

**SURFACE MOUNT
UNIDIRECTIONAL AND BIDIRECTIONAL
TRANSIENT VOLTAGE SUPPRESSORS**

REVERSE VOLTAGE - **6.8 to 250** Volts
POWER DISSIPATION - **1500** WATTS

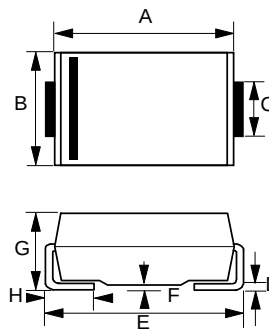
FEATURES

- Glass passivated chip
- For surface mounted applications
- Low leakage
- Uni and Bidirectional unit
- Excellent clamping capability
- The plastic material has U/L recognition 94V-0
- Fast response time
- RoHS compliant
- Qualified to AEC-Q101 Rev_C

MECHANICAL DATA

- Case : Molded plastic
- Case Material: Molding compound, UL Flammability classification 94V-0, (No Br. Sb. Cl.) "Halogen-free".
- Polarity : by cathode band denotes uni-directional device none cathode band denotes bi-directional device
- Weight : 0.007 ounces, 0.21 gram

SMC



SMC		
DIM.	MIN.	MAX.
A	6.60	7.11
B	5.59	6.22
C	2.92	3.18
D	0.15	0.31
E	7.75	8.13
F	0.05	0.20
G	2.01	2.40
H	0.76	1.52
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOLS	VALUE	UNIT
PEAK POWER DISSIPATION AT TA = 25°C , TP = 1ms (Note 1)	PPK	1500	WATTS
Peak Forward Surge Current 8.3ms single half sine-wave@Tj=25°C (Note 2)	IFSM	200	AMPS.
Steady State Power Dissipation at TL =120°C	PM(AV)	2.0	WATTS
Maximum Instantaneous forward voltage at 16A (Note 2, 3)	VF	2.0	Volts
Operating Temperature Range	TJ	-55 to +175	°C
Storage Temperature Range	TSTG	-55 to +175	°C

NOTES : 1. Non-repetitive current pulse, per fig. 5 and derated above TA= 25 °C per fig. 1

