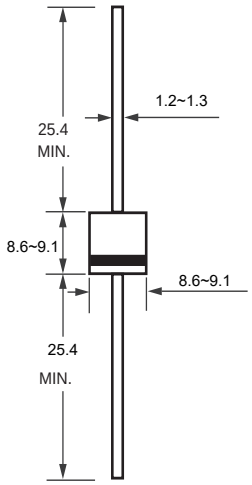
SLD10A~SLD60CA

SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR POWER 6000 Watt

BREAK DOWN VOLTAGE 10 to 60 Volt

R-6 Unit:mm



FEATURES

- Automotive Protection
- Glass Passivated Chip
- Excellent Clamping Capability
- Uni and Bidirectional unit
- Lead free in compliance with EU RoHS

MECHANICAL DATA

- Case: Molded plastic over passivated junction.
- Polarity: Color band denotes cathode end

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Rating	Symbol	Value	Units
Peak Pulse Power Dissipation on T_A = 25°C (Notes 1)	P_{PP}	6000	Watts
Steady State Power Dissipation on Infinite Heat Sink at TL=75ºC	$P_{M(AV)}$	8	W
Peak Forward Surge Current per Fig.5 (Notes 2)	I_{FSM}	500	Amps
Peak Pulse Current on tp=10/1000μs waveform (Notes 1)	I_{PPM}	see Table 1	Amps
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-55 to +175	°C

NOTES :

1. Non-repetitive current pulse, per Fig.5 and derated above T_A = 25°C per Fig. 1.
2. 8.3ms single half sine-wave, or equivalent square wave, duty cycle = 4 pulses per minutes maximum.

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ELECTRICAL CHARACTERISTICS @25°C

Part Number (Uni)	Part Number (Bi)	Breakdown Voltage V_{BR} @I_T			Maximum Reverse Leakage I_R @V_{RWM} (μA)	Working Peak Reverse Voltage V_{RWM} (V)	Maximum Reverse Surge Current I_{PP} (A)	Maximum Clamping Voltage V_C @I_{PP} (V)
		Min (V)	Max (V)	I_T (mA)				
SLD10A	SLD10CA	11.80	13.0	5	10	10	350.0	17.0
SLD11A	SLD11CA	12.20	13.5	5	10	11	327.0	18.2
SLD12A	SLD12CA	13.30	14.7	5	10	12	300.0	19.9
SLD13A	SLD13CA	14.40	15.9	5	10	13	277.0	21.5
SLD14A	SLD14CA	15.60	17.2	5	10	14	257.0	23.2
SLD15A	SLD15CA	16.70	18.5	5	10	15	245.0	24.4
SLD16A	SLD16CA	17.80	19.7	5	10	16	229.0	26.0
SLD17A	SLD17CA	18.90	20.9	5	10	17	216.0	27.6
SLD18A	SLD18CA	20.00	22.1	5	10	18	204.0	29.2
SLD20A	SLD20CA	22.20	24.5	5	10	20	184.0	32.4
SLD22A	SLD22CA	24.40	26.9	5	10	22	168.0	35.5
SLD24A	SLD24CA	25.00	30.0	5	10	24	153.0	38.9
SLD26A	SLD26CA	28.90	31.9	5	10	26	142.0	42.1
SLD28A	SLD28CA	31.10	34.4	5	10	28	131.0	45.4
SLD30A	SLD30CA	33.30	36.8	5	10	30	123.0	48.4
SLD33A	SLD33CA	36.70	40.6	5	10	33	112.0	53.3
SLD36A	SLD36CA	40.00	44.2	5	10	36	103.0	58.1
SLD40A	SLD40CA	44.40	49.1	5	10	40	92.5	64.5
SLD43A	SLD43CA	49.00	54.2	5	10	43	86.00	69.4
SLD48A	SLD48CA	53.30	58.9	5	10	48	77.00	77.4
SLD54A	SLD54CA	60.00	66.3	5	10	54	68.50	87.1
SLD58A	SLD58CA	64.40	71.2	5	10	58	64.00	93.6
SLD60A	SLD60CA	68.40	75.6	5	10	60	61.50	96.8

Note:

1. Add suffix ' CA ' after part number to specify Bi-directional devices
2. For Bi-Directional devices having V_R of 10 volts and under, the I_R limit is double
3. Surge current waveform is defined at 10/1000uS waveform

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RATING AND CHARACTERISTIC CURVES

