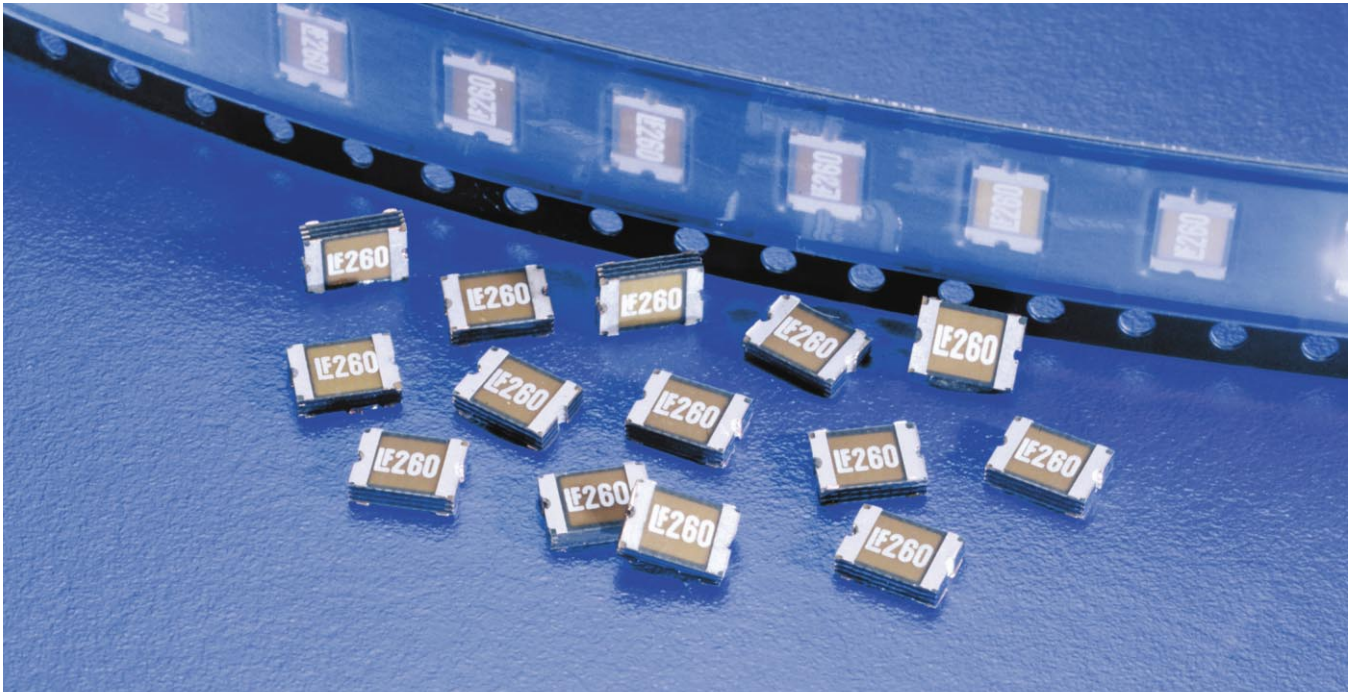


SURFACE MOUNT PTC

1812L Series



PHYSICAL SPECIFICATIONS:

Terminal Material: Tin-Lead Plated Copper

Solderability: Meets EIA specification RS186-9E and IPC/EIA J-STD-002, and IPC/EIA J-STD-001.

Device Labeling: Device is marked with IE and amperage rating.

Packaging: 12mm tape and reel carrier per EIA 481 Standard.

Standard reel quantity: 2,000 devices on 7" reel (PRT Suffix).
Optional reel quantity: 8,000 devices on 13" reel (ZRT Suffix).

AGENCY APPROVALS: UL, CSA, TUV approved.

ENVIRONMENTAL SPECIFICATIONS:

Passive Aging: 85°C, 1000 Hours.

Humidity Aging: 85°C, 85% R.H., 100 hours.

Thermal Shock: 85°C / -40°C, 20 times.

Vibration: MIL-STD 202, Method 201, MIL-STD-883, Method 2007.

Mechanical Shock: MIL-STD-202, Method 213 test condition I (100 g's, 6 sec.).

Solvent Resistance: MIL-STD-202, Method 215.

Operating/Storage Temperature: -40°C to 85°C

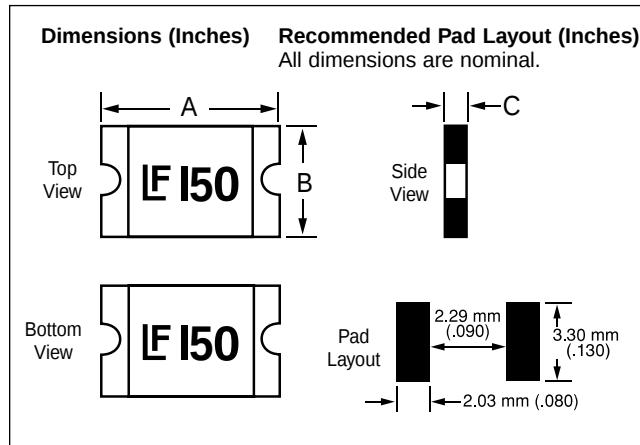
Device should remain in sealed bags prior to use.

