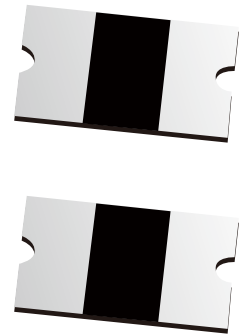


FEATURES

- | I(hold): 0.35~3.0A
- | Very high voltage surge capabilities
- | Available in lead-free version
- | Fast response to fault current
- | RoHS compliant, Lead- Free and Halogen-Free
- | Low resistance
- | Compact design saves board space
- | Compatible with high temperature solders



APPLICATIONS

- | USB peripherals
- | Disk drives
- | CD-ROMs
- | General electronics
- | Set-top-box and HDMI
- | Mobile Internet Device (MID)
- | PDAs / digital cameras
- | Game console port protection
- | Plug and play protection for peripherals
- | Mobile phones - battery and port protection

ENVIRONMENTAL SPECIFICATIONS

Test	Conditions	Resistance change
Passive aging	+85°C, 1000 hrs	±5% typica
Humidity aging	+85°C, 85%R.H., 168 hours	±5% typical
Thermal shock	+85°C to -40°C, 20times	±33% typical
Resistance to solvent	MIL-STD-202, Method 215	No change
Vibration	MIL-STD-202, Method 201	No change
Ambient operating conditions : - 40°C to +85°C Maximum surface temperature of the device in the tripped state is 125 °C		

PERFORMANCE SPECIFICATION

Type Number	I_{hold}	I_{trip}	V_{max}	Max. Time to Trip		I_{max}	$P_{d\ typ}$	Ri_{min}	$R1_{max}$
	A	A	V_{DC}	Current A	Tmax S	A	W	Ω	Ω
SMD0603-035L	0.35	0.7	6.0	8.0	0.1	50	0.5	0.15	1.0
SMD0603-050L	0.5	1.0	6.0	8.0	0.6	50	0.5	0.07	0.4
SMD0603-075L	0.75	1.5	6.0	8.0	1.0	50	0.5	0.055	0.25
SMD0603-100L	1.0	2.0	6.0	8.0	2.0	50	0.5	0.045	0.12
SMD0603-125L	1.25	2.5	6.0	8.0	3.0	50	0.5	0.035	0.10
SMD0603-150L	1.5	3.0	6.0	8.0	4.0	50	0.5	0.025	0.08
SMD0603-175L	1.75	3.5	6.0	8.0	5.0	50	0.5	0.015	0.07
SMD0603-200L	2.0	4.0	6.0	8.0	5.0	50	0.5	0.012	0.06
SMD0603-260L	2.6	5.2	6.0	8.0	5.0	50	0.5	0.008	0.05
SMD0603-300L	3.0	6.0	6.0	8.0	5.0	50	0.5	0.008	0.04

V_{max} = Maximum operating 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}).

I_{hold} = Hold Current. Maximum current device will not trip in 25°C still air.

I_{trip} = Trip Current. Minimum current at which the device will always trip in 25°C still air.

P_d = Power dissipation when device is in the tripped state in 25°C still air environment at rated voltage.

$Ri_{min/max}$ = Minimum/Maximum device resistance prior to tripping at 25°C.

$R1_{max}$ = Maximum device resistance is measured one hour post reflow.

THERMAL DERATING CHART-IH(A)

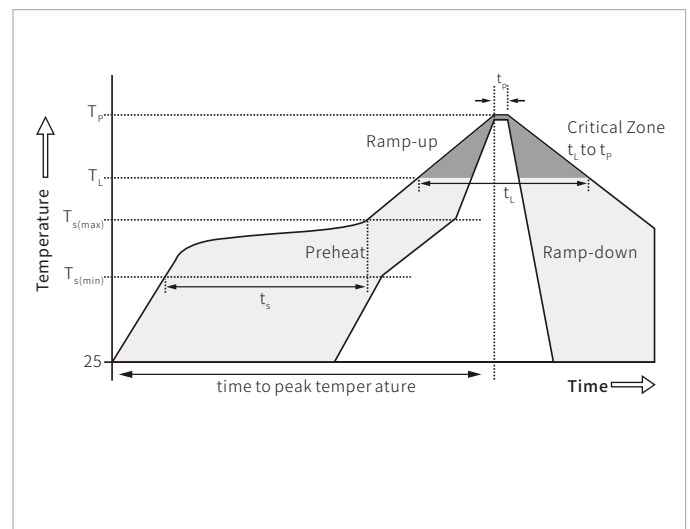
Part Number	Ambient Operation Temperature								
	-40 °C	-20 °C	0 °C	25 °C	40 °C	50 °C	60 °C	70 °C	85 °C
SMD0603-035L	0.46	0.40	0.37	0.35	0.29	0.25	0.24	0.20	0.14
SMD0603-050L	0.66	0.57	0.53	0.50	0.41	0.36	0.34	0.29	0.20
SMD0603-075L	0.99	0.86	0.79	0.75	0.62	0.54	0.51	0.43	0.30
SMD0603-100L	1.31	1.14	1.60	1.00	0.83	0.71	0.69	0.57	0.40
SMD0603-125L	1.64	1.43	1.32	1.25	1.04	0.89	0.86	0.71	0.50
SMD0603-150L	1.97	1.71	1.59	1.50	1.24	1.07	1.03	0.86	0.60
SMD0603-175L	2.30	2.00	1.85	1.75	1.45	1.25	1.20	1.00	0.70
SMD0603-200L	2.63	2.29	2.11	2.00	1.66	1.43	1.37	1.14	0.80
SMD0603-260L	3.42	2.97	2.75	2.60	2.15	1.83	1.78	1.49	1.04
SMD0603-300L	3.94	3.43	3.17	3.00	2.49	2.14	2.06	1.71	1.20

