

**SURFACE MOUNT
UNIDIRECTIONAL
TRANSIENT VOLTAGE SUPPRESSORS**

STAND-OFF VOLTAGE - **18 to 36** Volts
POWER DISSIPATION - **5000** WATTS

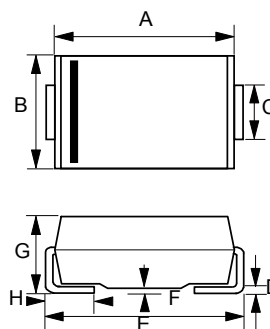
FEATURES

- For surface mounted applications
- Reliable low cost construction utilizing molded plastic technique
- Plastic material has UL flammability classification 94V-O
- Fast response time: typically less than 1.0ns

MECHANICAL DATA

- Case : Molded plastic
- 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.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOLS	VALUE	UNIT
PEAK POWER DISSIPATION AT $T_J = 25^\circ\text{C}$, $T_P = 1\text{ms}$ (Note 1)	P_{PK}	5000	WATTS
Peak Forward Surge Current 8.3ms single half sine-wave @ $T_J = 25^\circ\text{C}$ (Note 2)	I_{FSM}	300	AMPS.
Steady State Power Dissipation at $T_L = 120^\circ\text{C}$, see fig. 6	$P_{M(AV)}$	2.0	WATTS
Operating Temperature Range	T_J	-55 to +175	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +175	$^\circ\text{C}$

NOTES : 1. Non-repetitive current pulse, per Fig. 3 and derated above $T_J = 25^\circ\text{C}$ per Fig.1.
2. Only for unidirectional units.