2. Only for uni-directional units.

3. VF max=2.0V at IF=16 A 300us square wave pulse.

REV. 7, Nov-2016, KSIC07

FIG.1 - PULSE DERATING CURVE

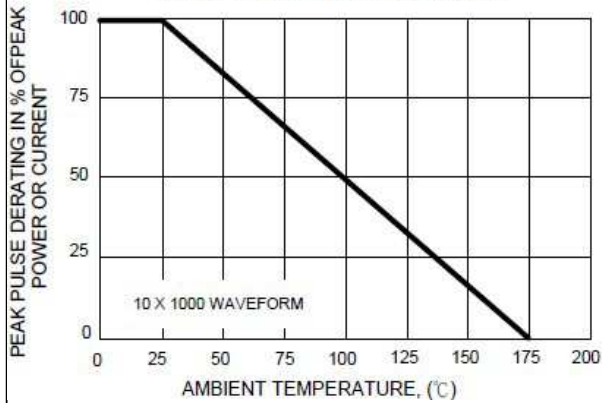


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

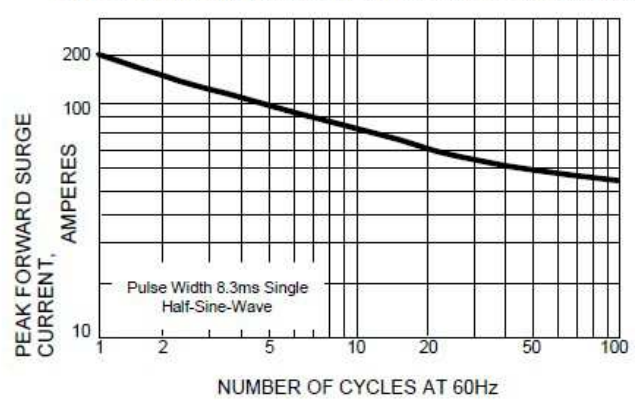


FIG.3 - PULSE WAVEFORM

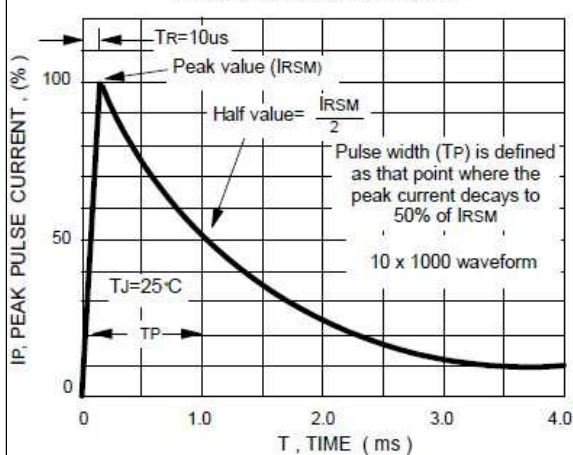


FIG.4 - TYPICAL JUNCTION CAPACITANCE

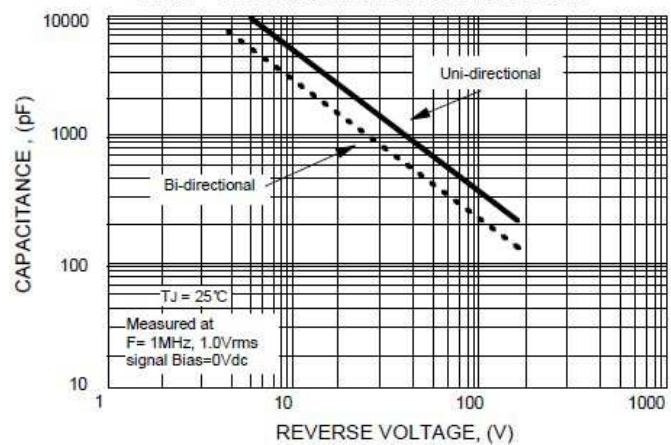


FIG.5 - PULSE RATING CURVE

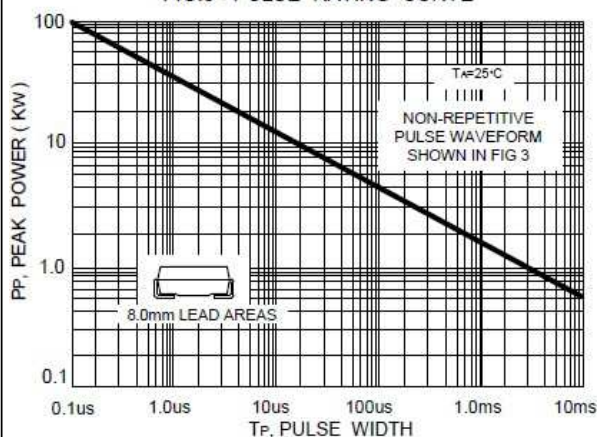
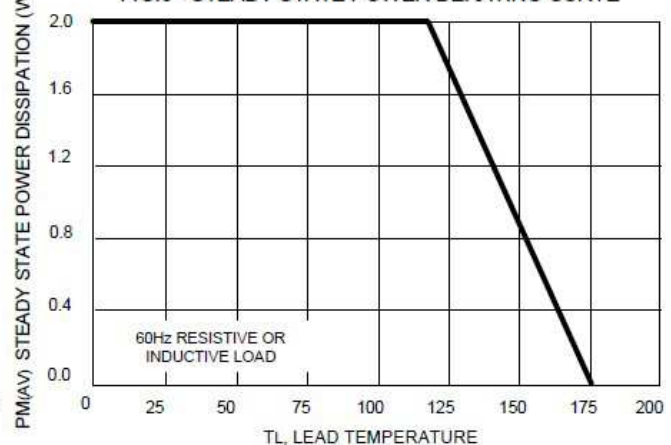


