

SURFACE MOUNT PTC

2029L/3425L Series









- The 2029L/3425L Series Resettable devices utilize a unique polymer-based, Positive Temperature Coefficient (PTC) material to protect electrical circuits against overcurrent conditions.
- In normal operation, the 2029L/3425L Series PTC has many conductive paths and a very low resistance. In an overcurrent condition, the temperature of the polymer material rises. This dramatically reduces the conductive paths resulting in an immediate rise in resistance. In this condition, the device provides circuit protection by significantly limiting the flow of current. However, once the cause of the in tion ated the 2029L/34 6L Series cools ow and resets low resistand value pe at fl orma to resume.
- The 2029L/34.

AGENCY APPROVALS: Recognized under the Components Program of Underwriters Laboratory and the Component Acceptance Program of CSA. TUV approved

AGENCY FILE NUMBERS: UL E183209, SA LR 880

PHYSICAL SPECIFICATIONS:

Materials: Terminal Material: Tin Plated Bass to

MIL-T-10727B

Lead Solderability: Meets EIA specification RS186-9E Device Labeling: Device is marked with the letter 'L', amperage rating and date code.

Packaging: Packaged in tape and reel carrier per EIA 481-2 standard

Standard reel quantities:

Part	Reel	Packaging		
Number	Quantity	Suffix		
2029L Series	2000	PR		
3425L Series	1500	DR		

ENVIRONMENTAL SPECIFICATIONS:

Passive Aging: 85°C, 1000 Hours. ±5% typical resistance change.

Humidity Aging: 85°C, 85% R.H., 1000 hours. ±5% typical resistance change.

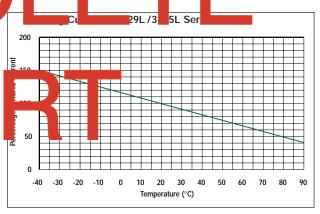
Thermal Shock: 85°C / -40°C, 20 times. ±10% typical resistance change.

Vibration: MIL-STD 202, Method 201. No resistance change.

Mechanical Shock: MIL-STD-202, Method 213 test conditior (100 g's

Surface 25°C Лa emperature:

g(ating/St mpera ıre: –



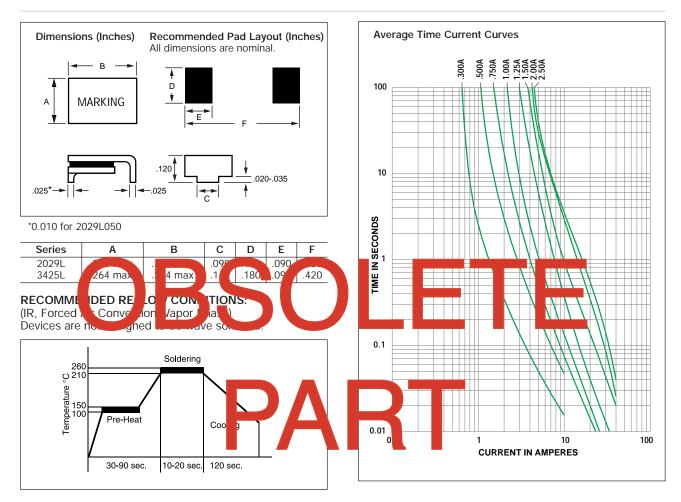
For NEW Designs use 1812L series PTC in place of the 2029L Series.





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ORDERING INFORMATION:

						Maximum Time To Trip		Resistance	
Catalog Number	I _{hold} (A)	I _{trip} (A)	V _{max} (Vdc)	I _{max} (A)	Pd max. (W)	Current (A)	Time (Sec)	R _{IL} (Ω)	R _{AT} (Ω)
2029L030	0.30	0.6	60	10	1.7	1.5	3.0	1.200	4.80
2029L050	0.50	1.0	60	10	1.7	2.5	4.0	0.350	1.40
2029L075	0.75	1.5	30	40	1.7	8.0	0.3	0.350	1.00
2029S100	1.10	2.2	15	40	1.7	8.0	0.5	0.120	0.48
2029L100	1.10	2.2	30	40	1.7	8.0	0.5	0.120	0.48
2029L125	1.25	2.5	15	40	1.7	8.0	2.0	0.070	0.25
3425L150	1.50	3.0	15	40	1.9	8.0	5.0	0.060	0.25
3425L200	2.00	4.0	15	40	1.9	8.0	12.0	0.050	0.13
3425L250	2.50	5.0	15	40	1.9	8.0	25.0	0.035	0.09
2029L260	2.60	5.2	6.0	40	1.7	8.0	20.0	0.025	0.075

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})

 $v_{max} = v_{max}/v_{max}$ $v_{max} = v_{max}/v_{max$

 $\frac{1}{2}$ = Power dissipated from device when in the tripped state at $\frac{3}{2}$ 0°C still air.

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

R_{AT} = Maximum resistance of device at 20°C measured one hour after tripping or reflow soldering of 260°C for 20 sec.

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