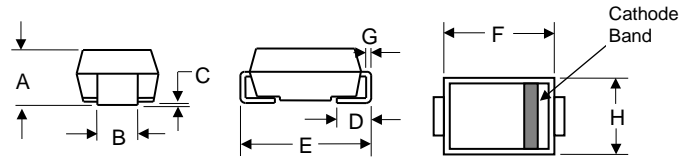


Features

- * Low profile package
- * Ideal for automated placement
- * Excellent clamping capability



RoHS
COMPLIANT



DIM	SMA			
	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.078	0.090	1.98	2.29
B	0.052	0.058	1.32	1.47
C	---	0.008	---	0.20
D	0.030	0.052	0.76	1.32
E	0.193	0.208	4.90	5.28
F	0.157	0.177	3.99	4.50
G	0.006	0.012	0.152	0.305
H	0.100	0.110	2.54	2.79

Mechanical Data

- * Case: DO-214AC (SMA)
- * Molding compound meets UL 94 V-0 flammability rating
- * Terminals: Matte tin plated leads, solderable per J-STD-002 and JESD22-B102
- * Polarity: Color band denotes cathode end

Maximum Ratings and Electrical Characteristics (T_A=25°C unless otherwise noted)

Parameter	Symbol	Value	Units
Peak Power Dissipation (Note 1.) @T _L = 25°C, Pulse Width = 1 ms	P _{PK}	600	W
Forward Surge Current (Note 2.) @T _A = 25°C	I _{FSM}	100	A
Power Dissipation On Infinite Heatsink, @T _A = 50°C	P _{M(AV)}	5	W
Thermal Resistance Junction To Ambient Air (Note 3.)	R _{θJA}	100	°C/W
Thermal Resistance Junction To Leads	R _{θJL}	20	°C/W
Storage Temperature Range	T _{STG}	-55 to 150	°C
Operating Junction Temperature Range	T _J	-55 to 150	°C

Note:

- 1) 10 X 1000 us, non-repetitive
- 2) 1/2 sine wave (or equivalent square wave), PW = 8.3 ms, duty cycle = 4 pulses per minute maximum
- 3) Mounted on minimum recommended pad layout



SMA6J5.0A THRU SMA6J400A

Surface Mount Transient Voltage Suppressors

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

Part Number		Reverse Stand off Voltage V _R (Volts)	Breakdown Voltage V _{BR} (Volts) @ I _T		Test Current I _T (mA)	Maximum Clamping Voltage V _c @ I _{PP} (Volts)	Maximum Peak Pulse Current I _{PP} (A)	Max Reverse Leakage I _R @ V _R (μA)
UNI	BI		MIN	MAX				
SMA6J5.0A	SMA6J5.0CA	5	6.4	7	10	9.6	65.2	500
SMA6J6.0A	SMA6J6.0CA	6	6.67	7.37	10	10.3	58.3	300
SMA6J6.5A	SMA6J6.5CA	6.5	7.22	7.98	10	11.2	53.6	200
SMA6J7.0A	SMA6J7.0CA	7	7.78	8.6	10	12	50	100
SMA6J7.5A	SMA6J7.5CA	7.5	8.33	9.21	1	12.9	46.6	50
SMA6J8.0A	SMA6J8.0CA	8	8.89	9.83	1	13.6	44.2	50
SMA6J8.5A	SMA6J8.5CA	8.5	9.44	10.4	1	14.4	41.7	20
SMA6J9.0A	SMA6J9.0CA	9	10	11.1	1	15.4	39	10
SMA6J10A	SMA6J10CA	10.5	11.1	12.3	1	17	35.3	5
SMA6J11A	SMA6J11CA	11.55	12.2	13.5	1	18.2	33	5
SMA6J12A	SMA6J12CA	12.6	13.3	14.7	1	19.9	30.2	5
SMA6J13A	SMA6J13CA	13.65	14.4	15.9	1	21.5	28	5
SMA6J14A	SMA6J14CA	14.7	15.6	17.2	1	23.2	25.9	5
SMA6J15A	SMA6J15CA	15.75	16.7	18.5	1	24.4	24.6	5
SMA6J16A	SMA6J16CA	16.8	17.8	19.7	1	26	23.1	5
SMA6J17A	SMA6J17CA	17.85	18.9	20.9	1	27.6	21.8	5
SMA6J18A	SMA6J18CA	18.9	20	22.1	1	29.2	20.6	5
SMA6J20A	SMA6J20CA	21	22.2	24.5	1	32.4	18.6	5
SMA6J22A	SMA6J22CA	23.1	24.4	26.9	1	35.5	16.9	5
SMA6J24A	SMA6J24CA	25.2	26.7	29.5	1	38.9	15.5	5
SMA6J26A	SMA6J26CA	27.3	28.9	31.9	1	42.1	14.3	5
SMA6J28A	SMA6J28CA	29.4	31.1	34.4	1	45.4	13.3	5
SMA6J30A	SMA6J30CA	31.5	33.3	36.8	1	48.4	12.4	5
SMA6J33A	SMA6J33CA	34.65	36.7	40.6	1	53.3	11.3	5
SMA6J36A	SMA6J36CA	37.8	40	44.2	1	58.1	10.4	5
SMA6J40A	SMA6J40CA	42	44.4	49.1	1	64.5	9.3	5
SMA6J43A	SMA6J43CA	45.15	47.8	52.8	1	69.4	8.7	5
SMA6J45A	SMA6J45CA	47.25	50	55.3	1	72.7	8.3	5
SMA6J48A	SMA6J48CA	50.4	53.3	58.9	1	77.4	7.8	5



