TECHNICAL DATA
DATSHEET 1248, REV D.2

3000W Surface Mount Transient Voltage Suppressors

FEATURES:

- **Glass Passivated die construction**
- **3000W peak pulse power dissipation**
- **5.0V-170V standoff voltage**
- **Uni- and Bi-directional versions available**
- **Excellent clamping capability**
- **Fast response time**
- **Plastic case material has UL Flammability classification rating 94V-O**
- **UL recognized file #E224235**

MAXIMUM RATINGS

ALL RATINGS ARE AT T_A = 25°C UNLESS OTHERWISE SPECIFIED.

Characteristic	Symbol	Value	Unit
Peak Pulse Power Dissipation 10/1000µS Waveform (Note 1, 2)	P_{PM}	3000	W
Peak Pulse Current on 10/1000µS Waveform (Note 1) Figure 3	I_{PPM}	See Table 1	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method) (Note 2, 3)	I_{FSM}	300	A
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150	°C

Note: 1. Non-repetitive current pulse, per Figure 3 and derated above T_A = 25°C per Figure 2
2. Mounted on 8mm x 8mm copper pads to each terminal
3. Measured on 8.3ms single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minutes maximum

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ELECTRICAL CHARACTERISTICS:

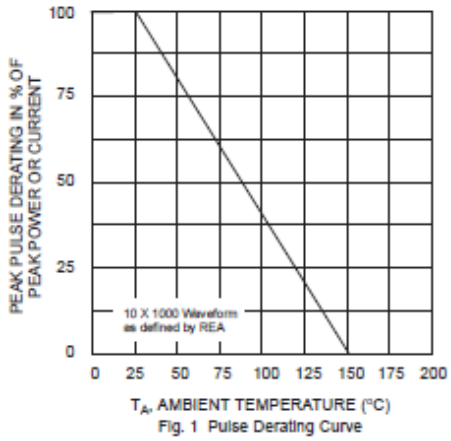
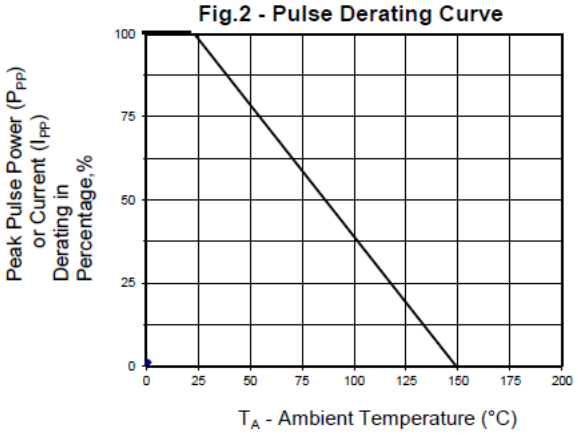
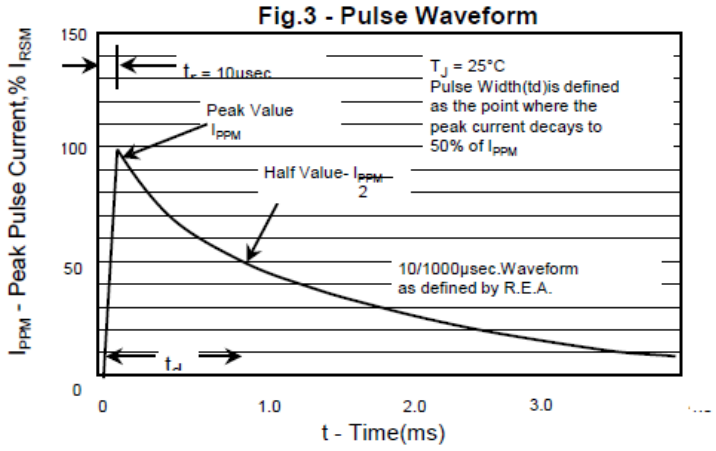


