

FEATURES

- | I(hold): 5.0~12.0A
- | 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

- | | |
|--|---|
| <ul style="list-style-type: none"> USB peripherals Disk drives CD-ROMs General electronics Set-top-box and HDMI | <ul style="list-style-type: none"> 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 hours	±10% typical
Humidity aging	+85°C, 85%R.H.,100 hours	±5% typical
Thermal shock	MIL-STD-202,Method 107G +85°C/-40°C,20 times	-30% typical
Resistance to solvent	MIL-STD-202, Method 215	No change
Vibration	ML-STD-883C,Test Condition A	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	T_{max} S	A	W	Ω	Ω
SMD2920-500L-16	5.00	10.0	16	50.0	2.0	50	2.2	0.001	0.014
SMD2920-500L-24	5.00	10.0	24	50.0	2.0	50	2.2	0.001	0.014
SMD2920-600L-16	6.00	12.0	16	50.0	2.0	50	2.2	0.0008	0.012
SMD2920-600L-24	6.00	12.0	24	50.0	2.0	50	2.2	0.0008	0.012
SMD2920-700L-16	7.00	14.0	16	50.0	2.0	50	2.2	0.0007	0.010
SMD2920-700L-24	7.00	14.0	24	50.0	2.0	50	2.2	0.0007	0.010
SMD2920-800L-16	8.00	16.0	16	50.0	2.0	50	2.2	0.0006	0.008
SMD2920-800L-24	8.00	16.0	24	50.0	2.0	50	2.2	0.0006	0.008
SMD2920-900L-16	9.00	18.0	16	50.0	2.0	50	2.2	0.0006	0.007
SMD2920-900L-24	9.00	18.0	24	50.0	2.0	50	2.2	0.0006	0.007
SMD2920-1000L-16	10.00	20.0	16	50.0	2.0	50	2.2	0.0005	0.006
SMD2920-1000L-24	10.00	20.0	24	50.0	2.0	50	2.2	0.0005	0.006
SMD2920-1100L-16	11.00	22.0	16	50.0	2.0	50	2.2	0.0005	0.005
SMD2920-1100L-24	11.00	22.0	24	50.0	2.0	50	2.2	0.0005	0.005
SMD2920-1200L-16	12.00	24.0	16	50.0	2.0	50	2.2	0.0005	0.0004
SMD2920-1200L-24	12.00	24.0	24	50.0	2.0	50	2.2	0.0005	0.0004

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.

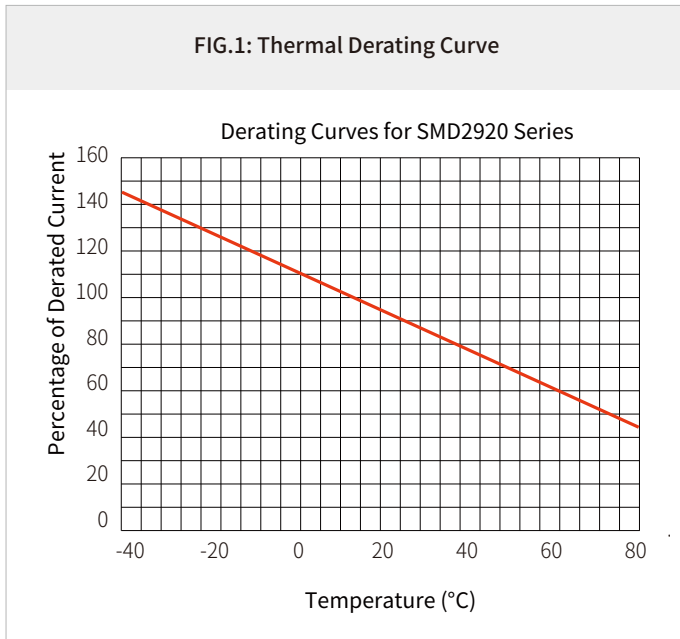
THERMAL DERATING CHART-IH(A)

