

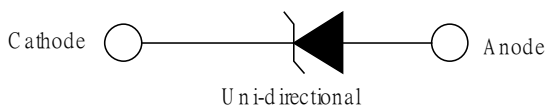
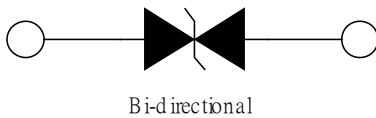
Description

The 6.6SMDJxx(C)A Series are transient voltage suppressor designed to protect sensitive electronic equipment from lightning and transient voltage events.

Features

- Glass passivated chip
- 6600 W peak pulse power capability with a 10/1000 us waveform, repetitive rate (duty cycle):0.01 %
- Excellent clamping capability
- Low reverse leakage
- Very fast response time
- Lead and body according with RoHS standard

Device Schematic



Device Schematic

Mechanical Characteristics

- Case: DO214AB/(SMC) Molded plastic
- Lead: Solderable per MIL-STD-750, method 2026
- Epoxy: UL 94V-0 rate flame retardant
- Polarity: Color band denotes cathode end except Bipola
- Mounting position: Any

Applications

- Telecom
- Computer
- Industrial
- Consumer Electronics

Marking Information



6.6SMDJxx(C)A = Marking Code
 Bar Denotes Cathode
 (for unidirectional only)

Ordering Information

Part Number	Packaging	Reel Size
6.6SMDJxx(C)A	3000/Tape & Reel	13 inch

Maximum Ratings & Characteristics Ratings ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbols	Value	Unit
Peak power dissipation with a 10/1000 us waveform	PPP	6600	W
Peak pulse current with a 10/1000 us waveform	IPP	See Next Table	A
Power dissipation on infinite heatsink at $T_L = 75^{\circ}\text{C}$	PD	6.5	W
Peak forward surge current, 8.3 ms single half sine wave unidirectional only	IFSM	300	A
Maximum instantaneous forward voltage at 100 A for unidirectional only	VF	3.5/6.5	V
Operating junction and storage temperature range	T_J, T_{STG}	-55 to 150	$^{\circ}\text{C}$

Note:

1. Non-repetitive current pulse per Fig.5 and derated above $T_A = 25^{\circ}\text{C}$ per Fig.1;
2. Measured on 8.3 ms single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum;
3. $V_F < 3.5\text{V}$ for devices of $V_{BR} < 200\text{V}$ and $V_F < 6.5\text{V}$ for devices of $V_{BR} > 201\text{V}$.

Electrical Characteristics (T_A=25°C unless otherwise specified)

Part Number		Device Marking Code		Reverse Stand-off Voltage	Breakdown Voltage VBR @ IR		Test Current	Max. Clamping Voltage@ IPP	Max. Peak Pulse Current	Max. Reverse Leakage @ VRWM
UNI-POLAR	BI-POLAR	UNI	BI		VRWM(V)	Min.(V)				
6.6SMDJ11A	6.6SMDJ11CA	6.6SMDJ11A	6.6SMDJ11CA	11.0	12.20	13.50	10	18.2	362.6	800
6.6SMDJ12A	6.6SMDJ12CA	6.6SMDJ12A	6.6SMDJ12CA	12.0	13.30	14.70	10	19.9	331.7	800
6.6SMDJ13A	6.6SMDJ13CA	6.6SMDJ13A	6.6SMDJ13CA	13.0	14.40	15.90	10	21.5	307.0	500
6.6SMDJ14A	6.6SMDJ14CA	6.6SMDJ14A	6.6SMDJ14CA	14.0	15.60	17.20	10	23.2	284.5	200
6.6SMDJ15A	6.6SMDJ15CA	6.6SMDJ15A	6.6SMDJ15CA	15.0	16.70	18.50	1	24.4	270.5	100
6.6SMDJ16A	6.6SMDJ16CA	6.6SMDJ16A	6.6SMDJ16CA	16.0	17.80	19.70	1	26.0	253.8	50
6.6SMDJ17A	6.6SMDJ17CA	6.6SMDJ17A	6.6SMDJ17CA	17.0	18.90	20.90	1	27.6	239.2	20
6.6SMDJ18A	6.6SMDJ18CA	6.6SMDJ18A	6.6SMDJ18CA	18.0	20.00	22.10	1	29.2	226.0	10
6.6SMDJ20A	6.6SMDJ20CA	6.6SMDJ20A	6.6SMDJ20CA	20.0	22.20	24.50	1	32.4	203.7	5
6.6SMDJ22A	6.6SMDJ22CA	6.6SMDJ22A	6.6SMDJ22CA	22.0	24.40	26.90	1	35.5	185.9	5
6.6SMDJ24A	6.6SMDJ24CA	6.6SMDJ24A	6.6SMDJ24CA	24.0	26.70	29.50	1	38.9	169.6	5
6.6SMDJ26A	6.6SMDJ26CA	6.6SMDJ26A	6.6SMDJ26CA	26.0	28.90	31.90	1	42.1	156.8	5
6.6SMDJ28A	6.6SMDJ28CA	6.6SMDJ28A	6.6SMDJ28CA	28.0	31.10	34.40	1	45.4	145.3	5
6.6SMDJ30A	6.6SMDJ30CA	6.6SMDJ30A	6.6SMDJ30CA	30.0	33.30	36.80	1	48.4	136.4	5
6.6SMDJ33A	6.6SMDJ33CA	6.6SMDJ33A	6.6SMDJ33CA	33.0	36.70	40.60	1	53.3	123.8	5
6.6SMDJ36A	6.6SMDJ36CA	6.6SMDJ36A	6.6SMDJ36CA	36.0	40.00	44.20	1	58.1	113.7	5
6.6SMDJ40A	6.6SMDJ40CA	6.6SMDJ40A	6.6SMDJ40CA	40.0	44.40	49.10	1	64.5	102.3	5
6.6SMDJ43A	6.6SMDJ43CA	6.6SMDJ43A	6.6SMDJ43CA	43.0	47.80	52.80	1	69.4	95.0	5
6.6SMDJ45A	6.6SMDJ45CA	6.6SMDJ45A	6.6SMDJ45CA	45.0	50.00	55.30	1	72.7	90.8	5
6.6SMDJ48A	6.6SMDJ48CA	6.6SMDJ48A	6.6SMDJ48CA	48.0	53.30	58.90	1	77.4	85.3	5
6.6SMDJ51A	6.6SMDJ51CA	6.6SMDJ51A	6.6SMDJ51CA	51.0	56.70	62.70	1	82.4	80.1	5
6.6SMDJ54A	6.6SMDJ54CA	6.6SMDJ54A	6.6SMDJ54CA	54.0	60.00	66.30	1	87.1	75.8	5
6.6SMDJ58A	6.6SMDJ58CA	6.6SMDJ58A	6.6SMDJ58CA	58.0	64.40	71.20	1	93.6	70.5	5
6.6SMDJ60A	6.6SMDJ60CA	6.6SMDJ60A	6.6SMDJ60CA	60.0	66.70	73.70	1	96.8	68.2	5