FIG.6 - STEADY STATE POWER DERATING CURVE



Type Number	Type Number	Device Marking code		Reverse Standoff Voltage	Breakdown Voltage BV Volts @It			Max. Reverse Leakage @VR	Max. Peak Pulse Current	Max. Clamping Voltage @Ipp	Max. Voltage Temp. Variation of
(UNI)	(BI)	(UNI)	(BI)	VR (V)	Min (V)	Max (V)	It (mA)	IR (uA)	Ipp (A)	Vc (V)	%/°C
PSMCJ6.8A	PSMCJ6.8CA	6V8A	6V8C	5.8	6.45	7.13	10	1000	142.9	10.5	0.057
PSMCJ7.5A	PSMCJ7.5CA	7V5A	7V5C	6.4	7.13	7.88	10	500	132.7	11.3	0.061
PSMCJ8.2A	PSMCJ8.2CA	8V2A	8V2C	7.0	7.79	8.61	10	200	124.0	12.1	0.065
PSMCJ9.1A	PSMCJ9.1CA	9V1A	9V1C	7.8	8.65	9.56	1	50	111.9	13.4	0.068
PSMCJ10A	PSMCJ10CA	10A	10C	8.6	9.50	10.50	1	10	103.4	14.5	0.073
PSMCJ11A	PSMCJ11CA	11A	11C	9.4	10.5	11.6	1	5	96.2	15.6	0.075
PSMCJ12A	PSMCJ12CA	12A	12C	10.2	11.4	12.6	1	0.5	89.8	16.7	0.078
PSMCJ13A	PSMCJ13CA	13A	13C	11.1	12.4	13.7	1	0.5	82.4	18.2	0.081
PSMCJ15A	PSMCJ15CA	15A	15C	12.8	14.3	15.8	1	0.5	70.8	21.2	0.084
PSMCJ16A	PSMCJ16CA	16A	16C	13.6	15.2	16.8	1	0.5	66.7	22.5	0.086
PSMCJ18A	PSMCJ18CA	18A	18C	15.3	17.1	18.9	1	0.5	59.5	25.2	0.088
PSMCJ20A	PSMCJ20CA	20A	20C	17.1	19.0	21.0	1	0.5	54.2	27.7	0.090
PSMCJ22A	PSMCJ22CA	22A	22C	18.8	20.9	23.1	1	0.5	49.0	30.6	0.092
PSMCJ24A	PSMCJ24CA	24A	24C	20.5	22.8	25.2	1	0.5	45.2	33.2	0.094
PSMCJ27A	PSMCJ27CA	27A	27C	23.1	25.7	28.4	1	0.5	40.0	37.5	0.096
PSMCJ30A	PSMCJ30CA	30A	30C	25.6	28.5	31.5	1	0.5	36.2	41.4	0.097
PSMCJ33A	PSMCJ33CA	33A	33C	28.2	31.4	34.7	1	0.5	32.8	45.7	0.098
PSMCJ36A	PSMCJ36CA	36A	36C	30.8	34.2	37.8	1	0.5	30.1	49.9	0.099
PSMCJ39A	PSMCJ39CA	39A	39C	33.3	37.1	41.0	1	0.5	27.8	53.9	0.100
PSMCJ43A	PSMCJ43CA	43A	43C	36.8	40.9	45.2	1	0.5	25.3	59.3	0.101
PSMCJ47A	PSMCJ47CA	47A	47C	40.2	44.7	49.4	1	0.5	23.1	64.8	0.101
PSMCJ51A	PSMCJ51CA	51A	51C	43.6	48.5	53.6	1	0.5	21.4	70.1	0.102
PSMCJ56A	PSMCJ56CA	56A	56C	47.8	53.2	58.8	1	0.5	19.5	77.0	0.103
PSMCJ62A	PSMCJ62CA	62A	62C	53.0	58.9	65.1	1	0.5	17.6	85.0	0.104
PSMCJ68A	PSMCJ68CA	68A	68C	58.1	64.6	71.4	1	0.5	16.3	92.0	0.104
PSMCJ75A	PSMCJ75CA	75A	75C	64.7	71.3	78.8	1	0.5	14.6	103.0	0.105
PSMCJ82A	PSMCJ82CA	82A	82C	70.1	77.9	86.1	1	0.5	13.3	113.0	0.105
PSMCJ91A	PSMCJ91CA	91A	91C	77.8	86.5	95.6	1	0.5	12.0	125.0	0.106
PSMCJ100A	PSMCJ100CA	100A	100C	85.5	95.0	105.0	1	0.5	10.9	137.0	0.106
PSMCJ110A	PSMCJ110CA	110A	110C	94.0	105.0	116.1	1	0.5	9.9	152.0	0.107
PSMCJ120A	PSMCJ120CA	120A	120C	102.0	114.0	126.0	1	0.5	9.1	165.0	0.107
PSMCJ130A	PSMCJ130CA	130A	130C	111.0	124.0	137.1	1	0.5	8.4	179.0	0.107
PSMCJ150A	PSMCJ150CA	150A	150C	128.0	143.0	158.1	1	0.5	7.2	207.0	0.108
PSMCJ160A	PSMCJ160CA	160A	160C	136.0	152.0	168.0	1	0.5	6.8	219.0	0.108
PSMCJ170A	PSMCJ170CA	170A	170C	145.0	162.0	179.1	1	0.5	6.4	234.0	0.108
PSMCJ180A	PSMCJ180CA	180A	180C	154.0	171.0	189.0	1	0.5	6.1	246.0	0.108
PSMCJ200A	PSMCJ200CA	200A	200C	171.0	190.0	210.0	1	0.5	5.5	274.0	0.108
PSMCJ220A	PSMCJ220CA	220A	220C	185.0	209.0	231.0	1	0.5	4.6	328.0	0.108
PSMCJ250A	PSMCJ250CA	250A	250C	214.0	237.0	262.0	1	0.5	4.4	344.0	0.110

NOTE :

Suffix 'A' denotes 5% tolerance device.

1. Add suffix 'C' or 'CA' after part number to specify Bi-directional devices.
2. The IR limit is double for Bi-Directional devices.

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