	E480232

600 Watt TVS
13 to 40 Volts

Features

- AEC-Q101 Qualified
- Excellent Clamping Capability
- For Surface Mount Applications
- Glass Passivated Junction
- Halogen Free. “Green” Device (Note 1)
- High Temp Soldering: 260°C / 10 Seconds At Terminals
- For Bidirectional Devices Add “C” to The Suffix of The Part Number: i.e.SMA6J13CAHE3 for 5% Tolerance
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant (Note2) ("P" Suffix Designates RoHS Compliant. See Ordering Information)

Mechanical Data

- Polarity: Indicated by Cathode Band Except Bi-directional Types

Maximum Ratings

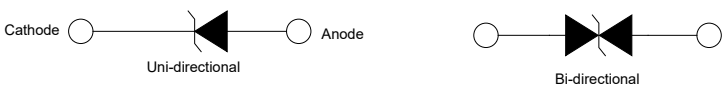
- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 33°C/W Junction to Lead

Peak Pulse Power Surge Current with a 10/1000μs Waveform	I_{PPM}	See the Table	Note 3
Peak Pulse Power Dissipation	P_{PPM}	600 W(Min.)	Note 3
Power Dissipatoin on Infinite Heatsink	P_D	3.0 W	T_L = 75°C
Peak Forward Surge Current Unidirectional Only	I_{FSM}	60 A	Note 4

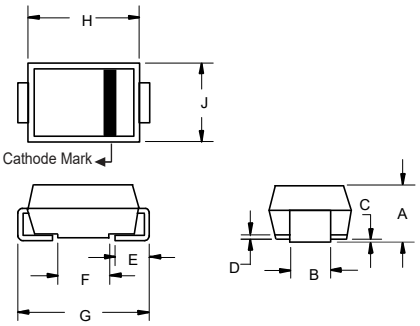
Note:

1. Halogen free "Green” products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
2. High temperature solder exemption applied, see EU directive annex 7a.
3. Non-repetitive current pulse per Fig.3 and derated above T_A= 25 °C per Fig.4
4. Measured on 8.3 ms single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum

Pin Configuration:

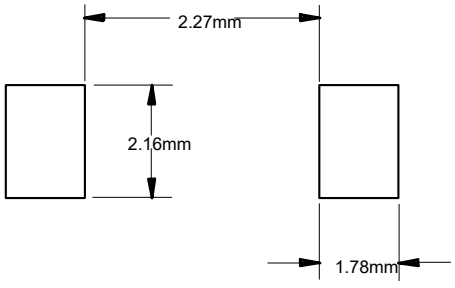


SMA (DO-214AC) LEAD FRAME



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.075	0.096	1.90	2.44	
B	0.050	0.064	1.27	1.63	
C	0.002	0.008	0.051	0.203	
D	---	0.020	---	0.51	
E	0.030	0.060	0.76	1.52	
F	0.065	0.091	1.65	2.32	
G	0.189	0.220	4.80	5.59	
H	0.157	0.187	4.00	4.75	
J	0.090	0.115	2.25	2.92	

SUGGESTED SOLDER PAD LAYOUT



Electrical Characteristics @ 25°C Unless Otherwise Specified

MCC Part Number		Breakdown Voltage V_{BR} @ I_T			Maximum Reverse Leakage I_D(μA) @V_{WM}	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
SMA6J13AHE3	SMA6J13CAHE3	14.4	15.9	1	1.0	13	27.9	21.5	LG	UG
SMA6J14AHE3	SMA6J14CAHE3	15.6	17.2	1	1.0	14	25.9	23.2	LK	UK
SMA6J15AHE3	SMA6J15CAHE3	16.7	18.5	1	1.0	15	24.6	24.4	LM	UM
SMA6J16AHE3	SMA6J16CAHE3	17.8	19.7	1	1.0	16	23.1	26.0	LP	UP
SMA6J17AHE3	SMA6J17CAHE3	18.9	20.9	1	1.0	17	21.7	27.6	LR	UR
SMA6J18AHE3	SMA6J18CAHE3	20.0	22.1	1	1.0	18	20.5	29.2	LT	UT
SMA6J19AHE3	SMA6J19CAHE3	21.1	23.3	1	1.0	19	19.5	30.8	LB	UB
SMA6J20AHE3	SMA6J20CAHE3	22.2	24.5	1	1.0	20	18.5	32.4	LV	UV
SMA6J22AHE3	SMA6J22CAHE3	24.4	26.9	1	1.0	22	16.9	35.5	LX	UX
SMA6J24AHE3	SMA6J24CAHE3	26.7	29.5	1	1.0	24	15.4	38.9	LZ	UZ
SMA6J26AHE3	SMA6J26CAHE3	28.9	31.9	1	1.0	26	14.3	42.1	ME	WE
SMA6J28AHE3	SMA6J28CAHE3	31.1	34.4	1	1.0	28	13.2	45.4	MG	WG
SMA6J30AHE3	SMA6J30CAHE3	33.3	36.8	1	1.0	30	12.4	48.4	MK	WK
SMA6J33AHE3	SMA6J33CAHE3	36.7	40.6	1	1.0	33	11.3	53.3	MM	WM
SMA6J36AHE3	SMA6J36CAHE3	40.0	44.2	1	1.0	36	10.3	58.1	MP	WP
SMA6J40AHE3	SMA6J40CAHE3	44.4	49.1	1	1.0	40	9.3	64.5	MR	WR

