	E480232

Features

- AEC-Q101 Qualified
- For Surface Mount Application in Order to Optimize Board Space
- Built-in Strain Relief
- Glass Passivated Junction
- Excellent Clamping Capability
- Repetition Rate(duty cycle):0.5%
- Fast Response Time: Typical Less Than 1ps From 0V to BV Min
- Typical I_D Less Than 1μA above 10V
- High Temperature Soldering: 260°C/10 Seconds at Terminals
- Halogen Free. "Green" Device (Note 1)
- Moisture Sensitivity Level 1
- For Bidirectional Devices Add “C” To The Suffix of The Part Number: i.e.SMLJ10CAHE3A for 5% Tolerance
- 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: Color Band Denotes Positive End(Cathode) Except Bi-directional Types
- Weight: 0.007 ounce, 0.21 gram
- Manufacturing Code Added for Better Tracking
- Standard Packaging: 16mm Tape Per (EIA 481).
- Terminals: Solderable Per MIL-STD-750, Method 2026

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 17.5°C/W Junction to Lead
- Thermal Resistance: 75°C/W Junction to Ambient

Electrical Characteristics @ 25°C Unless Otherwise Specified

Peak Pulse Power Surge Current on 10/1000μs Waveform	I_{PPM}	See the Table	Note 3
Peak Pulse Power Dissipation on 10/1000μs Waveform	P_{PPM}	3000W(Min)	Note 3,4
Power Dissipationon infinite heat sink	P_D	6.5W	T_L = 50°C.
Peak Forward Surge Current	I_{FSM}	300A	8.3 ms Single Half Sine-Wave Unidirectional Only

Note: 1. Halogen free "Green” products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

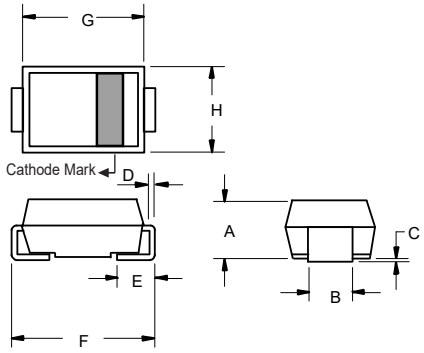
2. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.

3. Non-repetitive current pulse, per Fig.3 and derated above T_A=25 °C per Fig.4.

4. Mounted on 8.0mm^2 copper pads to each terminal.

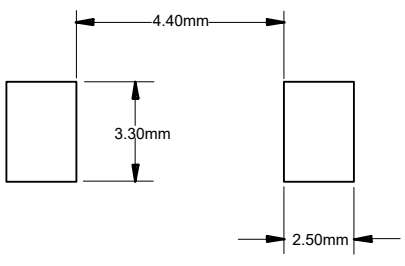
3000 Watt TVS
10 to 48 Volts

SMC (DO-214AB) (LEAD FRAME)



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.079	0.103	2.00	2.62	
B	0.108	0.128	2.75	3.25	
C	0.002	0.008	0.051	0.203	
D	0.006	0.012	0.152	0.305	
E	0.030	0.060	0.76	1.52	
F	0.305	0.320	7.75	8.13	
G	0.260	0.280	6.60	7.11	
H	0.220	0.245	5.59	6.22	