Temperature Derating:

Part Number	Ambient Temperature									
	-40°C	-20°C	0°C	20°C	40°C	50°C	60°C	70°C	80°C	85°C
	Hold Current (A)									
1812L050	0.65	0.61	0.57	0.50	0.46	0.44	0.41	0.39	0.37	0.35
1812L075	0.98	0.91	0.83	0.75	0.69	0.65	0.62	0.58	0.54	0.53
1812L110	1.44	1.33	1.22	1.10	1.01	0.96	0.90	0.85	0.80	0.77
1812L125	1.63	1.51	1.41	1.25	1.15	1.09	1.03	0.96	0.91	0.88
1812L150	1.96	1.81	1.67	1.50	1.38	1.30	1.23	1.16	1.09	1.05
1812L200	3.02	2.68	2.33	2.00	1.66	1.49	1.32	1.15	0.99	0.82
1812L260	3.92	3.48	3.04	2.60	2.16	1.94	1.72	1.50	1.28	1.06

SURFACE MOUNT PTC

1812L Series



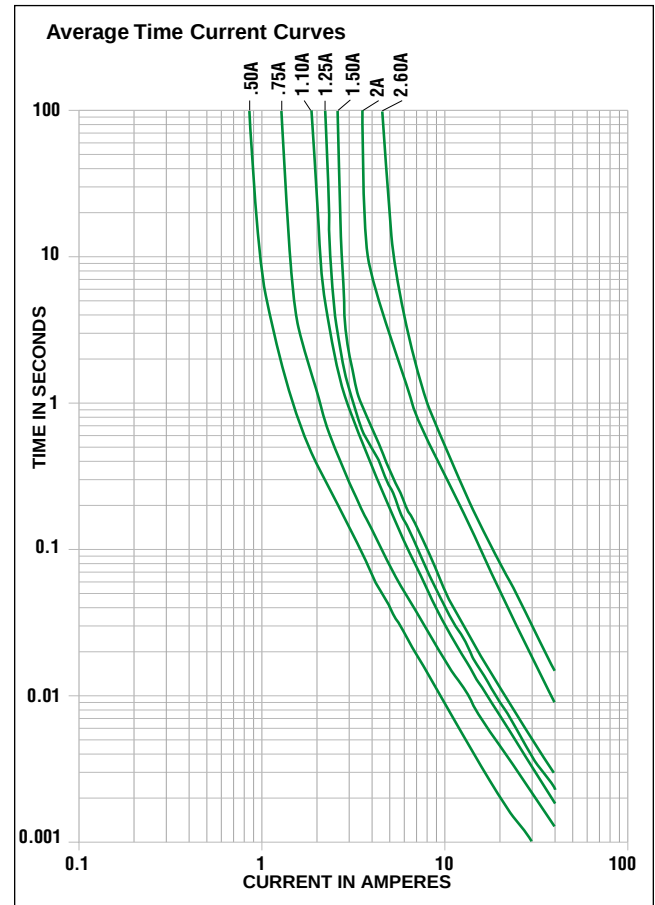
Devices can be reflow or wave soldered.

Dimensions:

1812L 050-150	A	B	C
Min. [mm (in.)]	4.32(.170)	3.00(.118)	0.53(.021)
Max. [mm (in.)]	4.62(.182)	3.30(.130)	0.69(.028)

Dimensions:

1812L 200-260	A	B	C
Min. [mm (in.)]	4.32(.170)	3.00(.118)	1.01(.040)
Max. [mm (in.)]	4.62(.182)	3.30(.130)	1.45(.057)



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	
						Current (A)	Time (Sec)	R_{IL} (Ω)	R_{AT} (Ω)
1812L050	0.50	1.00	15.0	40	0.8	8.0	0.15	0.100	1.000
1812L075	0.75	1.50	13.2	40	0.8	8.0	0.30	0.075	0.420
1812L110	1.10	2.20	6.0	40	0.8	8.0	0.30	0.040	0.226
1812L125	1.25	2.50	6.0	40	0.8	8.0	0.25	0.045	0.184
1812L150	1.50	3.00	6.0	40	0.8	8.0	0.30	0.040	0.137
1812L200	2.00	4.00	6.0	40	0.8	8.0	2.50	Call for Data	Call for Data
1812L260	2.60	5.20	6.0	40	0.8	8.0	2.50	0.01	0.050

I_{hold} = Hold Current: maximum current device will sustain for 4 hours 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_{IL} = Minimum resistance of device in initial (un-soldered) state.

R_{AT} = Maximum measured resistance in the non-tripped state 1 hour after reflow with reflow conditions of 260°C for 20 sec.

CAUTION: Operation beyond the specified ratings may result in damage and possible arcing and flame.