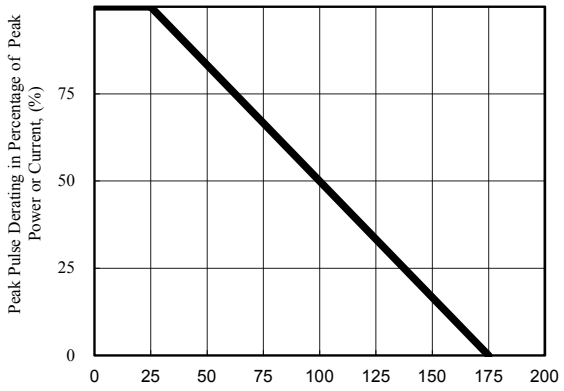

Fig. 1 - Pulse Derating Curve

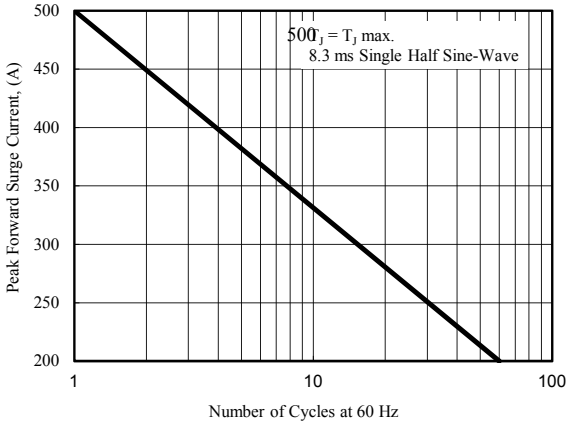

Fig. 2 - Maximum Non-Repetitive Surge Current

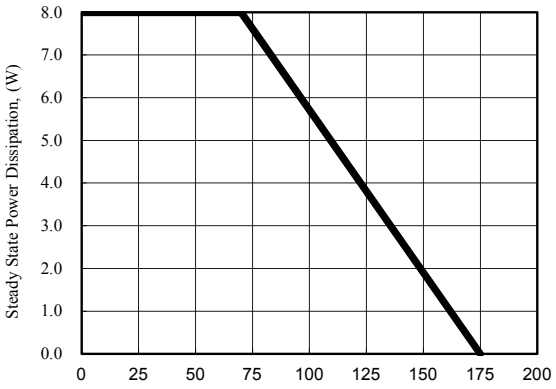

Fig. 3 - Steady State Power Derating Curve

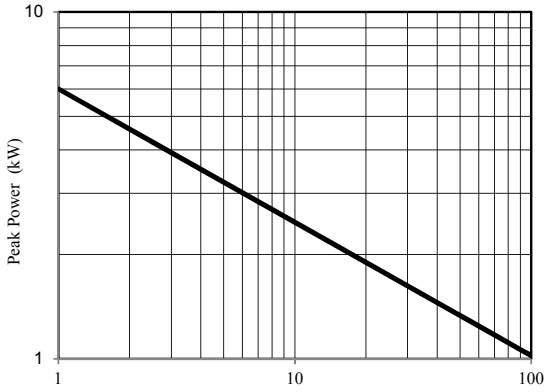

Fig. 4 - Peak Pulse Power Rating Curve

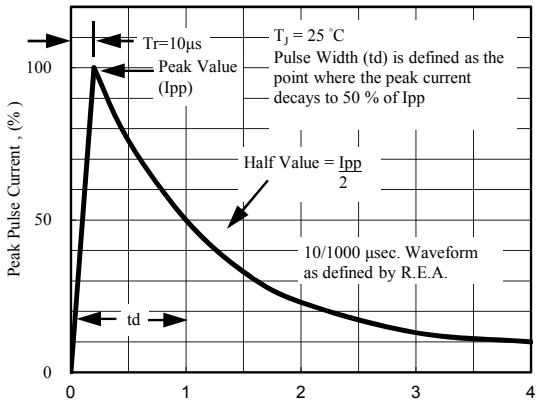

Fig. 5 - Pulse Waveform

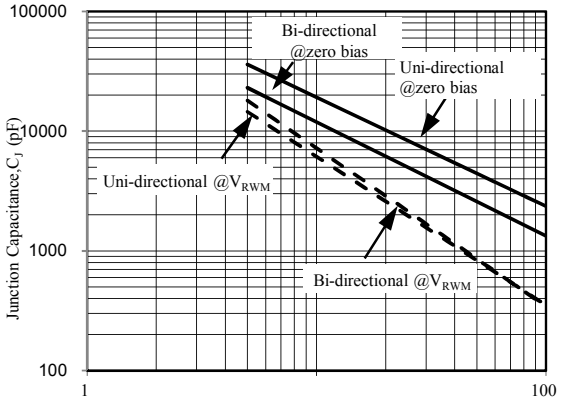

Fig. 6 - Typical Junction Capacitance

ORDER INFORMATION

• Packing information

Part Number	Case	Reel Size	QUANTITY
SLD10A~SLD60CA	R-6	13 Inch	500