Fig. 1 Pulse Derating Curve





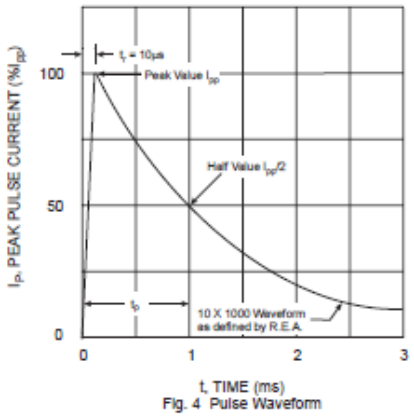


Fig. 4 Pulse Waveform

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UNIDIRECTIONAL	BIDIRECTIONAL	DEVICE MARKING CODE		REVERSE STANDOFF VOLTAGE V_{RWM} (V)	BREAKDOWN VOLTAGE V_{BR} (V) MIN. @ I_T	BREAKDOWN VOLTAGE V_{BR} (V) MAX. @ I_T	TEST CURRENT (I_T) mA	MAXIMUM CLAMPING VOLTAGE @I_{PP} V_C (V)	PEAK PULSE CURRENT I_{PP} (A)	REVERSE LEAKAGE @ V_{RWM} I_R (µA)
		UNI	BI							
3.0SMCJ5.0A	3.0SMCJ5.0CA	HDE	IOE	5.00	6.40	7.00	10	9.2	326.1	800
3.0SMCJ6.0A	3.0SMCJ6.0CA	HDG	IOG	6.00	6.67	7.37	10	10.3	291.3	800
3.0SMCJ6.5A	3.0SMCJ6.5CA	HDK	IOK	6.50	7.22	7.98	10	11.2	267.9	500
3.0SMCJ7.0A	3.0SMCJ7.0CA	HDM	IOM	7.00	7.78	8.60	10	12.0	250.0	200
3.0SMCJ7.5A	3.0SMCJ7.5CA	HDP	IOP	7.50	8.33	9.21	1	12.9	232.6	100
3.0SMCJ8.0A	3.0SMCJ8.0CA	HDR	IOR	8.00	8.89	9.83	1	13.6	220.6	50
3.0SMCJ8.5A	3.0SMCJ8.5CA	HDT	IOT	8.50	9.44	10.40	1	14.4	208.3	20
3.0SMCJ9.0A	3.0SMCJ9.0CA	HDV	IOV	9.00	10.00	11.10	1	15.4	194.8	10
3.0SMCJ10A	3.0SMCJ10CA	HDX	IOX	10.00	11.10	12.30	1	17.0	176.5	5
3.0SMCJ11A	3.0SMCJ11CA	HDZ	IOZ	11.00	12.20	13.50	1	18.2	164.8	5
3.0SMCJ12A	3.0SMCJ12CA	HEE	IEE	12.00	13.30	14.70	1	19.9	150.8	5
3.0SMCJ13A	3.0SMCJ13CA	HEG	IEG	13.00	14.40	15.90	1	21.5	139.5	5
3.0SMCJ14A	3.0SMCJ14CA	HEK	IEK	14.00	15.60	17.20	1	23.2	129.3	5
3.0SMCJ15A	3.0SMCJ15CA	HEM	IEM	15.00	16.70	18.50	1	24.4	123.0	5
3.0SMCJ16A	3.0SMCJ16CA	HEP	IEP	16.00	17.80	19.70	1	26.0	115.4	5
3.0SMCJ17A	3.0SMCJ17CA	HER	IER	17.00	18.90	20.90	1	27.6	108.7	5
3.0SMCJ18A	3.0SMCJ18CA	HET	IET	18.00	20.00	22.10	1	29.2	102.7	5
3.0SMCJ20A	3.0SMCJ20CA	HEV	IEV	20.00	22.20	24.50	1	32.4	92.6	5
3.0SMCJ22A	3.0SMCJ22CA	HEX	IEX	22.00	24.40	26.90	1	35.5	84.5	5
3.0SMCJ24A	3.0SMCJ24CA	HEZ	IEZ	24.00	26.70	29.50	1	38.9	77.1	5
3.0SMCJ26A	3.0SMCJ26CA	HFE	IFE	26.00	28.90	31.90	1	42.1	71.3	5
3.0SMCJ28A	3.0SMCJ28CA	HFG	IFG	28.00	31.10	34.40	1	45.4	66.1	5
3.0SMCJ30A	3.0SMCJ30CA	HFK	IFK	30.00	33.30	36.80	1	48.4	62.0	5
3.0SMCJ33A	3.0SMCJ33CA	HFM	IFM	33.00	36.70	40.60	1	53.3	56.3	5
3.0SMCJ36A	3.0SMCJ36CA	HFH	IFP	36.00	40.00	44.20	1	58.1	51.6	5
3.0SMCJ40A	3.0SMCJ40CA	HFR	IFR	40.00	44.40	49.10	1	64.5	46.5	5
3.0SMCJ43A	3.0SMCJ43CA	HFT	IFT	43.00	47.80	52.80	1	69.4	43.2	5
3.0SMCJ45A	3.0SMCJ45CA	HFV	IFV	45.00	50.00	55.30	1	72.7	41.3	5
3.0SMCJ48A	3.0SMCJ48CA	HFX	IFX	48.00	53.30	58.90	1	77.4	38.8	5
3.0SMCJ51A	3.0SMCJ51CA	HFZ	IFZ	51.00	56.70	62.70	1	82.4	36.4	5
3.0SMCJ54A	3.0SMCJ54CA	HGE	IGE	54.00	60.00	66.30	1	87.1	34.4	5
3.0SMCJ58A	3.0SMCJ58CA	HGG	IGG	58.00	64.40	71.20	1	93.6	32.1	5
3.0SMCJ60A	3.0SMCJ60CA	HGK	IGK	60.00	66.70	73.70	1	96.8	31.0	5
3.0SMCJ64A	3.0SMCJ64CA	HGM	IGM	64.00	71.10	78.60	1	103.0	29.1	5
3.0SMCJ70A	3.0SMCJ70CA	HGP	IGP	70.00	77.80	86.00	1	113.0	26.5	5
3.0SMCJ75A	3.0SMCJ75CA	HGR	IGR	75.00	83.30	92.10	1	121.0	24.8	5
3.0SMCJ78A	3.0SMCJ78CA	HGT	IGT	78.00	86.70	95.80	1	126.0	23.8	5
3.0SMCJ85A	3.0SMCJ85CA	HGV	IGV	85.00	94.40	104.00	1	137.0	21.9	5
3.0SMCJ90A	3.0SMCJ90CA	HGX	IGX	90.00	100.00	111.00	1	146.0	20.5	5
3.0SMCJ100A	3.0SMCJ100CA	HGZ	IGZ	100.00	111.00	123.00	1	162.0	18.5	5
3.0SMCJ110A	3.0SMCJ110CA	HHE	IHE	110.00	122.00	135.00	1	177.0	16.9	5
3.0SMCJ120A	3.0SMCJ120CA	HHG	IHG	120.00	133.00	147.00	1	193.0	15.5	5
3.0SMCJ130A	3.0SMCJ130CA	HHK	IHK	130.00	144.00	159.00	1	209.0	14.4	5
3.0SMCJ150A	3.0SMCJ150CA	HHM	IHM	150.00	167.00	185.00	1	243.0	12.3	5
3.0SMCJ160A	3.0SMCJ160CA	HHP	IHP	160.00	178.00	197.00	1	259.0	11.6	5
3.0SMCJ170A	3.0SMCJ170CA	HHR	IHR	170.00	189.00	209.00	1	275.0	10.9	5