Part Number	Ambient Operating Temperature								
	-40 °C	-20 °C	0 °C	25 °C	40 °C	50 °C	60 °C	70 °C	85 °C
SMD2920-500L-16	7.00	6.75	5.65	5.00	4.54	4.20	3.85	3.45	2.82
SMD2920-500L-24	7.00	6.75	5.65	5.00	4.54	4.20	3.85	3.45	2.82
SMD2920-600L-16	8.58	7.83	7.05	6.00	5.27	4.87	4.48	4.05	3.38
SMD2920-600L-24	8.58	7.83	7.05	6.00	5.27	4.87	4.48	4.05	3.38
SMD2920-700L-16	9.48	8.73	7.92	7.00	6.36	5.88	5.41	4.83	3.94
SMD2920-700L-24	9.48	8.73	7.92	7.00	6.36	5.88	5.41	4.83	3.94
SMD2920-800L-16	11.20	10.26	9.17	8.00	7.17	6.67	6.16	5.66	4.88
SMD2920-800L-24	11.20	10.26	9.17	8.00	7.17	6.67	6.16	5.66	4.88
SMD2920-900L-16	12.60	11.54	10.32	9.00	8.07	7.49	6.93	6.36	5.49
SMD2920-900L-24	12.60	11.54	10.32	9.00	8.07	7.49	6.93	6.36	5.49
SMD2920-1000L-16	14.00	12.83	11.47	10.00	8.97	8.33	7.70	7.07	6.10
SMD2920-1000L-24	14.00	12.83	11.47	10.00	8.97	8.33	7.70	7.07	6.10
SMD2920-1100L-16	15.40	14.11	12.61	11.00	9.86	9.16	8.47	7.77	6.71
SMD2920-1100L-24	15.40	14.11	12.61	11.00	9.86	9.16	8.47	7.77	6.71
SMD2920-1200L-16	16.80	15.40	13.76	12.00	10.76	10.00	9.24	8.48	7.32
SMD2920-1200L-24	16.80	15.40	13.76	12.00	10.76	10.00	9.24	8.48	7.32

DIMENSIONS

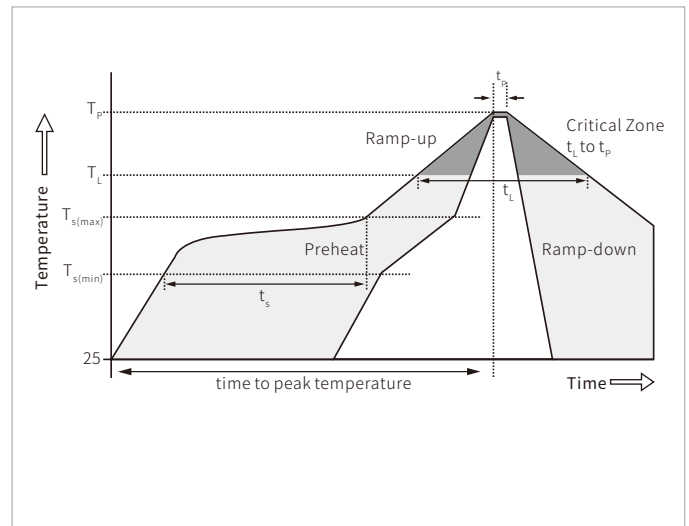
Type Number	Package Dimensions (mm)							
	A		B		C		D	E
	min	max	min	max	min	max	min	min
SMD2920-500L-16	6.73	7.98	4.8	5.44	0.5	1.4	0.3	0.15
SMD2920-500L-24	6.73	7.98	4.8	5.44	0.5	1.4	0.3	0.15
SMD2920-600L-16	6.73	7.98	4.8	5.44	0.5	1.4	0.3	0.15
SMD2920-600L-24	6.73	7.98	4.8	5.44	0.5	1.4	0.3	0.15
SMD2920-700L-16	6.73	7.98	4.8	5.44	0.5	1.4	0.3	0.15
SMD2920-700L-24	6.73	7.98	4.8	5.44	0.5	1.4	0.3	0.15
SMD2920-800L-16	6.73	7.98	4.8	5.44	0.5	1.4	0.3	0.15
SMD2920-800L-24	6.73	7.98	4.8	5.44	0.5	1.4	0.3	0.15
SMD2920-900L-16	6.73	7.98	4.8	5.44	0.5	1.4	0.3	0.15
SMD2920-900L-24	6.73	7.98	4.8	5.44	0.5	1.4	0.3	0.15
SMD2920-1000L-16	6.73	7.98	4.8	5.44	0.5	1.4	0.3	0.15
SMD2920-1000L-24	6.73	7.98	4.8	5.44	0.5	1.4	0.3	0.15
SMD2920-1100L-16	6.73	7.98	4.8	5.44	0.5	1.4	0.3	0.15
SMD2920-1100L-24	6.73	7.98	4.8	5.44	0.5	1.4	0.3	0.15
SMD2920-1200L-16	6.73	7.98	4.8	5.44	0.5	1.4	0.3	0.15
SMD2920-1200L-24	6.73	7.98	4.8	5.44	0.5	1.4	0.3	0.15