Curve Characteristics

Fig. 1 - Peak Pulse Power Rating Curve

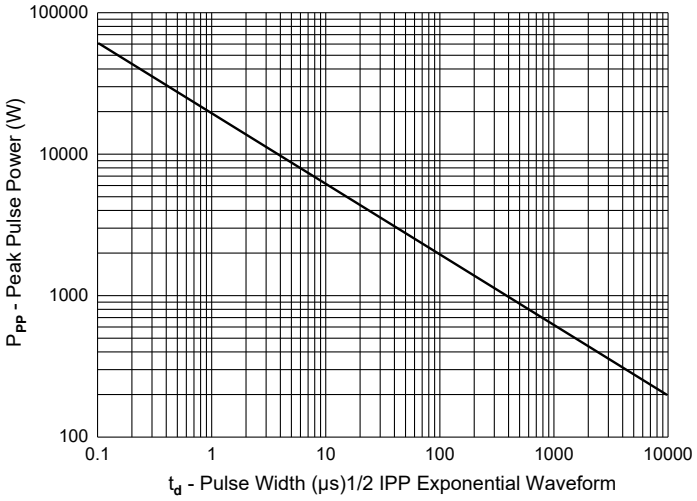


Fig. 2 - Typical Junction Capacitance

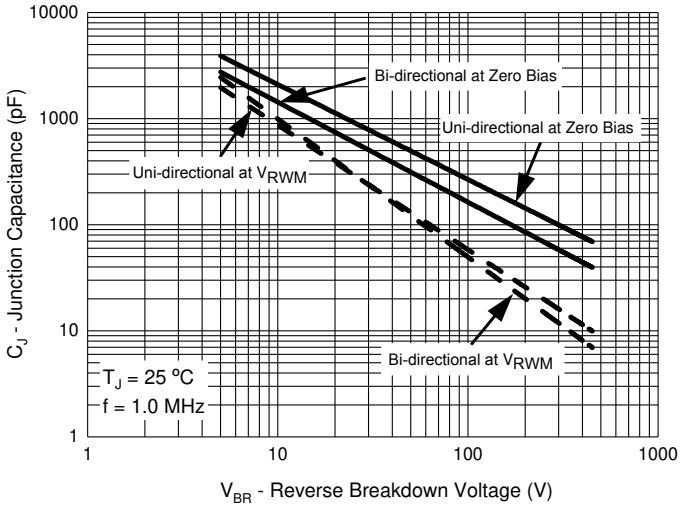


Fig. 3 - Pulse Waveform

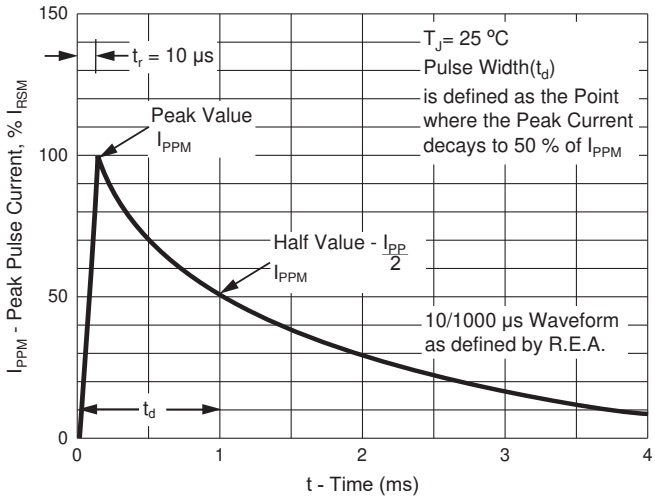
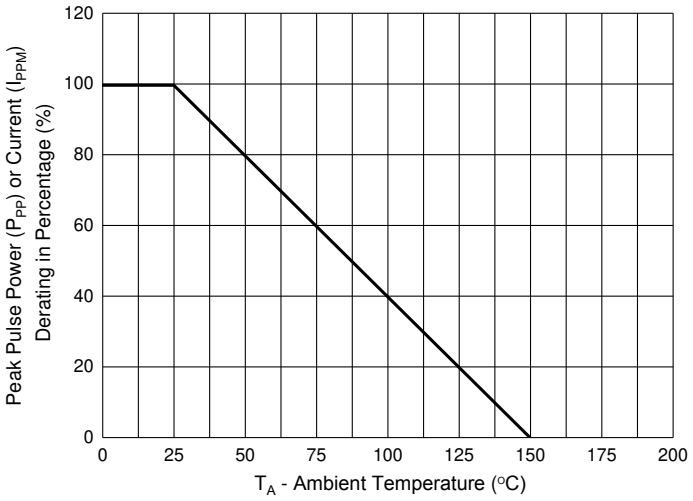


Fig. 4 - Pulse Derating Curve



Ordering Information

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