Typical Performance Characteristics ($T_A=25^\circ\text{C}$ unless otherwise Specified)

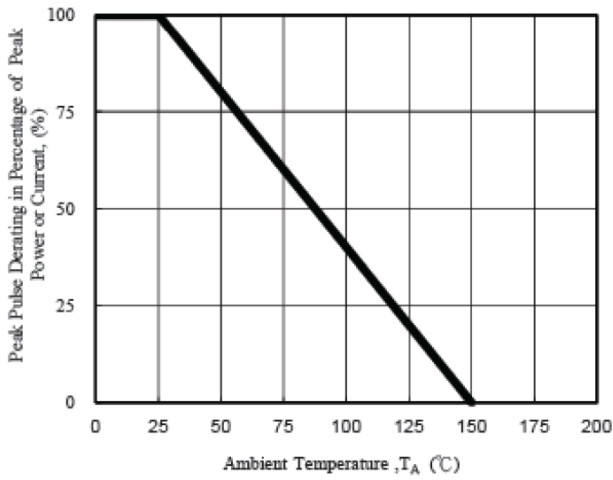


Fig. 1 - Pulse Derating Curve

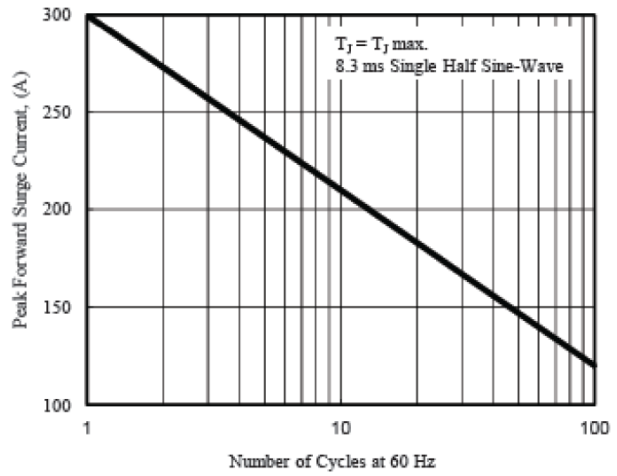


Fig. 2 - Maximum Non-Repetitive Surge Current

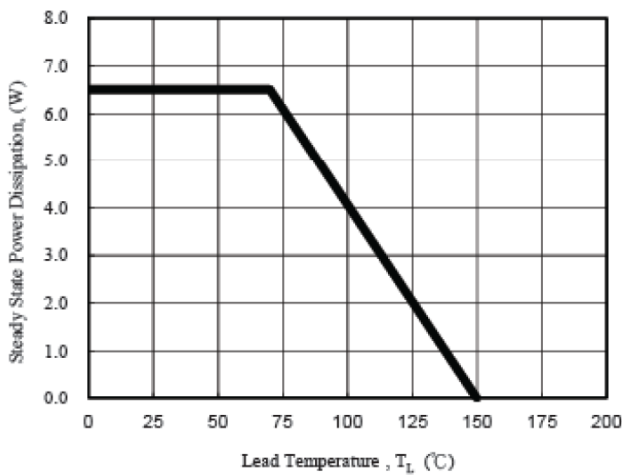


Fig. 3 - Steady State Power Derating Curve

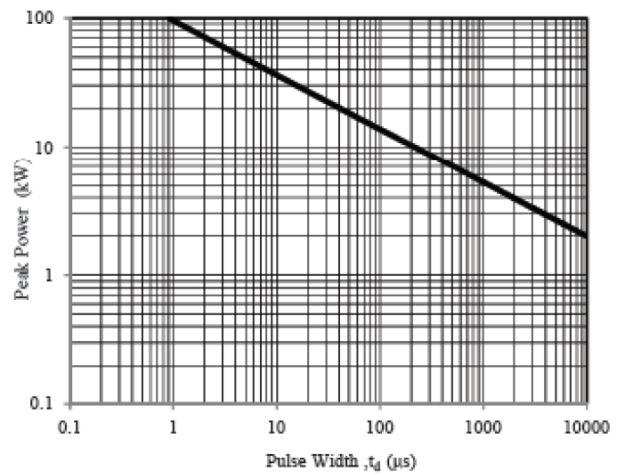


Fig. 4 - Peak Pulse Power Rating Curve

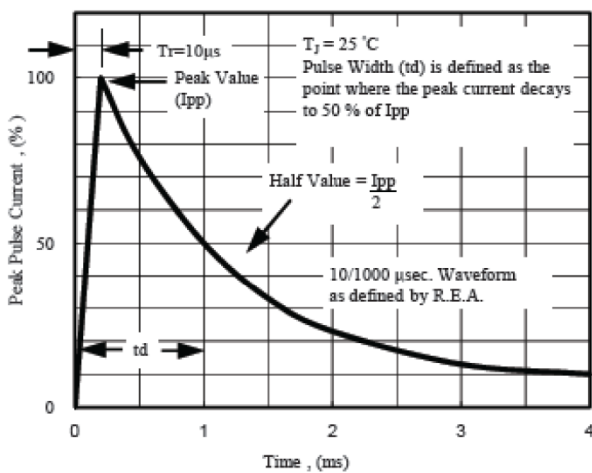


Fig. 5 - Pulse Waveform

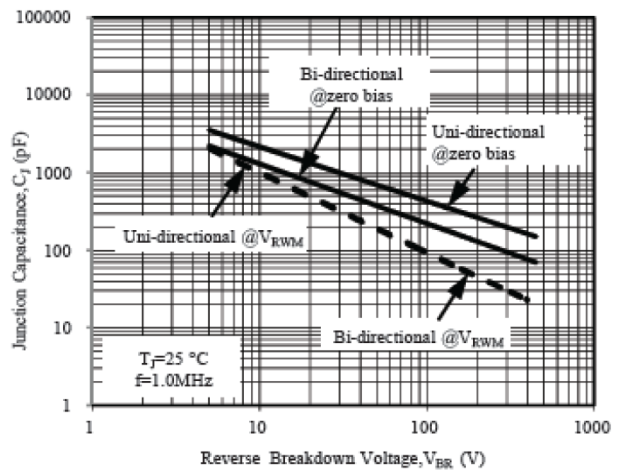
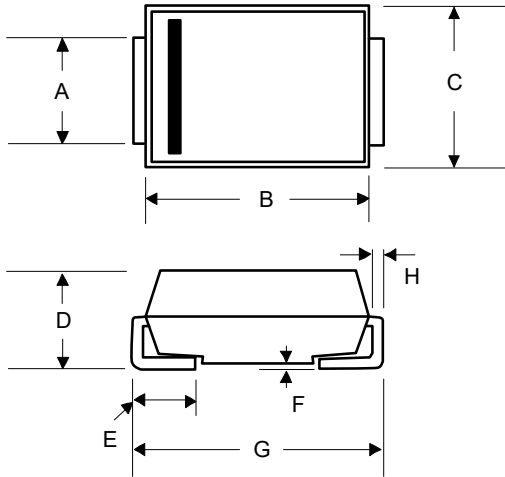


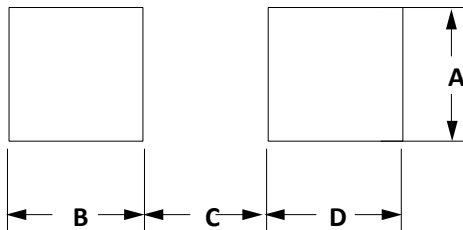
Fig. 6 - Typical Junction Capacitance

DO-214AB Package Outline Drawing



SYM	DIMENSIONS			
	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	2.900	3.200	0.114	0.126
B	6.600	7.110	0.260	0.280
C	5.590	6.220	0.220	0.245
D	2.060	2.620	0.079	0.103
E	0.760	1.520	0.030	0.060
F	-	0.203	-	0.008
G	7.750	8.130	0.305	0.320
H	0.152	0.305	0.006	0.012

Suggested Land Pattern



SYM	DIMENSIONS	
	MILLIMETERS	INCHES
A	3.30	0.129
B	2.40	0.094
C	4.20	0.165
D	2.40	0.094

Contact Information

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