DIMENSIONS

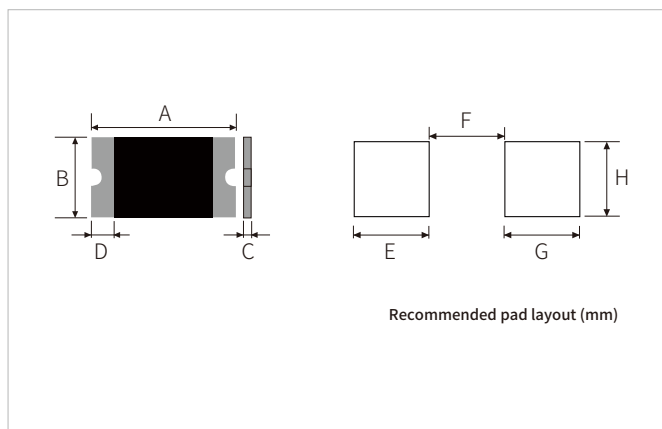
Type Number	Package Dimensions (mm)							Package Dimensions (in)						
	A		B		C		D	A		B		C		D
	min	max	min	max	min	max	min	min	max	min	max	min	max	max
SMD0603-035L	1.45	1.85	0.65	1.05	0.40	1.00	0.15	0.057	0.073	0.026	0.041	0.016	0.039	0.006
SMD0603-050L	1.45	1.85	0.65	1.05	0.40	1.00	0.15	0.057	0.073	0.026	0.041	0.016	0.039	0.006
SMD0603-075L	1.45	1.85	0.65	1.05	0.40	1.00	0.15	0.057	0.073	0.026	0.041	0.016	0.039	0.006
SMD0603-100L	1.45	1.85	0.65	1.05	0.40	1.00	0.15	0.057	0.073	0.026	0.041	0.016	0.039	0.006
SMD0603-125L	1.45	1.85	0.65	1.05	0.40	1.00	0.15	0.057	0.073	0.026	0.041	0.016	0.039	0.006
SMD0603-150L	1.45	1.85	0.65	1.05	0.40	1.00	0.15	0.057	0.073	0.026	0.041	0.016	0.039	0.006
SMD0603-175L	1.45	1.85	0.65	1.05	0.40	1.00	0.15	0.057	0.073	0.026	0.041	0.016	0.039	0.006
SMD0603-200L	1.45	1.85	0.65	1.05	0.40	1.00	0.15	0.057	0.073	0.026	0.041	0.016	0.039	0.006
SMD0603-260L	1.45	1.85	0.65	1.05	0.40	1.00	0.15	0.057	0.073	0.026	0.041	0.016	0.039	0.006
SMD0603-300L	1.45	1.85	0.65	1.05	0.40	1.00	0.15	0.057	0.073	0.026	0.041	0.016	0.039	0.006

REFLOW PROFILE

Reflow Condition		Pb-Free assembly
Pre Heat	Temperature Min	150°C
	Temperature Max	200°C
	Time(min to max)	60-180 secs
Average ramp up rate (Liquidus)Temp (T_L) to peak T_s (max) to T_L - Ramp-up Rate		3°C/second max
Reflow	Temperature (T_L) (Liquidus)	217°C
	Temperature (T_L)	60-150 seconds
Peak Temperature (T_p)		260+0/-5 °C
Time within 5°C of actual peak Temperature (t_p)		20~40 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T_p)		8 minutes max.
Do not exceed		260°C

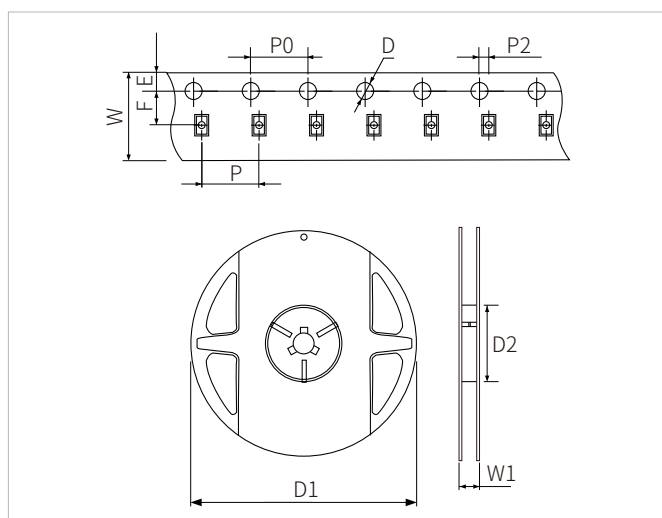


PACKAGE MECHANICAL DATA



Ref.	Dimensions
	Millimeters
A	See Dimensions Table
B	
C	
D	
E	0.8
F	0.7
G	0.8
H	1.0

TAPING AND REEL SPECIFICATIONS



Ref.	Dimensions	
	Millimeters	Inches
W	8 ± 0.2	0.315 ± 0.008
P	4 ± 0.1	0.157 ± 0.004
P0	4 ± 0.1	0.157 ± 0.004
P2	2 ± 0.05	0.079 ± 0.002
F	3.5 ± 0.05	0.138 ± 0.002
E	1.75 ± 0.1	0.069 ± 0.004
D	1.55 ± 0.05	0.061 ± 0.002
D1(max)	178	7.007
D2(min)	60	2.362
W1	9.0 ± 0.5	0.354 ± 0.02

ORDERING INFORMATION

Part Number	QTY/Reel	Reel Size
SMD0603-035L Thru SMD0603-125L	5000PCS	7"
SMD0603-150L Thru SMD0603-300L	4000PCS	7"

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