

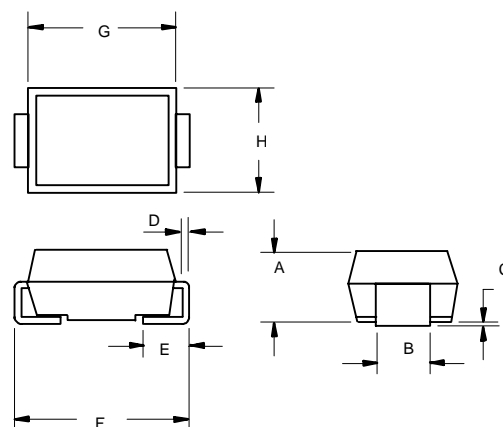
# SMCJ10AHE3 THRU SMCJ78CAHE3

## Transient Voltage Suppressor 10 to 78 Volts 1500 Watt

### Features

- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- For surface mount application in order to optimize board space
- Built-in strain relief
- Glass passivated junction
- Typical ID less than 1uA above 10V
- High temperature soldering: 260°C/10 seconds at terminals
- Halogen free
- Plastic package has Underwrites Laboratory Flammability
- Meet AEC-Q101 Requirement
- UL Recognized File # E331408

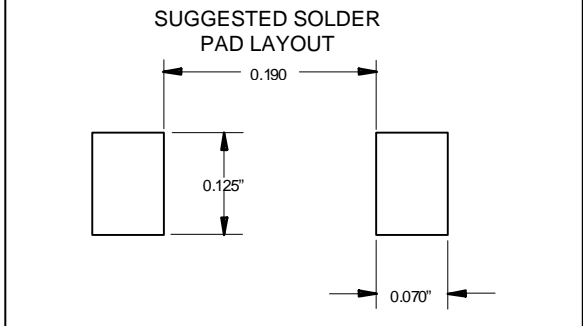
### DO-214AB (SMC) (LEAD FRAME)



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.079	.103	2.00	2.62	
B	.108	.128	2.75	3.25	
C	.002	.008	0.051	0.203	
D	.006	.012	0.152	0.305	
E	.030	.060	0.76	1.52	
F	.305	.320	7.75	8.13	
G	.260	.280	6.60	7.11	
H	.220	.245	5.59	6.22	

### Mechanical Data

- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Terminals: solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes positive end( cathode) except Bi-directional types.
- Standard packaging: 16mm tape per ( EIA 481).
- Weight: 0.007 ounce, 0.21 gram
- Manufacturing code added for better tracking



### Maximum Ratings @ 25°C Unless Otherwise Specified

Peak Pulse Current on 10/1000us waveform(Note2, Fig4)	I <sub>PPM</sub>	See Table 1	Amps
Peak Pulse Power Dissipation on 10/1000us waveform(Note2,3, Fig1)	P <sub>PPM</sub>	Minimum 1500	Watts
Operation And Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55°C to +175°C	

Notes: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.  
2. Non-repetitive current pulse per Fig.3 and derated above T<sub>A</sub>=25°C per Fig.2.  
3. Mounted on 8.0mm<sup>2</sup> copper pads to each terminal.  
4. Unidirectional and bidirectional available,for bidirectional devices add 'C' suffix to the pn#, i.e.SMCJ10CAHE3