REV. 2, Nov-2010, KSIC03

Datasheet.Live

FIG.1 - PULSE DERATING CURVE

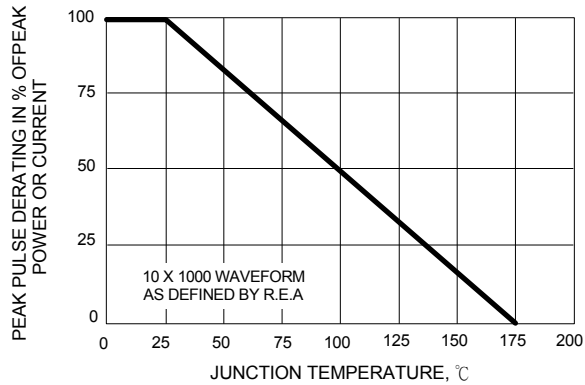


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

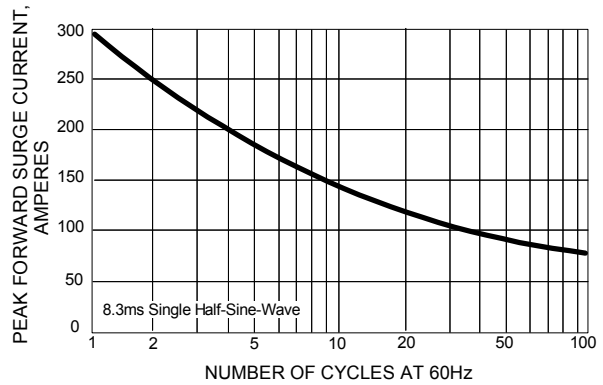


FIG.3 - PULSE WAVEFORM

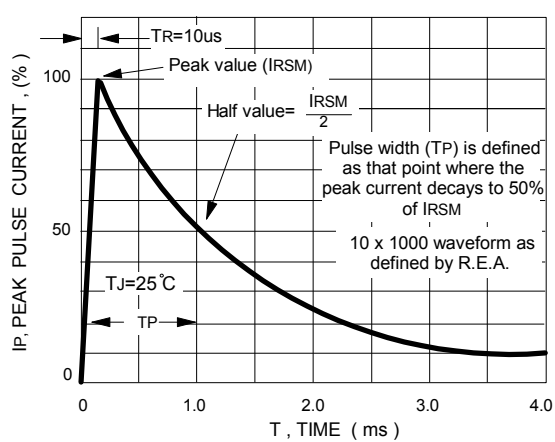


FIG.4 - TYPICAL JUNCTION CAPACITANCE

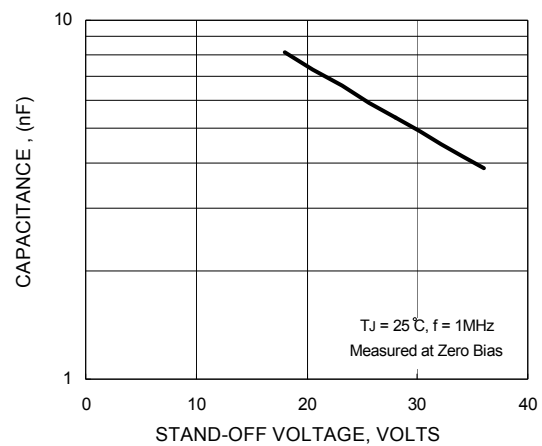


FIG.5 - PULSE RATING CURVE

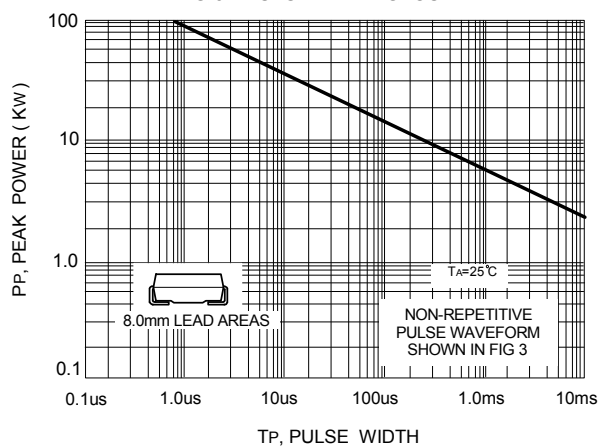
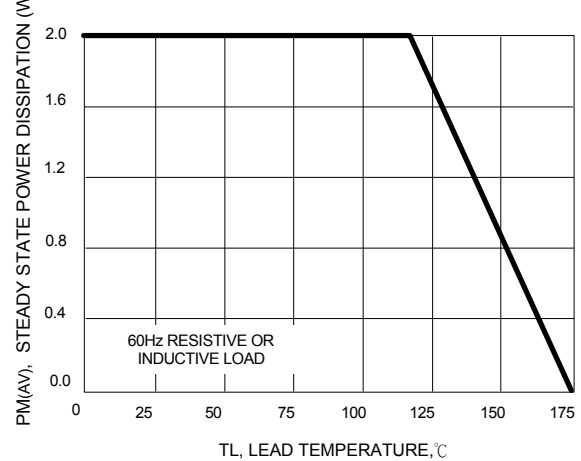


FIG.6 - STEADY STATE POWER DERATING CURVE



Type Number	Type Number	Device Marking code		Reverse Standoff Voltage	Breakdown Voltage BV Volts @It			Max. Reverse Leakage @VR	Max. Clamping Voltage @Ipp	Max. Peak Pulse Current
(UNI)	(BI)	(UNI)	(BI)	VR (V)	Min (V)	Max (V)	It (mA)	IR (uA)	Vc (V)	Ipp (A)
5.0SMCJ18	---	OES	--	18.0	20.0	24.4	1	5.0	32.2	155.3
5.0SMCJ18A	---	OET	--	18.0	20.0	22.1	1	5.0	29.2	171.2
5.0SMCJ20	---	OEU	--	20.0	22.2	27.1	1	5.0	35.8	139.7
5.0SMCJ20A	---	OEV	--	20.0	22.2	24.5	1	5.0	32.4	154.3
5.0SMCJ22	---	OEW	--	22.0	24.4	29.8	1	5.0	39.4	126.9
5.0SMCJ22A	---	OEX	--	22.0	24.4	27.0	1	5.0	35.5	140.8
5.0SMCJ24	---	OEY	--	24.0	26.7	32.6	1	5.0	43.0	116.3
5.0SMCJ24A	---	OEZ	--	24.0	26.7	29.5	1	5.0	38.9	128.5
5.0SMCJ26	---	OFD	--	26.0	28.9	35.3	1	5	46.6	107.3
5.0SMCJ26A	---	OFE	--	26.0	28.9	31.9	1	5	42.1	118.8
5.0SMCJ28	---	OFF	--	28.0	31.1	38.0	1	5	50.0	100.0
5.0SMCJ28A	---	OFG	--	28.0	31.1	34.4	1	5	45.4	110.1
5.0SMCJ30	---	OFH	--	30.0	33.3	40.7	1	5	53.5	93.5
5.0SMCJ30A	---	OFK	--	30.0	33.3	36.8	1	5	48.4	103.3
5.0SMCJ33	---	OFL	--	33.0	36.7	44.8	1	5	59.0	84.7
5.0SMCJ33A	---	OFM	--	33.0	36.7	40.6	1	5	53.3	93.8
5.0SMCJ36	---	OFN	--	36.0	40.0	48.9	1	5	64.3	77.8
5.0SMCJ36A	---	OFP	--	36.0	40.0	44.2	1	5	58.1	86.1

NOTES:

Suffix 'A' denotes 5% tolerance device, no suffix denotes 10% tolerance device .

Important Notice and Disclaimer

LSC reserves the right to make changes to this document and its products and specifications at any time without notice. Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.

LSC makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does LSC assume any liability for application assistance or customer product design. LSC does not warrant or accept any liability with products which are purchased or used for any unintended or unauthorized application.

No license is granted by implication or otherwise under any intellectual property rights of LSC.

LSC products are not authorized for use as critical components in life support devices or systems without express written approval of LSC.