

### Rohs 😥 0805L UL Series



# **Device Specification**

#### ELECTRICAL CHARACTERISTICS

Deed Marsher		I <sub>hold</sub>	I <sub>trip</sub>	V <sub>max</sub>	I <sub>max</sub>	Pd <sub>Tvp</sub>	Maximum Time-to-Trip		Resistance	
Part Number	Marking	(A)	(A)	(Vdc)	(A)	( <b>W</b> )	Current (A)	Time (Sec.)	R <sub>min</sub> (Ω)	$\begin{array}{c} \mathbf{R}_{1\max} \\ (\mathbf{\Omega}) \end{array}$
0805L075UL	-G	0.75	1.50	6	50	0.6	8.0	0.3	0.050	0.15
0805L110UL	-H	1.10	1.80	6	50	0.6	8.0	0.3	0.040	0.120
0805L150UL	-K	1.50	3.00	6	50	0.6	8.0	0.5	0.024	0.085
0805L175UL	-V	1.75	3.50	6	50	0.6	8.0	0.6	0.018	0.063
0805L200ULTH	-L	2.00	4.00	6	50	0.6	8.0	1.0	0.014	0.049
0805L260ULTH	-S	2.60	5.20	6	50	0.6	8.0	4.0	0.010	0.035

Note:  $I_{hold}$ 

= Hold current: maximum current device will pass without tripping in  $20^{\circ}$ 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 (Imax)

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

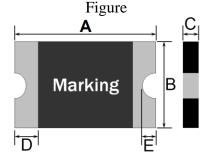
Pd = Power dissipated from device when in the tripped state at  $20^{\circ}$ C still air.

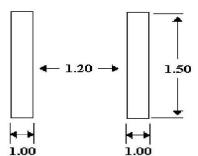
 $R_{min}$  = Minimum resistance of device in initial (un-soldered) state.

 $R_{1max}$  = 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 rating may result in damage and possible arcing and flame. Figure Solder Pad Layout (mm)





#### PHYSICAL DIMENSIONS (mm)

Part Number	Α		В		С		D		Е	
I alt Number	Min.	Max.								
0805LxxxUL	2.00	2.20	1.20	1.50	0.40	0.75	0.20	0.55	0.05	0.45

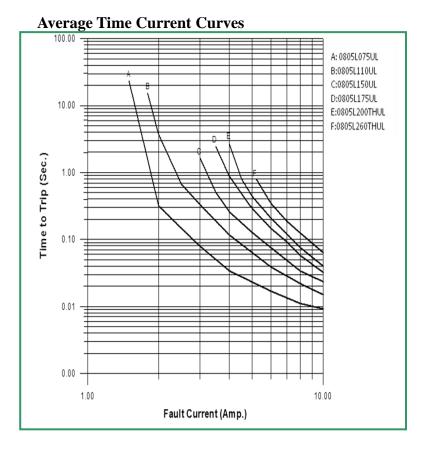
Note: xxx represents hold current rating (075, 110, 150, 175, 200 and 260).

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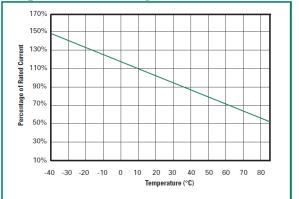


#### **Temperature Rerating**

	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)								
0805L075UL	1.15	1.0	0.85	0.75	0.55	0.45	0.40	0.30	0.20
0805L110UL	1.7	1.5	1.3	1.1	0.85	0.7	0.6	0.5	0.3
0805L150UL	2.25	2	1.75	1.5	1.15	1	0.85	0.65	0.45
0805L175UL	2.6	2.3	2	1.75	1.3	1.15	0.95	0.75	0.5
0805L200UL	3.1	2.75	2.4	2	1.65	1.4	1.15	0.95	0.65
0805L260UL	3.8	3.3	2.9	2.6	2.2	1.95	1.75	1.5	1.05



#### **Temperature Rerating Curve**



Note: The average time current curves and Temperature Rerating curve performance is affected

By a number of variables, and these curves provide as guidance only. Customer must verify the performance in their application.

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#### **Soldering Parameters**

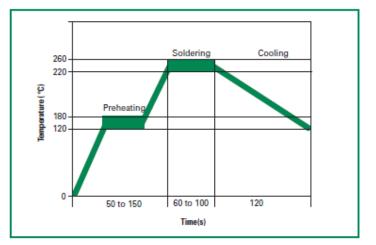
Condition	Reflow
PeakTemp/ DurationTime	260°C / 10 Sec
Time above liquids (TAL) 220°C	60 Sec ~ 100 Sec
Preheat 120°C~ 180°C	50 Sec ~ 150 Sec
Storage Condition	0°C~35°C, ≦70%RH

• Recommended reflow methods: IR, vapor phase oven, hot air oven,  $N_2$  environment for lead-free

- · Recommended maximum paste thickness is 0.25mm (0.010 inch)
- Devices can be cleaned using standard industry methods and solvents.
- Note: If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.

#### **Physical Specifications**

Terminal Material	Solder-Plated Copper (Solder Material: Matte Tin (Sn))
Lead Solderability	Meets EIA Specification RS186-9E, ANSI/J-STD-002, Category 3



#### **Environmental Specifications**

Operating/Storage Temperature	-40°C to +85°C
Maximum Device Surface Temperature in Tripped State	125°C
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	MIL–STD–202, Method 107G +85°C/-40°C 20 times -30% typical resistance change
Solvent Resistance	MIL–STD–202, Method 215 No change
Vibration	MIL–STD–883C, Method 2007.1, Condition A No change
Moisture Sensitivity Level	Level 2, J-STD-020C