

SMA6J5.0A THRU SMA6J33A

Features

- For Surface Mount Applications
- Unidirectional And Bidirectional
- High Surge Capability
- High Temp Soldering: 260°C for 10 Seconds At Terminals
- For Bidirectional Devices Add "C" To The Suffix of The Part Number: i.e.SMA6J9.0CA for 5% Tolerance
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"

Mechanical Data

- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Polarity: Indicated by cathode band except bi-directional types

Maximum Rating:

- Operating Temperature: -55°C to +175°C
- Storage Temperature: -55°C to +175°C
- Typical Thermal Resistance: 33°C/W Junction to lead

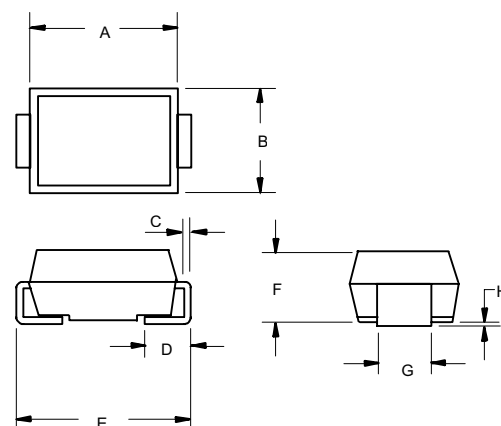
Peak Pulse Current on 10/1000us Waveform	I _{PPM}	See Table 1	Note 2
Peak Pulse Power Dissipation	P _{PPM}	Min 600 W	Note 2, 6
Steady State Power Dissipation	P _{M(AV)}	3.0 W	Note 5

Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.

2. Non-repetitive current pulse, per Fig.4 and derated above T_A=25°C per Fig1
3. Mounted on 5.0mm² copper pads to each terminal.
4. 8.3ms, single half sine wave duty cycle = 4 pulses per Minutes maximum.
5. Lead temperature at T_L = 75°C.
6. Peak pulse power waveform is 10/1000us

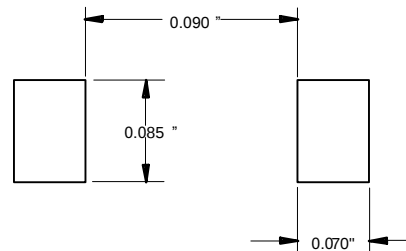
600 Watt Transient Voltage Suppressors 5.0 to 33 Volts

DO-214AC (SMA)(LEAD FRAME)



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.157	.181	4.00	4.60	
B	.098	.114	2.50	2.90	
C	.006	.012	0.152	0.305	
D	.030	.060	0.76	1.52	
E	.188	.208	4.80	5.28	
F	.078	.096	2.00	2.44	
G	.050	.064	1.27	1.63	
H	.002	.008	0.051	0.203	