Suggested Solder Pad Layout



Electrical Characteristics @ 25°C Unless Otherwise Specified

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)	V_C(V)	I_{PP}(A)	I_D(μA)	
SMLJ10AHE3A	10	11.1	12.3	1	17.0	176.4	5	PDX
SMLJ11AHE3A	11	12.2	13.5	1	18.2	164.8	5	PDZ
SMLJ12AHE3A	12	13.3	14.7	1	19.9	150.6	2	PEE
SMLJ13AHE3A	13	14.4	15.9	1	21.5	139.4	2	PEG
SMLJ14AHE3A	14	15.6	17.2	1	23.2	129.4	1	PEK
SMLJ15AHE3A	15	16.7	18.5	1	24.4	123.0	1	PEM
SMLJ16AHE3A	16	17.8	19.7	1	26.0	115.4	1	PEP
SMLJ17AHE3A	17	18.9	20.9	1	27.6	106.6	1	PER
SMLJ18AHE3A	18	20.0	22.1	1	29.2	102.8	1	PET
SMLJ20AHE3A	20	22.2	24.5	1	32.4	92.6	1	PEV
SMLJ22AHE3A	22	24.4	26.9	1	35.5	84.4	1	PEX
SMLJ24AHE3A	24	26.7	29.5	1	38.9	77.2	1	PEZ
SMLJ26AHE3A	26	28.9	31.9	1	42.1	71.2	1	PFE
SMLJ28AHE3A	28	31.1	34.4	1	45.4	66.0	1	PFG
SMLJ30AHE3A	30	33.3	36.8	1	48.4	62.0	1	PFK
SMLJ33AHE3A	33	36.7	40.6	1	53.3	56.2	1	PFM
SMLJ36AHE3A	36	40.0	44.2	1	58.1	51.6	1	PFP
SMLJ40AHE3A	40	44.4	49.1	1	64.5	46.4	1	PFR
SMLJ43AHE3A	43	47.8	52.8	1	69.4	43.2	1	PFT
SMLJ45AHE3A	45	50	55.3	1	72.7	41.3	1	PFV
SMLJ48AHE3A	48	53.3	58.9	1	77.4	38.8	1	PFX
SMLJ10CAHE3A	10	11.1	12.3	1	17.0	176.4	5	DDX
SMLJ11CAHE3A	11	12.2	13.5	1	18.2	164.8	5	DDZ
SMLJ12CAHE3A	12	13.3	14.7	1	19.9	150.6	2	DEE
SMLJ13CAHE3A	13	14.4	15.9	1	21.5	139.4	2	DEG
SMLJ14CAHE3A	14	15.6	17.2	1	23.2	129.4	1	DEK
SMLJ15CAHE3A	15	16.7	18.5	1	24.4	123.0	1	DEM
SMLJ16CAHE3A	16	17.8	19.7	1	26.0	115.4	1	DEP
SMLJ17CAHE3A	17	18.9	20.9	1	27.6	106.6	1	DER
SMLJ18CAHE3A	18	20.0	22.1	1	29.2	102.8	1	DET
SMLJ20CAHE3A	20	22.2	24.5	1	32.4	92.6	1	DEV
SMLJ22CAHE3A	22	24.4	26.9	1	35.5	84.4	1	DEX
SMLJ24CAHE3A	24	26.7	29.5	1	38.9	77.2	1	DEZ
SMLJ26CAHE3A	26	28.9	31.9	1	42.1	71.2	1	DFE
SMLJ28CAHE3A	28	31.1	34.4	1	45.4	66.0	1	DFG
SMLJ30CAHE3A	30	33.3	36.8	1	48.4	62.0	1	DFK
SMLJ33CAHE3A	33	36.7	40.6	1	53.3	56.2	1	DFM
SMLJ36CAHE3A	36	40.0	44.2	1	58.1	51.6	1	DFP
SMLJ40CAHE3A	40	44.4	49.1	1	64.5	46.4	1	DFR
SMLJ43CAHE3A	43	47.8	52.8	1	69.4	43.2	1	DFT
SMLJ45CAHE3A	45	50	55.3	1	72.7	41.3	1	DFV
SMLJ48CAHE3A	48	53.3	58.9	1	77.4	38.8	1	DFX