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Surface Mount Transient Voltage Suppressors

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

Part Number		Reverse Stand off Voltage V _R (Volts)	Breakdown Voltage V _{BR} (Volts) @ I _T		Test Current I _T (mA)	Maximum Clamping Voltage V _c @ I _{PP} (Volts)	Maximum Peak Pulse Current I _{PP} (A)	Max Reverse Leakage I _R @ V _R (μA)
			MIN	MAX				
SMA6J51A	SMA6J51CA	53.55	56.7	62.7	1	82.4	7.3	5
SMA6J54A	SMA6J54CA	56.7	60	66.3	1	87.1	6.9	5
SMA6J58A	SMA6J58CA	60.9	64.4	71.2	1	93.6	6.5	5
SMA6J60A	SMA6J60CA	63	66.7	73.7	1	96.8	6.2	5
SMA6J64A	SMA6J64CA	67.2	71.1	78.6	1	103	5.9	5
SMA6J70A	SMA6J70CA	73.5	77.8	86	1	113	5.3	5
SMA6J75A	SMA6J75CA	78.75	83.3	92.1	1	121	5	5
SMA6J78A	SMA6J78CA	81.9	86.7	95.8	1	126	4.8	5
SMA6J85A	SMA6J85CA	89.25	94.4	104	1	137	4.4	5
SMA6J90A	SMA6J90CA	94.5	100	111	1	146	4.1	5
SMA6J100A	SMA6J100CA	105	111	123	1	162	3.7	5
SMA6J110A	SMA6J110CA	115.5	122	135	1	177	3.4	5
SMA6J120A	SMA6J120CA	126	133	147	1	193	3.1	5
SMA6J130A	SMA6J130CA	136.5	144	159	1	209	2.9	5
SMA6J150A	SMA6J150CA	157.5	167	185	1	243	2.5	5
SMA6J160A	SMA6J160CA	168	178	197	1	259	2.3	5
SMA6J170A	SMA6J170CA	178.5	189	209	1	275	2.2	5
SMA6J180A	SMA6J180CA	189	201	222	1	292	2.1	5
SMA6J190A	SMA6J190CA	199.5	211	233	1	306	2	5
SMA6J200A	SMA6J200CA	210	224	247	1	324	1.9	5
SMA6J210A	SMA6J210CA	220.5	233	258	1	324	1.9	5
SMA6J220A	SMA6J220CA	231	246	272	1	356	1.7	5
SMA6J250A	SMA6J250CA	262.5	279	309	1	405	1.5	5
SMA6J300A	SMA6J300CA	315	335	371	1	486	1.3	5
SMA6J350A	SMA6J350CA	367.5	391	432	1	567	1.1	5
SMA6J400A	SMA6J400CA	420	447	494	1	648	0.9	5

1. For Bi-directional type having V_{RWM} of 10 Volts and less, the I_R limit is double
2. A transient suppressor is normally selected according to the working peak reverse voltage (V_{RWM}), which should be equal to or greater than the DC or continuous peak operating voltage level.
3. V_{BR} measured at pulse test current I_T at an ambient temperature of 25°C.
4. Surge current waveform per Figure 1 and derate per Figure.

