

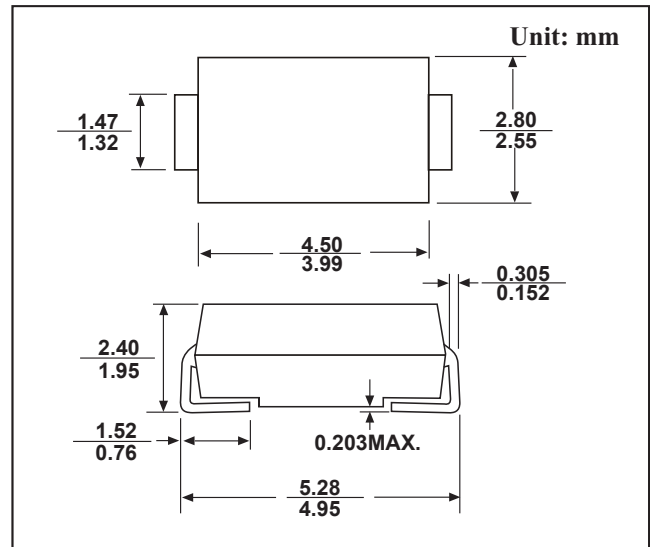
SMA TRANSIENT VOLTAGE SUPPRESSOR

FEATURES

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- High reliability
- High temperature soldering guaranteed:260 °C/10 seconds at terminals
- Component in accordance to RoHs 2015/863 and WEEE 2012/19/EU

MECHANICAL DATA

- Case style: SMA molded plastic
- Mounting position: Any



DEVICES FOR BIDIRECTIONAL APPLICATIONS

For bi-directional use C or CA suffix for types SMDJ 5.0 thru types SMDJ NT0 (e.g. SMDJ5.0CA,SMDJ440CA). Electrical characteristics apply in both directions.

MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Value	Units
Peak Power Dissipation $T_L = 25^\circ\text{C}$, Pulse Width = 1 ms	PPK	3000	W
Forward Surge Current $T_A = 25^\circ\text{C}$	IFSM	200	A
Power Dissipation On Infinite Heatsink, @ $T_A = 50^\circ\text{C}$	PM(AV)	5.0	W
Thermal Resistance Junction To Ambient Air	$R_{\theta JA}$	75	$^\circ\text{C/W}$
Thermal Resistance Junction To Leads	$R_{\theta JL}$	15	$^\circ\text{C/W}$
Storage Temperature Range	T_{STG}	-55 to 150	$^\circ\text{C}$
Operating Junction Temperature Range	T_J	-55 to 150	$^\circ\text{C}$