**SMCJ10AHE3 THRU SMCJ78CAHE3**

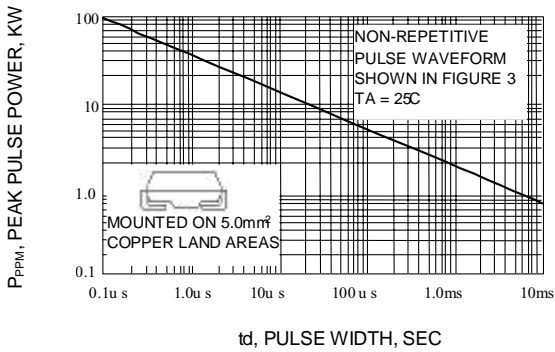


Fig. 1-PEAK PULSE POWER RATING CURVE

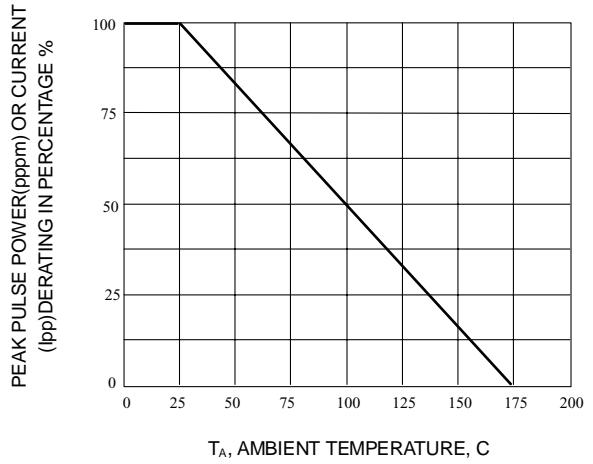


Fig. 2-PULSE DERATING CURVE

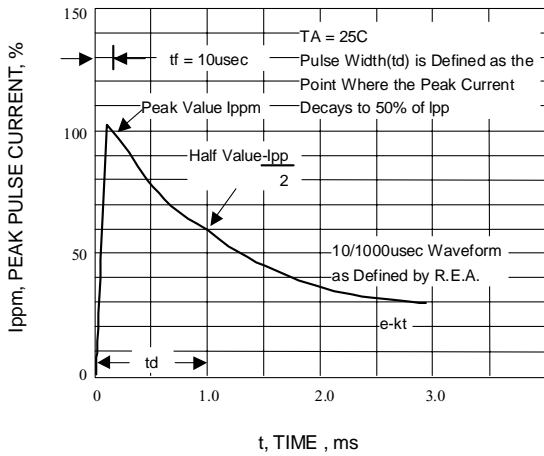


Fig. 3-PULSE WAVEFORM

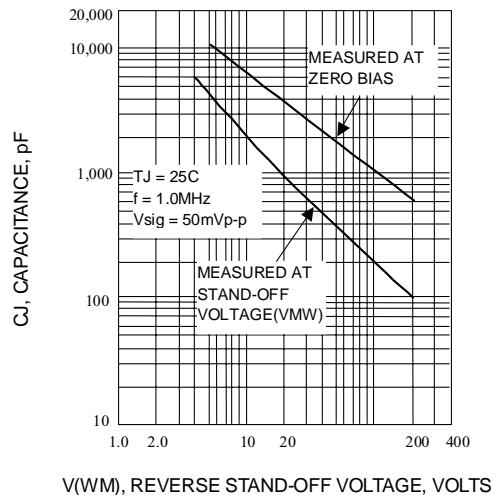


Fig. 4-TYPICAL JUNCTION CAPACITANCE

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## ELECTRICAL CHARACTERISTICS @25°C

MCC Part Number		Reverse Stand -Off Voltage	Breakdown Voltage $V_{BR}(V)$		Test Current	Max. Clamping Voltage @ $I_{PP}$	Peak Pulse Current	Reverse Leakage Current@ $V_{WM}$	Marking Code	
Uni-Polar	Bi-Polar	$V_{WM}(V)$	Min	Max	$I_T(mA)$	$V_C(V)$	$I_{PP}(A)$	$I_D(\mu A)$	UNI	BI
SMCJ10AHE3	SMCJ10CAHE3	10	11.1	12.3	1	17.0	88.3	5	GDX	BDX
SMCJ11AHE3	SMCJ11CAHE3	11	12.2	13.5	1	18.2	82.5	1	GDZ	BDZ
SMCJ12AHE3	SMCJ12CAHE3	12	13.3	14.7	1	19.9	75.4	1	GEE	BEE
SMCJ13AHE3	SMCJ13CAHE3	13	14.4	15.9	1	21.5	69.8	1	GEG	BEG
SMCJ14AHE3	SMCJ14CAHE3	14	15.6	17.2	1	23.2	64.7	1	GEK	BEK
SMCJ15AHE3	SMCJ15CAHE3	15	16.7	18.5	1	24.4	61.5	1	GEM	BEM
SMCJ16AHE3	SMCJ16CAHE3	16	17.8	19.7	1	26.0	57.7	1	GEP	BEP
SMCJ17AHE3	SMCJ17CAHE3	17	18.9	20.9	1	27.6	54.4	1	GER	BER
SMCJ18AHE3	SMCJ18CAHE3	18	20.0	22.1	1	29.2	51.4	1	GET	BET
SMCJ20AHE3	SMCJ20CAHE3	20	22.2	24.5	1	32.4	46.3	1	GEV	BEV
SMCJ22AHE3	SMCJ22CAHE3	22	24.4	26.9	1	35.5	42.3	1	GEX	BEX
SMCJ24AHE3	SMCJ24CAHE3	24	26.7	29.5	1	38.9	38.6	1	GEZ	BEZ
SMCJ26AHE3	SMCJ26CAHE3	26	28.9	31.9	1	42.1	35.7	1	GFE	BFE
SMCJ28AHE3	SMCJ28CAHE3	28	31.1	34.4	1	45.4	33.1	1	GFG	BFG
SMCJ30AHE3	SMCJ30CAHE3	30	33.3	36.8	1	48.4	31.0	1	GFK	BFK
SMCJ33AHE3	SMCJ33CAHE3	33	36.7	40.6	1	53.3	28.2	1	GFM	BFM
SMCJ36AHE3	SMCJ36CAHE3	36	40.0	44.2	1	58.1	25.9	1	GFP	BFP
SMCJ40AHE3	SMCJ40CAHE3	40	44.4	49.1	1	64.5	23.3	1	GFR	BFR
SMCJ43AHE3	SMCJ43CAHE3	43	47.8	52.8	1	69.4	21.7	1	GFT	BFT
SMCJ45AHE3	SMCJ45CAHE3	45	50.0	55.3	1	72.7	20.6	1	GFV	BFV
SMCJ48AHE3	SMCJ48CAHE3	48	53.3	58.9	1	77.4	19.4	1	GFX	BFX
SMCJ51AHE3	SMCJ51CAHE3	51	56.7	62.7	1	82.4	18.2	1	GFZ	BFZ
SMCJ54AHE3	SMCJ54CAHE3	54	60.0	66.3	1	87.1	17.3	1	GGE	BGE
SMCJ58AHE3	SMCJ58CAHE3	58	64.4	71.2	1	93.6	16.1	1	GGG	BGG
SMCJ60AHE3	SMCJ60CAHE3	60	66.7	73.7	1	96.8	15.5	1	GGK	BGK
SMCJ64AHE3	SMCJ64CAHE3	64	71.1	78.6	1	103.0	14.6	1	GGM	BGM
SMCJ70AHE3	SMCJ70CAHE3	70	77.8	86.0	1	113.0	13.3	1	GGP	BGP
SMCJ75AHE3	SMCJ75CAHE3	75	83.3	92.1	1	121.0	12.4	1	GGR	BGR
SMCJ78AHE3	SMCJ78CAHE3	78	86.7	95.8	1	126.0	11.9	1	GGT	BGT

For bi-directional type having  $V_{RWM}$  of 10volts and less, the IR limit is double. For parts without A, the VBR is  $\pm 10\%$



Micro Commercial Components

Ordering Information :

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

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