

## Device Specification (Preliminary)



### 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.)	$R_{min}$ ( $\Omega$ )	$R_{1max}$ ( $\Omega$ )
SMD1210P175SLR	1.75	3.50	6	50	0.8	8.00	2.50	0.006	0.040

Note:  $I_{hold}$  = Hold current: maximum current device will pass without tripping in 23°C still air.

$I_{trip}$  = Trip current: minimum current at which the device will trip in 23°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 23°C still air.

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

$R_{1max}$  = Maximum resistance of device at 23°C measured one hour after tripping or reflow soldering of 260°C for 20 sec.

\*Value specified were determined using the PWB with 0.030"×1.5oz copper traces.

\*Customer should verify the device performance in their specified conditions.

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

Recognitions:



FIGURE

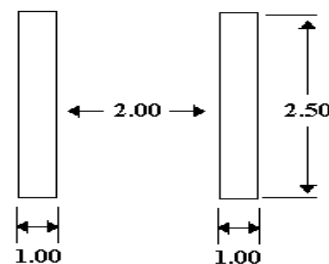
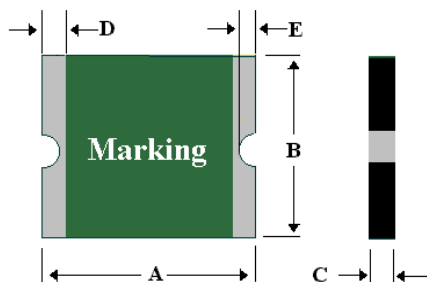
SOLDER PAD LAYOUTS

Marking:

└ Polytronics Logo

P□□

└ Part Identification (TBD)



Note: Polystar is Polytronics's manufacturing site in China. The Polystar ID marking shall appear on smallest package.

### PHYSICAL DIMENSIONS (mm)

Part Number	A		B		C		D		E	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
SMD1210P175SLR	3.00	3.43	2.35	2.80	0.40	0.70	0.25	0.75	0.20	0.50

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**EVERFUSE<sup>TM</sup>**  
Polymeric PTC Resistor

Product: SMD1210P175SLR  
Revision: Preliminary 0.2  
Date: March 04, 2009  
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THERMAL DERATING CHART – Ihold/Itrip(Amps)

**RECOMMENDED DATA**

Model		Ambient Operation Temperature								
		-40℃	-20℃	0℃	23℃	40℃	50℃	60℃	70℃	85℃
SMD1210P175SLR	Ihold	2.65	2.30	2.05	1.75	1.40	1.20	1.05	0.90	0.60
	Itrip	5.30	4.70	4.15	3.50	2.90	2.60	2.30	1.95	1.40