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

Part Number	Part Number	Device Marking Code		Reverse Stand off Voltage	Breakdown Voltage VBR (Volts) @ IT		Test Current IT (mA)	Maximum Clamping Voltage VC @ IPP (Volts)	Maximum Peak Pulse Current IPP (A)	Maximum Reverse Leakage IR @ VR (μA)
UNI	BI	UNI	BI	VR (Volts)	MIN	MAX				
3.0SMDJ5.0A	3.0SMDJ5.0CA	HDE	IDE	5	6.4	7.07	10	9.2	326.1	500
3.0SMDJ6.0A	3.0SMDJ6.0CA	HDG	IDG	6	6.67	7.37	10	10.3	291.3	500
3.0SMDJ6.5A	3.0SMDJ6.5CA	HDK	IDK	6.5	7.22	7.98	10	11.2	267.9	300
3.0SMDJ7.0A	3.0SMDJ7.0CA	HDM	IDM	7	7.78	8.6	10	12	250.0	200
3.0SMDJ7.5A	3.0SMDJ7.5CA	HDP	IDP	7.5	8.33	9.21	1	12.9	232.6	100
3.0SMDJ8.0A	3.0SMDJ8.0CA	HDR	IDR	8	8.89	9.83	1	13.6	220.6	50
3.0SMDJ8.5A	3.0SMDJ8.5CA	HDT	IDT	8.5	9.44	10.4	1	14.4	208.3	30
3.0SMDJ9.0A	3.0SMDJ9.0CA	HDV	IDV	9	10	11.1	1	15.4	194.8	30
3.0SMDJ10A	3.0SMDJ10CA	HDX	IDX	10	11.1	12.3	1	17	176.5	5
3.0SMDJ11A	3.0SMDJ11CA	HDZ	IDZ	11	12.2	13.5	1	18.2	164.8	1
3.0SMDJ12A	3.0SMDJ12CA	HEE	IEE	12	13.3	14.7	1	19.9	150.8	1
3.0SMDJ13A	3.0SMDJ13CA	HEG	IEG	13	14.4	15.9	1	21.5	139.5	1
3.0SMDJ14A	3.0SMDJ14CA	HEK	IEK	14	15.6	17.2	1	23.2	129.3	1
3.0SMDJ15A	3.0SMDJ15CA	HEM	IEM	15	16.7	18.5	1	24.4	123.0	1
3.0SMDJ16A	3.0SMDJ16CA	HEP	IEP	16	17.8	19.7	1	26	115.4	1
3.0SMDJ17A	3.0SMDJ17CA	HER	IER	17	18.9	20.9	1	27.6	108.7	1
3.0SMDJ18A	3.0SMDJ18CA	HET	IET	18	20	22.1	1	29.2	102.7	1
3.0SMDJ20A	3.0SMDJ20CA	HEV	IEV	20	22.2	24.5	1	32.4	92.6	1
3.0SMDJ22A	3.0SMDJ22CA	HEX	IEX	22	24.4	26.9	1	35.5	84.5	1
3.0SMDJ24A	3.0SMDJ24CA	HEZ	IEZ	24	26.7	29.5	1	38.9	77.1	1
3.0SMDJ26A	3.0SMDJ26CA	HFE	IFE	26	28.9	31.9	1	42.1	71.3	1
3.0SMDJ28A	3.0SMDJ28CA	HFG	IFG	28	31.1	34.4	1	45.4	66.1	1
3.0SMDJ30A	3.0SMDJ30CA	HFK	IFK	30	33.3	36.8	1	48.4	62.0	1
3.0SMDJ33A	3.0SMDJ33CA	HFM	IFM	33	36.7	40.6	1	53.3	56.3	1
3.0SMDJ36A	3.0SMDJ36CA	HFP	IFP	36	40	44.2	1	58.1	51.6	1
3.0SMDJ40A	3.0SMDJ40CA	HFR	IFR	40	44.4	49.1	1	64.5	46.5	1
3.0SMDJ43A	3.0SMDJ43CA	HFT	IFT	43	47.8	52.8	1	69.4	43.2	1
3.0SMDJ45A	3.0SMDJ45CA	HFV	IFV	45	50	55.3	1	72.7	41.3	1
3.0SMDJ48A	3.0SMDJ48CA	HFX	IFX	48	53.3	58.9	1	77.4	38.8	1
3.0SMDJ51A	3.0SMDJ51CA	HFZ	IFZ	51	56.7	62.7	1	82.4	36.4	1
3.0SMDJ54A	3.0SMDJ54CA	HGE	IGE	54	60	66.3	1	87.1	34.4	1
3.0SMDJ58A	3.0SMDJ58CA	HGG	IGG	58	64.4	71.2	1	93.6	32.1	1
3.0SMDJ60A	3.0SMDJ60CA	HGK	IGK	60	66.7	73.7	1	96.8	31.0	1
3.0SMDJ64A	3.0SMDJ64CA	HGM	IGM	64	71.1	78.6	1	103	29.1	1