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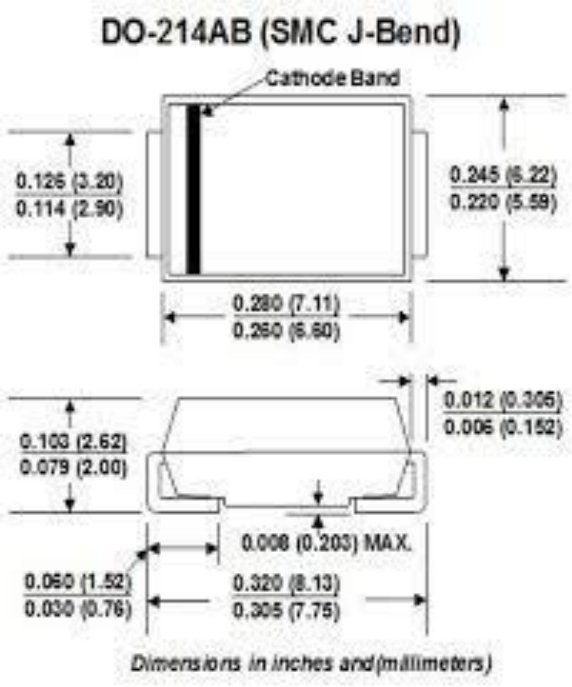
PACKAGE DIMENSIONS (inches/mm)



PART ORDERING INFORMATION

3.0SMCJxxCA S –GT3

Part Number

Screening Level (blank is no screening):

Suffix	Screened in Accordance with:
blank	No screening level
S	Hi Rel screened per Sensitron Datasheet 5429

Options:

Suffix	Option:
-G	ROHS Compliant
T3	Tape & Reeled, 13” Reel

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