

## Features

- For Surface Mount Applications in Order to Optimize Board Space
- Fast Response Time: Typical Less Than 1.0ps From 0 Volts to  $V_B$  Minimum
- Low Inductance
- Excellent Clamping Capability
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix Designates RoHS Compliant. See Ordering Information)

## Mechanical Data

- Terminals: Solderable Per MIL-STD-750, Method 2026

## Maximum Ratings

- Operating Junction Temperature Range:  $-55^{\circ}\text{C}$  to  $+175^{\circ}\text{C}$
- Storage Temperature Range:  $-55^{\circ}\text{C}$  to  $+175^{\circ}\text{C}$
- Thermal Resistance :  $20^{\circ}\text{C/W}$  Junction to Lead
- Thermal Resistance :  $25^{\circ}\text{C/W}$  Junction to Case

## Electrical Characteristics @ $25^{\circ}\text{C}$ Unless Otherwise Specified

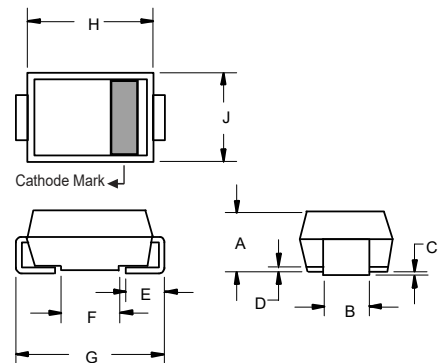
Peak Pulse Power Surge Current on 10/1000 $\mu\text{s}$ Waveform	$I_{PP}$	See the Table	Note 2
Peak Pulse Power Dissipation	$P_{PP}$	600W	Note 2

### Notes:

1. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.
2. Non-repetitive current pulse, per Fig.3 and derated above  $T_A=25^{\circ}\text{C}$  per Fig.2

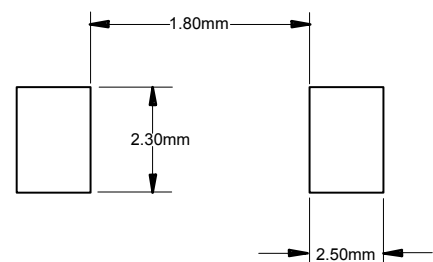
# 600 Watt TVS 250 to 400 Volts

## SMB (DO-214AA) (LEAD FRAME)



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.079	0.103	2.00	2.62	
B	0.075	0.087	1.91	2.21	
C	0.002	0.008	0.05	0.20	
D	0.006	0.012	0.15	0.31	
E	0.030	0.060	0.76	1.52	
F	0.065	0.091	1.65	2.32	
G	0.200	0.220	5.08	5.59	
H	0.160	0.191	4.06	4.85	
J	0.130	0.155	3.30	3.94	

### Suggested Solder Pad Layout



Electrical Characteristics @ 25°C Unless Otherwise Specified

MCC PART NUMBER	REVERSE STAND-OFF VOLTAGE $V_{WM}$	BREAKDOWN VOLTAGE $V_{(BR)} @ I_T$ (VOLTS)			MAXIMUM CLAMPING VOLTAGE@ $I_{PP}$	PEAK PULSE CURRENT $I_{PP}$	MAXIMUM REVERSE LEAKAGE @ $V_{WM}$ $I_D$	MARKING CODE
	VOLTS	MIN	MAX	$I_T$ (mA)	VOLTS	(AMPS)	( $\mu$ A)	
SMBJP6KE250AL	214.00	237.00	263.00	1	344.0	1.9	1	250AL
SMBJP6KE300AL	256.00	285.00	315.00	1	414.0	1.5	1	300AL
SMBJP6KE350AL	300.00	332.00	368.00	1	482.0	1.3	1	350AL
SMBJP6KE400AL	342.00	380.00	420.00	1	548.0	1.1	1	400AL

**Curve Characteristics**

Fig. 1 - Peak Pulse Power Rating Curve

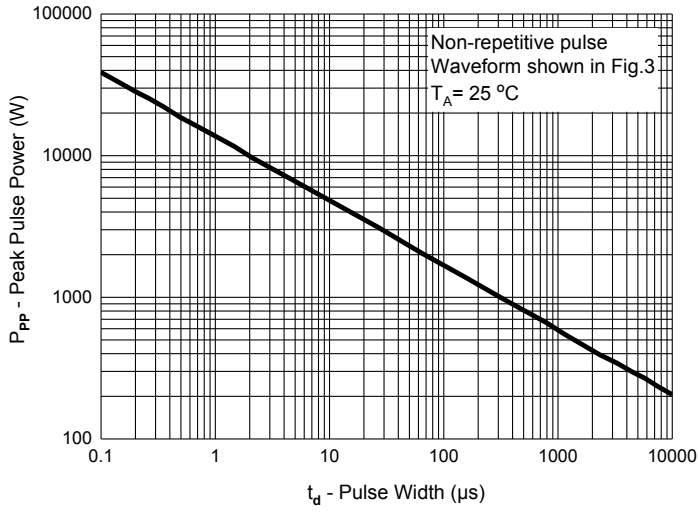


Fig. 2 - Pulse Derating Curve

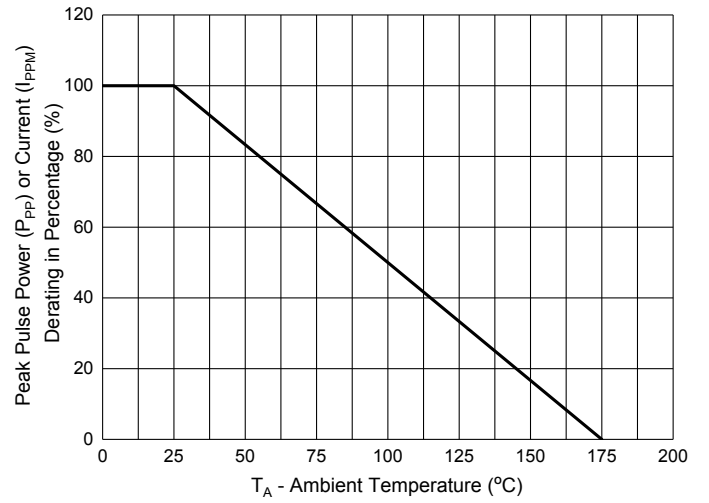
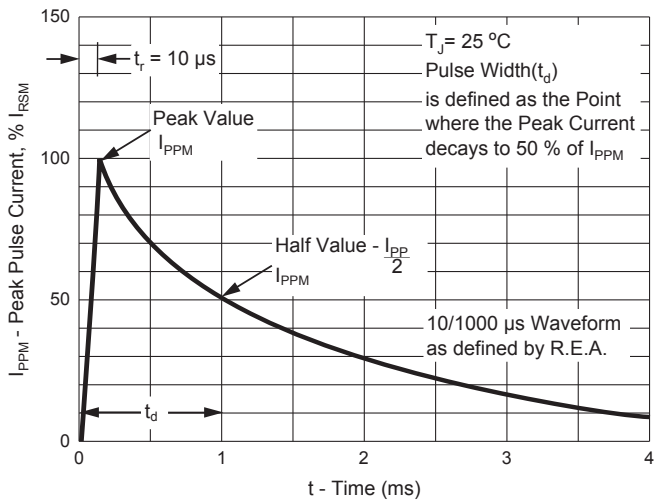


Fig. 3 - Pulse Waveform



## Ordering Information

Device	Packing
Part Number-TP	Tape&Reel:3Kpcs/Reel

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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