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UNI	BI	UNI	BI	VR (Volts)	MIN	MAX				
3.0SMDJ70A	3.0SMDJ70CA	HGP	IGP	70	77.8	86	1	113	26.5	1
3.0SMDJ75A	3.0SMDJ75CA	HGR	IGR	75	83.3	92.1	1	121	24.8	1
3.0SMDJ78A	3.0SMDJ78CA	HGT	IGT	78	86.7	95.8	1	126	23.8	1
3.0SMDJ85A	3.0SMDJ85CA	HGV	IGV	85	94.4	104	1	137	21.9	1
3.0SMDJ90A	3.0SMDJ90CA	HGX	IGX	90	100	111	1	146	20.5	1
3.0SMDJ100A	3.0SMDJ100CA	HGZ	IGZ	100	111	123	1	162	18.5	1
3.0SMDJ110A	3.0SMDJ110CA	HHE	IHE	110	122	135	1	177	16.9	1
3.0SMDJ120A	3.0SMDJ120CA	HHG	IHG	120	133	147	1	193	15.5	1
3.0SMDJ130A	3.0SMDJ130CA	HHK	IHK	130	144	159	1	209	14.4	1
3.0SMDJ150A	3.0SMDJ150CA	HHM	IHM	150	167	185	1	243	12.3	1
3.0SMDJ160A	3.0SMDJ160CA	HHP	IHP	160	178	197	1	259	11.6	1
3.0SMDJ170A	3.0SMDJ170CA	HHR	IHR	170	189	209	1	275	10.9	1

