

# SMLJ10AHE3 THRU SMLJ43CAHE3

## Transient Voltage Suppressor 10 to 43 Volts 3000 Watt

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

### Features

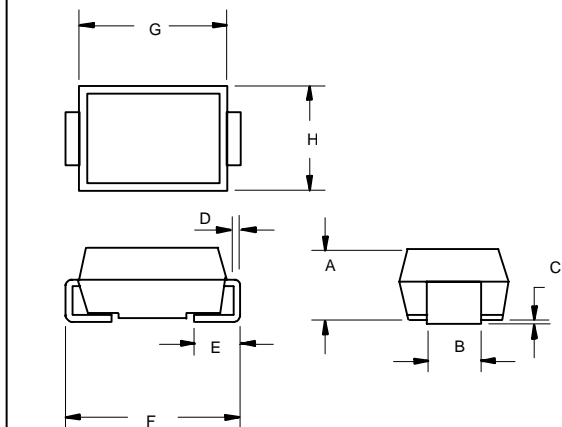
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- For surface mount application in order to optimize board space
- Built-in strain relief
- Glass passivated junction
- Typical I<sub>b</sub> less than 1uA above 10V
- High temperature soldering: 260°C/10 seconds at terminals
- Excellent clamping capability
- Repetition Rate(duty cycle):0.5%
- Meet AEC-Q101 Requirement
- UL Recognized File # E331408
- Fast response time: typical less than 1ps from 0V to BV min
- Halogen free

### Mechanical Data

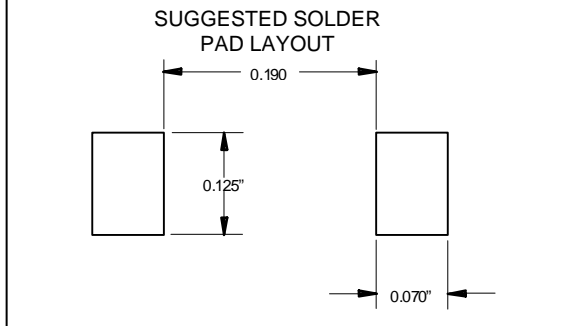
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Terminals: solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes positive end( cathode) except Bi-directional types.
- Standard packaging: 16mm tape per ( EIA 481).
- Weight: 0.007 ounce, 0.21 gram
- Manufacturing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

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

Peak Pulse Current on 10/1000us waveform(Note2, Fig3)	I <sub>PPM</sub>	See Table 1	Amps
Peak Pulse Power Dissipation on 10/1000us waveform(Note2,3, Fig1)	P <sub>PPM</sub>	Minimum 3000	Watts
Operation And Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55°C to +175°C	
Thermal Resistance Junction to Ambient@Lead	R <sub>thJA</sub> R <sub>thJL</sub>	75 17.5	°C/W



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.079	.103	2.00	2.62	
B	.115	.121	2.92	3.07	
C	.002	.008	0.051	0.203	
D	.006	.012	0.152	0.305	
E	.030	0.060	0.76	1.52	
F	.305	.320	7.75	8.13	
G	.260	.260	6.60	7.11	
H	.220	.245	5.59	6.22	



Notes: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.  
2. Non-repetitive current pulse per Fig.3 and derated above TA=25°C per Fig.2.  
3. Mounted on 8.0mm<sup>2</sup> copper pads to each terminal.

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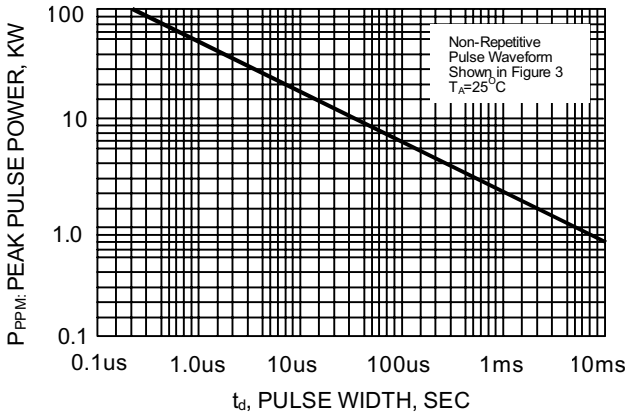