PARAMETER CHARACTERISTIC CURVE

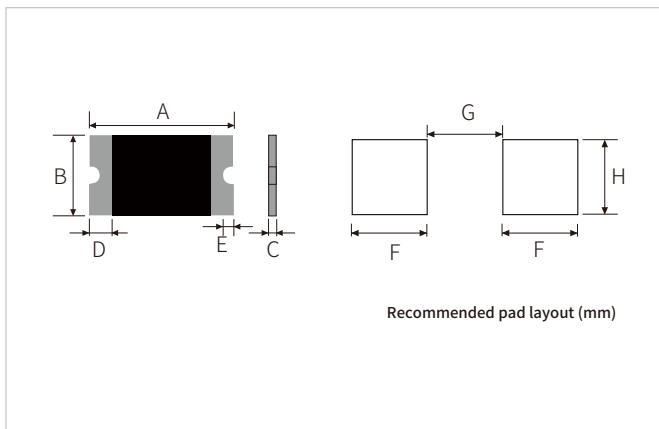


REFLOW PROFILE

Reflow Condition		Pb-Free assembly
Pre Heat	Temperature Min	150°C
	Temperature Max	200°C
	Time ($t_{s_{min}}$ to $t_{s_{max}}$)	60-120 seconds
Average ramp up rate (Liquidus) Temp (T_L) to peak		3°C/second max
$T_s(\text{max})$ to T_L - Ramp-up Rate		
Reflow	Temperature (T_L) (Liquidus)	217°C
	Time (min to max) (t_s)	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		3°C/second max
Time 25°C to peak Temperature (T_p)		8 minutes max.
Do not exceed		260°C

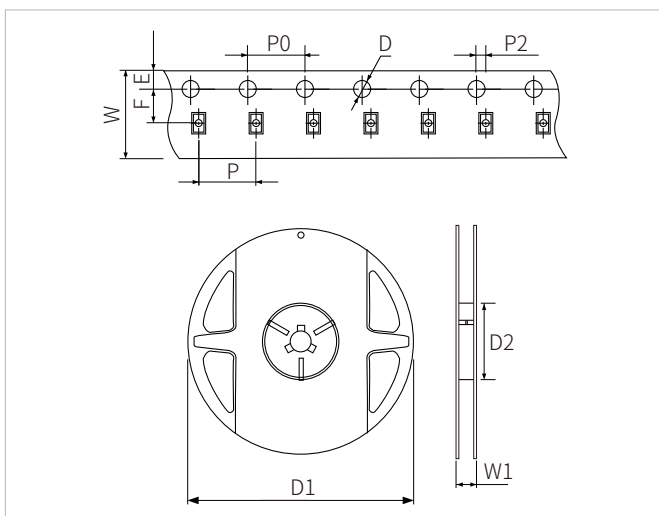


PACKAGE MECHANICAL DATA



Ref.	Dimensions	
	Millimeters	
A	See Dimensions Table	
B		
C		
D		
E		
F	2.3	
G	5.1	
H	5.6	

TAPING AND REEL SPECIFICATIONS



Symbol	Dimensions	
	Millimeters	Inches
W	16.0±0.3	0.63±0.012
P	4.0±0.1	0.157±0.004
P0	4.0±0.1	0.157±0.004
P2	2.0±0.05	0.079±0.002
F	7.5±0.05	0.295±0.002
E	1.75±0.1	0.069±0.002
D	1.55±0.05	0.061±0.002
D1(max)	178	7.007
D2(min)	60	2.362
W1	12.0±1	0.472±0.039

ORDERING INFORMATION

Part Number	QTY/Reel	Reel Size
SMD2920-500L-SMD2920-700L	2000PCS	7"
SMD2920-800L-SMD2920-1200L	1500PCS	7"

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