Curve Characteristics

Fig. 1 - Peak Pulse Power Rating Curve

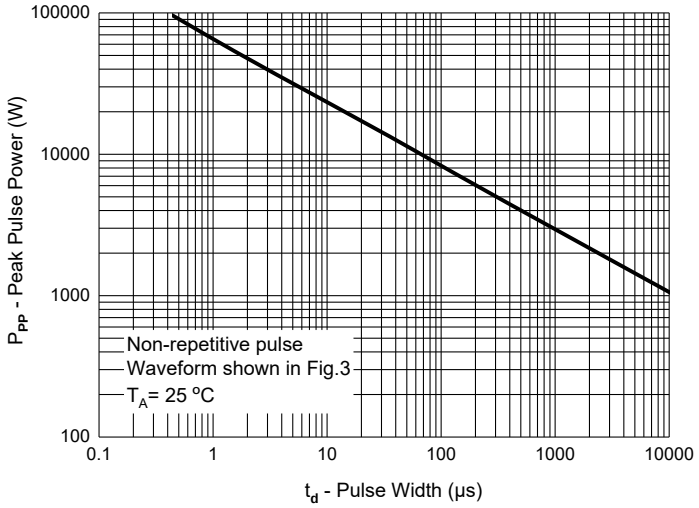


Fig. 2 - Typical Junction Capacitance

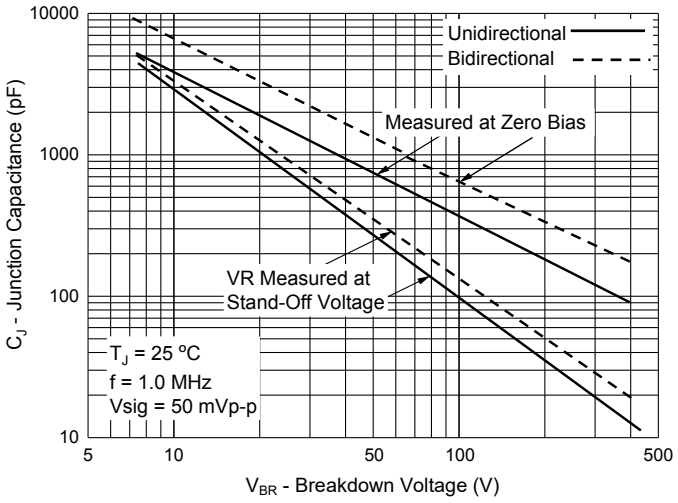


Fig. 3 - Pulse Waveform

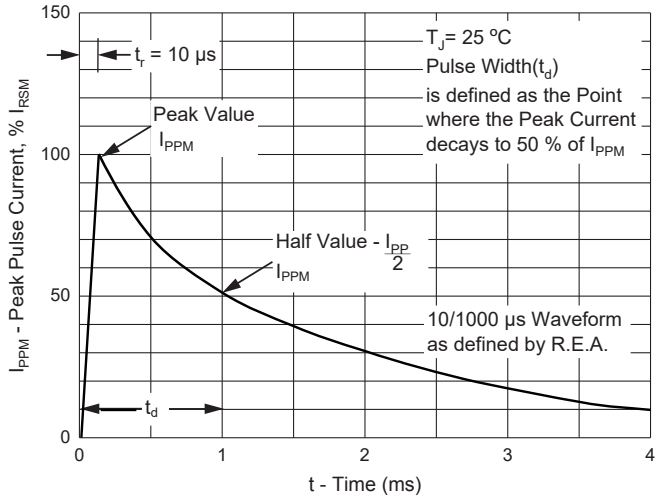


Fig. 4 - Pulse Derating Curve

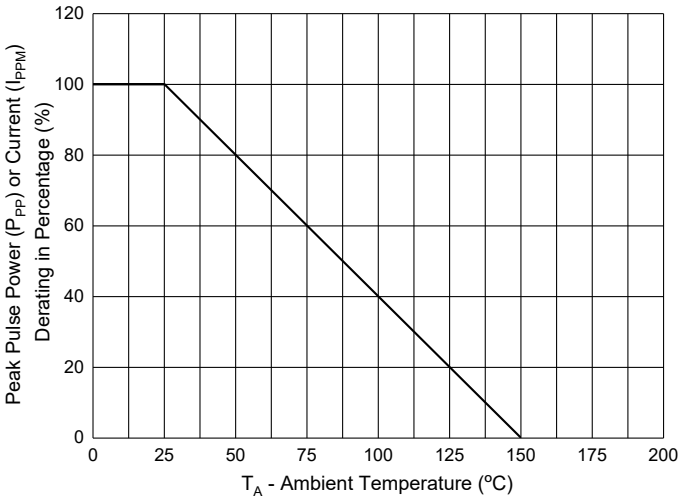
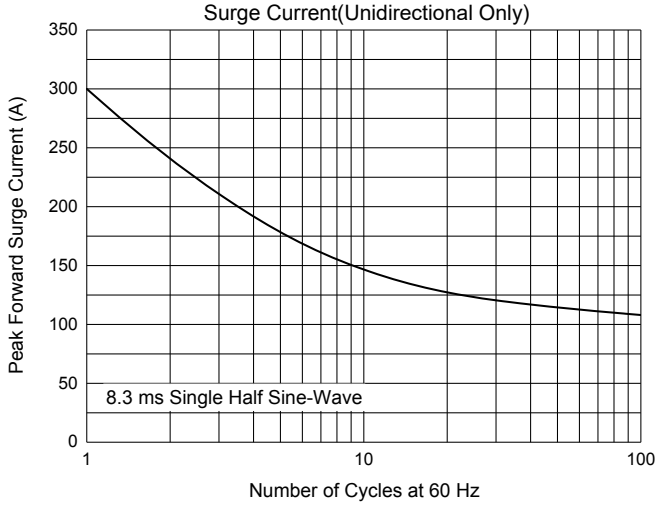


Fig. 5 - Maximum Non-Repetitive Peak Forward Surge Current(Unidirectional Only)



Ordering Information

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