SUGGESTED SOLDER PAD LAYOUT



SMA6J5.0A thru SMA6J33A

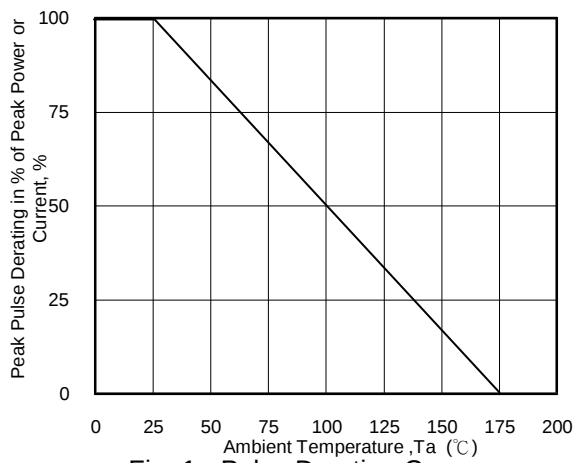


Fig. 1 - Pulse Derating Curve

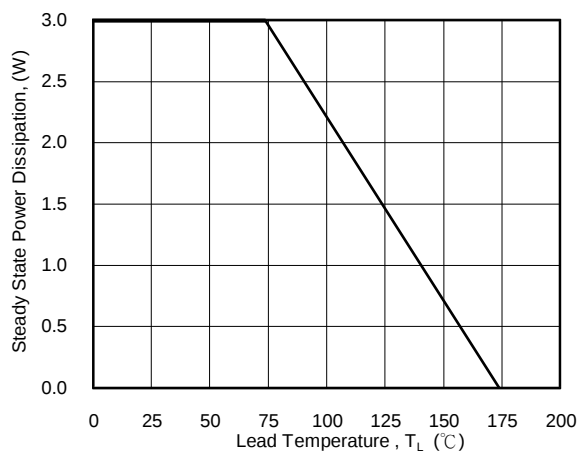


Fig. 2 - Steady State Power Derating Curve

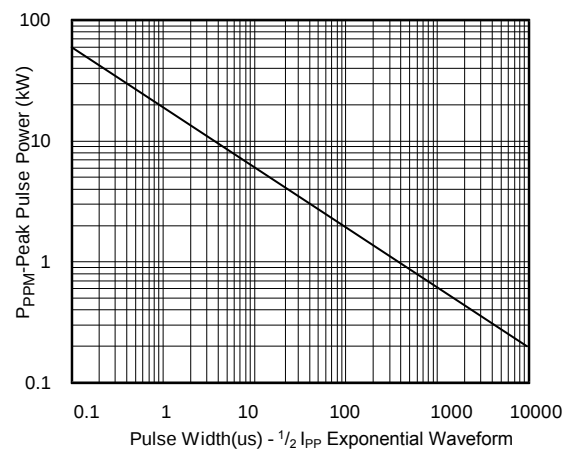


Fig. 3 - Peak Pulse Power Rating Curve

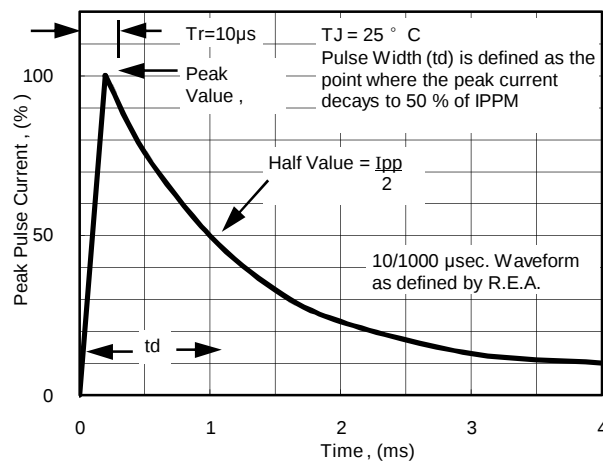


Fig. 4 - Pulse Waveform

SMA6J5.0A thru SMA6J33A

MCC Part Number		Breakdown Voltage V_{BR} @ I_T			Maximum Reverse Leakage I_D (μ A) @VWM	Reverse Stand-Off Voltage V_{WM} (Volts)	Maximum Reverse Surge Current I_{pp} (A) @10x1000us sinewave	Maximum Clamping Voltage V_c (Volts) @ I_{pp}	Device Marking Code	
Uni-polar	Bi-polar	Min. (V)	Max. (V)	I_T (mA)					Uni	Bi
SMA6J5.0A		6.40	7.00	10	800	5.0	65.2	9.2	KE	
SMA6J6.0A		6.67	7.37	10	800	6.0	58.3	10.3	KG	
SMA6J9.0A	SMA6J9.0CA	10.0	11.1	1	5.0	9.0	39.0	15.4	KV	TV
SMA6J10A	SMA6J10CA	11.1	12.3	1	5.0	10	35.3	17.0	KX	TX
SMA6J11A	SMA6J11CA	12.2	13.5	1	5.0	11	33.0	18.2	KZ	TZ
SMA6J12A	SMA6J12CA	13.3	14.7	1	5.0	12	30.2	19.9	LE	UE
SMA6J13A	SMA6J13CA	14.4	15.9	1	5.0	13	27.9	21.5	LG	UG
SMA6J14A	SMA6J14CA	15.6	17.2	1	5.0	14	25.9	23.2	LK	UK
SMA6J15A	SMA6J15CA	16.7	18.5	1	5.0	15	24.6	24.4	LM	UM
SMA6J16A	SMA6J16CA	17.8	19.7	1	5.0	16	23.1	26.0	LP	UP
SMA6J17A	SMA6J17CA	18.9	20.9	1	5.0	17	21.7	27.6	LR	UR
SMA6J18A		20.0	22.1	1	5.0	18	20.5	29.2	LT	
SMA6J19A		21.1	23.3	1	5.0	19	19.5	30.8	LB	
SMA6J20A		22.2	24.5	1	5.0	20	18.5	32.4	LV	
SMA6J22A		24.4	26.9	1	5.0	22	16.9	35.5	LX	
SMA6J24A	SMA6J24CA	26.7	29.5	1	5.0	24	15.4	38.9	LZ	UZ
SMA6J26A		28.9	31.9	1	5.0	26	14.3	42.1	ME	
	SMA6J28CA	31.1	34.4	1	5.0	28	13.2	45.4		WG
SMA6J33A		36.7	40.6	1	5.0	33	11.3	53.3	MM	

Note:

1. For Bi-Directional devices having VR of 10 volts and under, the IR limit is double .
2. The items in blue character are still under development.

Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel; 5Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

IMPORTANT NOTICE

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. **Micro Commercial Components Corp.** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp.** and all the companies whose products are represented on our website, harmless against all damages.

LIFE SUPPORT

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

CUSTOMER AWARENESS

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.