RATINGS AND CHARACTERISTIC CURVES

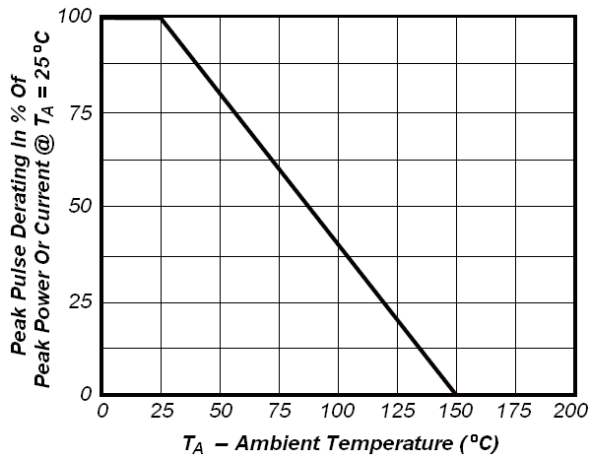


Fig1. Pulse Dearing Curve

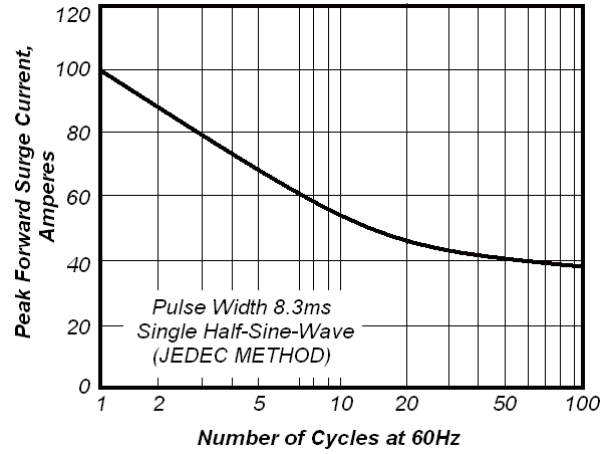


Fig2. Maximum Non-Repetitive Peak Forward Surge Current

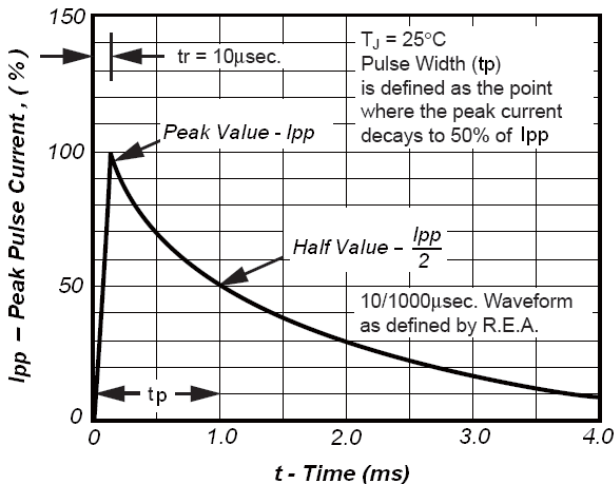


Fig3. Pulse Waveform

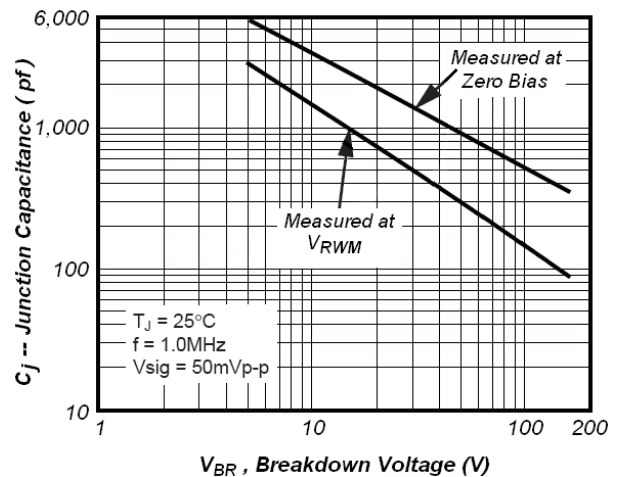


Fig4. Typical Junction Capacitance

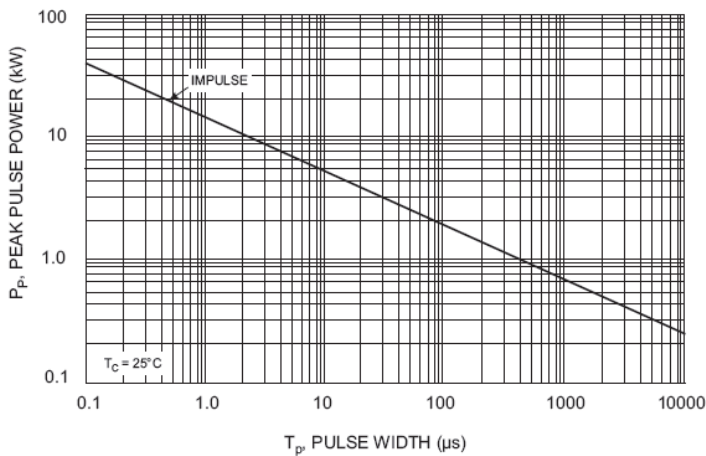


Fig5. Peak Pulse Power Rating curve

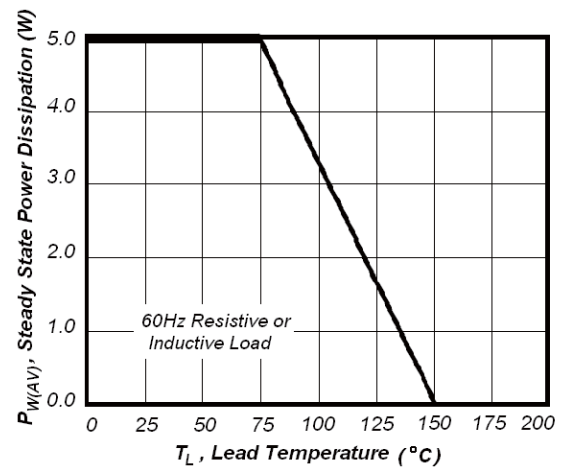


Fig6. Steady State Power Derating Curve