

SMA6J15A

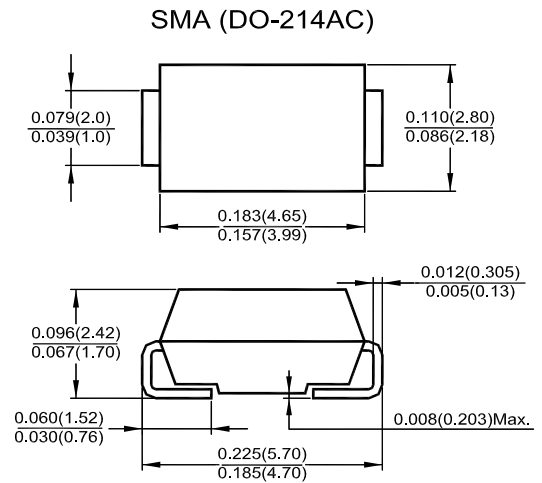
Surface Mount Transient Voltage Suppressors

Features

- Plastic package has UL Flammability Classification 94V-0
- Very fast reponse time

Mechanical Data

- Case: DO-214AC (SMA) molded plastic
- Polarity: Color band denotes cathode end except Bipolar
- Mounting Position: Any
- Marking Code: 15A



Dimensions in inches and (millimeters)

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power Dissipation with a 10/1000 μs Waveform ¹⁾	P_{PPM}	Minimum 600	W
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method) ²⁾	I_{FSM}	100	A
Maximum Instantaneous Forward Voltage (Unidirectional only) at 50 A	V_F	3.5	V
Operating Junction and Storage Temperature Range	T_j, T_{stg}	- 55 to + 150	$^\circ\text{C}$

¹⁾ Non-repetitive current pulse and derated above $T_a = 25^\circ\text{C}$.

²⁾ Mounted on copper lead area at 5 mm² (0.013 mm thick).

Electrical Characteristics ($T_a = 25^\circ\text{C}$ unless otherwise specified)

Type	I_R Max at V_{RM}			V_{BR} at I_R ¹⁾			V_{CL} at IPP 10/1000 μs		R_D ²⁾ 10/1000 μs	V_{CL} at IPP 8/20 μs		R_D ²⁾ 8/20 μs	αT ³⁾
	25 $^\circ\text{C}$	85 $^\circ\text{C}$		Min.	Max.		Max.			Max.			
	μA		V	V		mA	V	A	Ω	V	A	Ω	10-4/ $^\circ\text{C}$
SMA6J15A	0.2	1	15	16.7	18.5	1	23.6	25.1	0.206	27.7	123	0.075	8.8

¹⁾ Pulse test: $t_p < 50\text{ms}$.

²⁾ To calculate maximum clamping voltage at other surge currents, use the following formula: $V_{CLMax} = R_D \times I_{PP} + V_{BRMax}$.

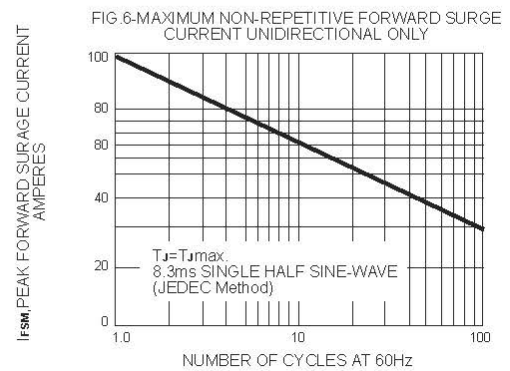
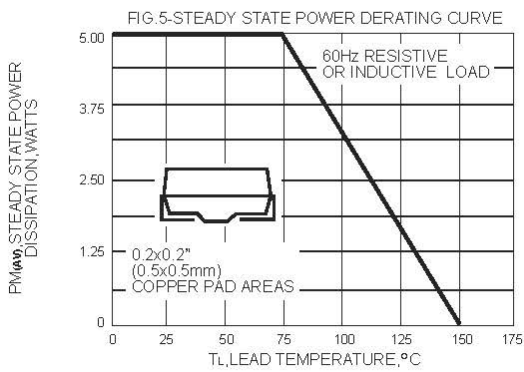
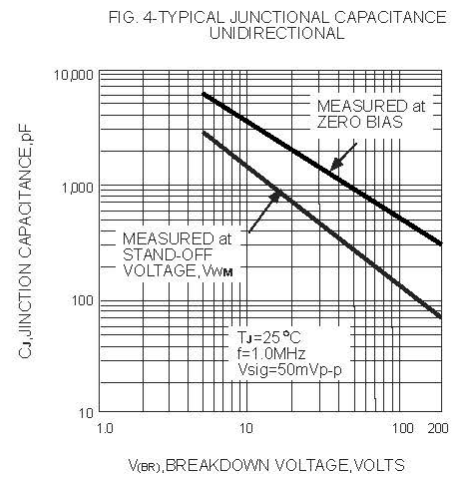
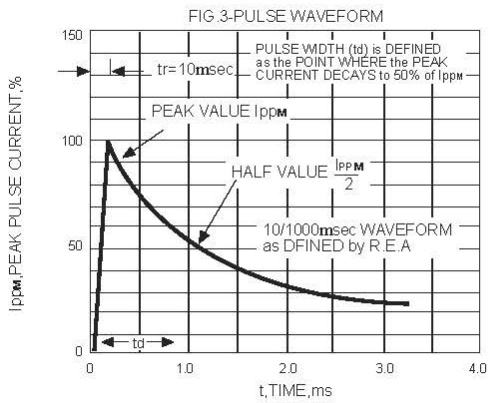
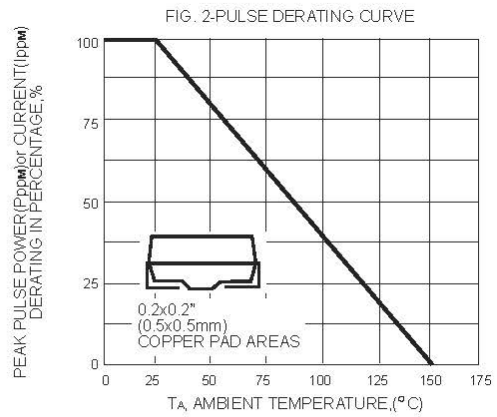
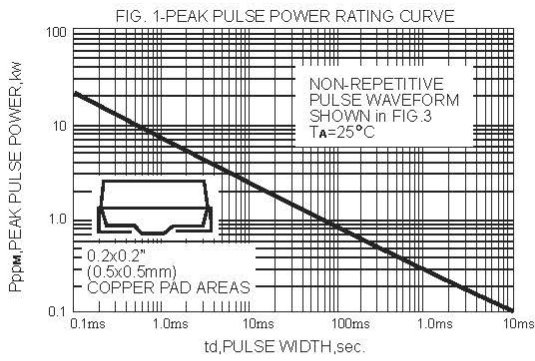
³⁾ To calculate V_{BR} versus junction temperature, use the following formula: V_{BR} at $T_j = V_{BR}$ at 25 $^\circ\text{C}$ X (1 + αT x ($T_j - 25$)).

TOP DYNAMIC



Dated : 30/06/2016 CG Rev: 02

SMA6J15A



TOP DYNAMIC



ISO14001 : 2004 Certificate No. 121505007
 ISO 9001 : 2008 Certificate No. 50114012
 OHSAS 18001 : 2007 Certificate No. 05191506008
 IECQ QC 080000 Certificate No. BSM10007AUM2

Dated : 30/06/2016 CG Rev: 02