Ratings and Characteristic Curves

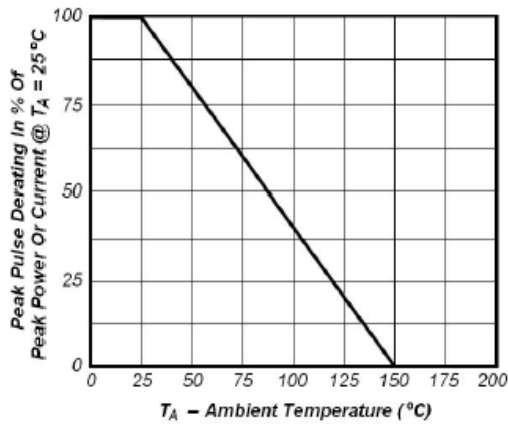


Fig1. Pulse Dearing Curve

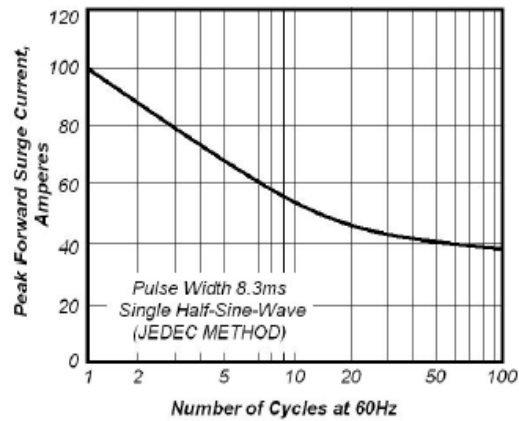


Fig2. Maximum Non-Repetitive Peak Forward Surge Current

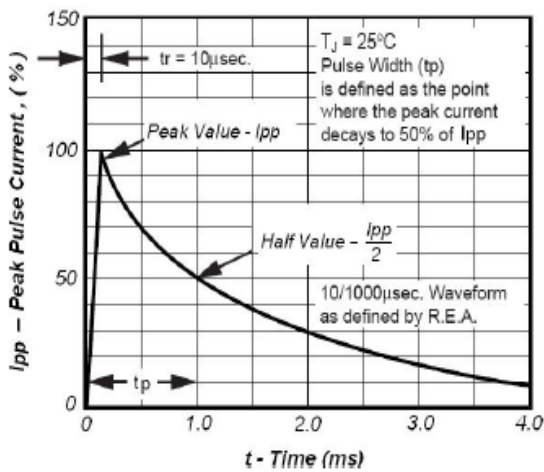


Fig3. Pulse Waveform

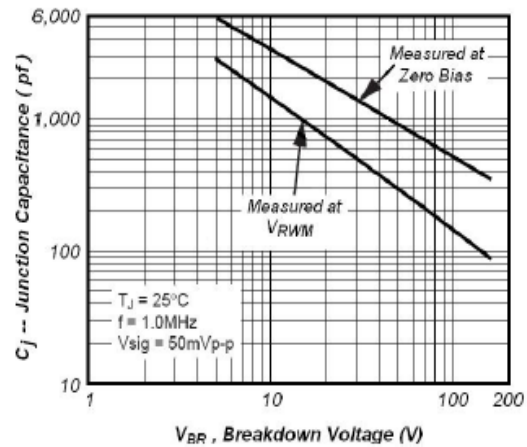


Fig4. Typical Junction Capacitance

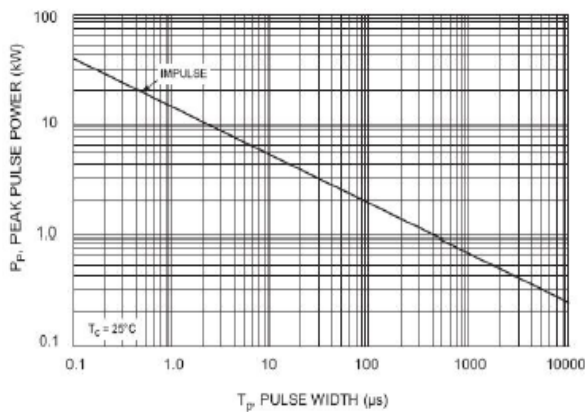


Fig5. Peak Pulse Power Rating curve

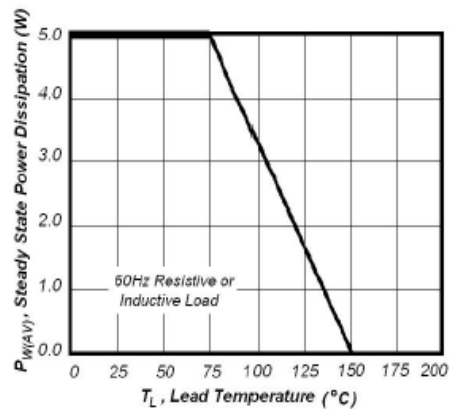


Fig6. Steady State Power Derating Curve



SMA6J5.0A THRU SMA6J400A

Surface Mount Transient Voltage Suppressors

Ordering Information

Part No.	Package	Packing Code	Packing
SMA6J5.0A THRU SMA6J400A	SMA	R50	5000pcs/Reel

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