Fig. 1-PEAL PULSE POWER VS PULSE.TIME

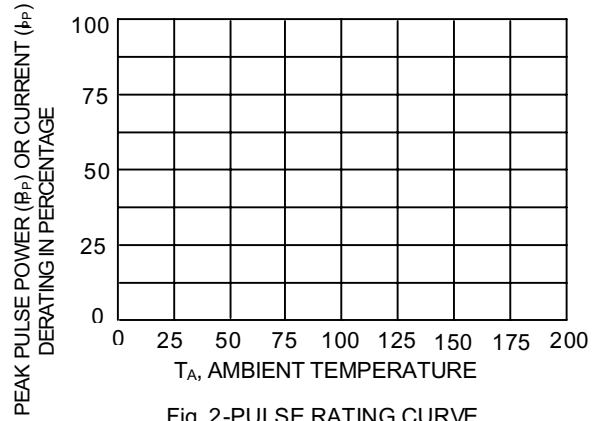


Fig. 2-PULSE RATING CURVE

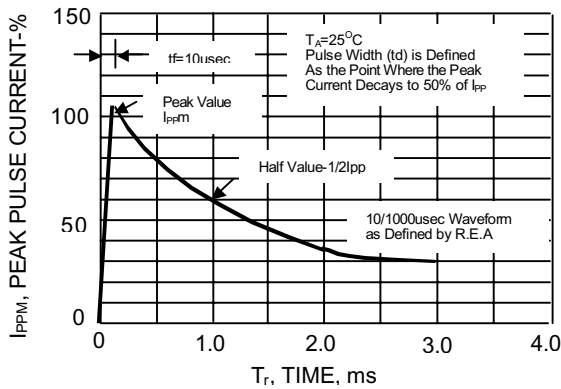


Fig. 3-PULSE WAVEFORM

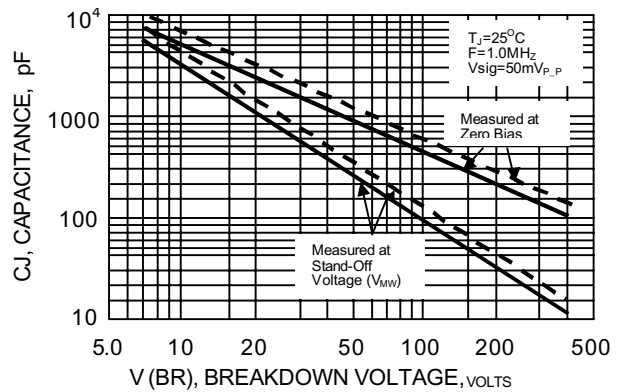


Fig. 4-TYPICAL CAPACITANCE VS STAND-OFF VOLTAGE

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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	
		$V_{WM}(V)$	Min					Max	$I_T(mA)$
SMLJ10AHE3	10	11.1	12.3	5	17.0	176.4	15	PDX	HDX
SMLJ11AHE3	11	12.2	13.5	5	18.2	164.8	2	PDZ	HDZ
SMLJ12AHE3	12	13.3	14.7	5	19.9	150.6	2	PEE	HEE
SMLJ13AHE3	13	14.4	15.9	5	21.5	139.4	2	PEG	HEG
SMLJ14AHE3	14	15.6	17.2	5	23.2	129.4	2	PEK	HEK
SMLJ15AHE3	15	16.7	18.5	5	24.4	123.0	2	PEM	HEM
SMLJ16AHE3	16	17.8	19.7	5	26.0	115.4	2	PEP	HEP
SMLJ17AHE3	17	18.9	20.9	5	27.6	106.6	2	PER	HER
SMLJ18AHE3	18	20.0	22.1	5	29.2	102.8	2	PET	HET
SMLJ20AHE3	20	22.2	24.5	5	32.4	92.6	2	PEV	HEV
SMLJ22AHE3	22	24.4	26.9	5	35.5	84.4	2	PEX	HEX
SMLJ24AHE3	24	26.7	29.5	5	38.9	77.2	2	PEZ	HEZ
SMLJ26AHE3	26	28.9	31.9	5	42.1	71.2	2	PFE	HFE
SMLJ28AHE3	28	31.1	34.4	5	45.4	66.0	2	PFG	HFG
SMLJ30AHE3	30	33.3	36.8	5	48.4	62.0	2	PFK	HFK
SMLJ33AHE3	33	36.7	40.6	5	53.3	56.2	2	PFM	HFM
SMLJ36AHE3	36	40.0	44.2	5	58.1	51.6	2	PFP	HFP
SMLJ40AHE3	40	44.4	49.1	5	64.5	46.4	2	PFR	HFR
SMLJ43AHE3	43	47.8	52.8	5	69.4	43.2	2	PFT	HFT

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		$V_{WM}(V)$	Min					Max	$I_T(mA)$
SMLJ10CAHE3	10	11.1	12.3	5	17.0	176.4	15	DDX	IDX
SMLJ11CAHE3	11	12.2	13.5	5	18.2	164.8	2	DDZ	IDZ
SMLJ12CAHE3	12	13.3	14.7	5	19.9	150.6	2	DEE	IEE
SMLJ13CAHE3	13	14.4	15.9	5	21.5	139.4	2	DEG	IEG
SMLJ14CAHE3	14	15.6	17.2	5	23.2	129.4	2	DEK	IEK
SMLJ15CAHE3	15	16.7	18.5	5	24.4	123.0	2	DEM	IEM
SMLJ16CAHE3	16	17.8	19.7	5	26.0	115.4	2	DEP	IEP
SMLJ17CAHE3	17	18.9	20.9	5	27.6	106.6	2	DER	IER
SMLJ18CAHE3	18	20.0	22.1	5	29.2	102.8	2	DET	IET
SMLJ20CAHE3	20	22.2	24.5	5	32.4	92.6	2	DEV	IEV
SMLJ22CAHE3	22	24.4	26.9	5	35.5	84.4	2	DEX	IEX
SMLJ24CAHE3	24	26.7	29.5	5	38.9	77.2	2	DEZ	IEZ
SMLJ26CAHE3	26	28.9	31.9	5	42.1	71.2	2	DFE	IFE
SMLJ28CAHE3	28	31.1	34.4	5	45.4	66.0	2	DFG	IFG
SMLJ30CAHE3	30	33.3	36.8	5	48.4	62.0	2	DFK	IFK
SMLJ33CAHE3	33	36.7	40.6	5	53.3	56.2	2	DFM	IFM
SMLJ36CAHE3	36	40.0	44.2	5	58.1	51.6	2	DFP	IFP
SMLJ40CAHE3	40	44.4	49.1	5	64.5	46.4	2	DFR	IFR
SMLJ43CAHE3	43	47.8	52.8	5	69.4	43.2	2	DFT	IFT



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Ordering Information :

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

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