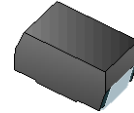


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Low Profile Package
- Ideal For Automated Placements
- Guard Ring for Over Voltage Protection
- Low Forward Voltage Drop

SMA



MECHANICAL DATA

- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Terminals: Lead free plating (Tin finish)
Solderable per MIL-STD-202, Method 208
- Polarity: Cathode band

PACKAGE INFORMATION

Package	MPQ	Leader Size
SMA	5K	13 inch

ORDER INFORMATION

Part Number	Type
SM540A-C	Lead (Pb)-free and Halogen-free

Cathode  —  Anode

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, de-rate current by 20%.)

Parameter	Symbol	Ratings	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	40	V
Maximum RMS Voltage	V_{RMS}	28	V
Maximum DC Blocking Voltage	V_{DC}	40	V
Average Rectified Output Current @ $T_L=100^\circ\text{C}$	I_F	5	A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	110	A
Forward Voltage @ $I_F=5\text{A}$	V_F	0.53	V
Peak Reverse Current @Rated DC Blocking Voltage	I_R	$T_A=25^\circ\text{C}$	0.1
		$T_A=100^\circ\text{C}$	10
Typical Junction Capacitance ¹	C_J	200	pF
Typical Thermal Resistance from Junction-Ambient ²	$R_{\theta JA}$	101	°C/W
Typical Thermal Resistance from Junction-Case ²	$R_{\theta JC}$	25	
Typical Thermal Resistance from Junction-Lead ²	$R_{\theta JL}$	17	
Operating & Storage Temperature	T_J, T_{STG}	-55~150	°C

Notes:

1. Measured at 1MHz and Applied Reverse Voltage of 4V D.C.
2. Device mounted on FR-4 substrate, 1"x1", 2oz, single-sided, PC boards with 0.1"x0.15" copper pad.

RATINGS AND CHARACTERISTIC CURVES

Fig. 1 Forward Current Derating Curve

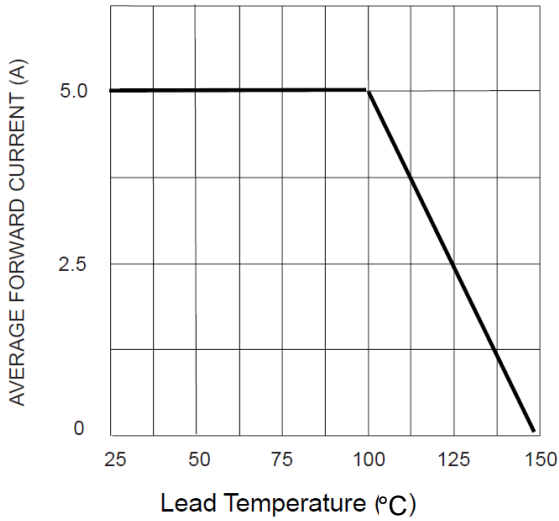


Fig. 2 Typ. Forward Characteristics

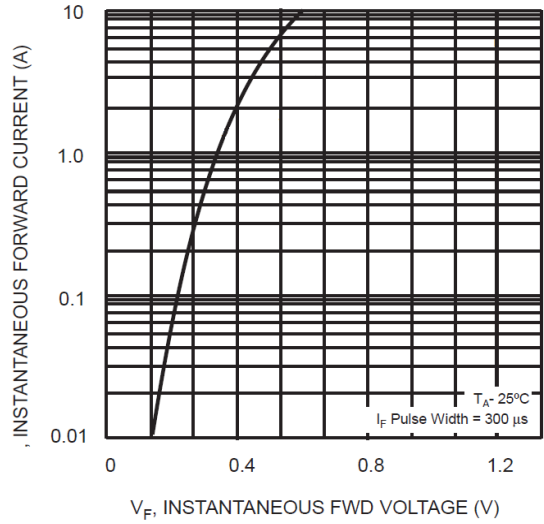


Fig. 3 Max Non-Repetitive Peak Forward Surge Current

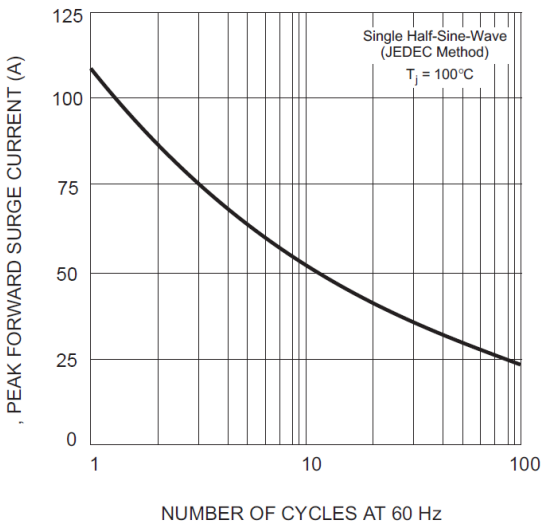
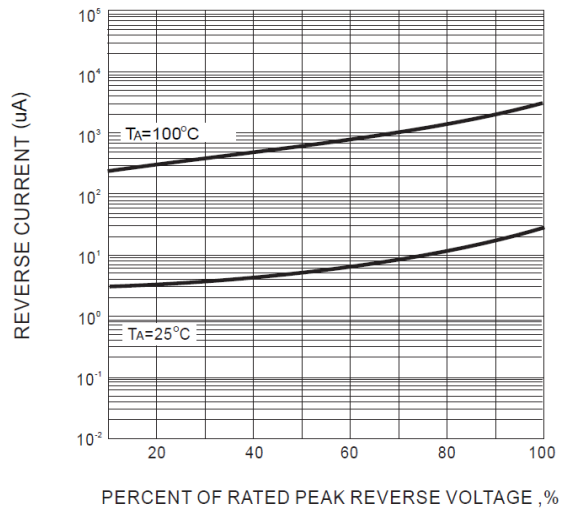
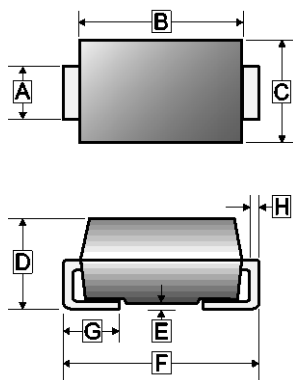


Fig. 4 Typical Reverse Characteristic



PACKAGE OUTLINE DIMENSIONS

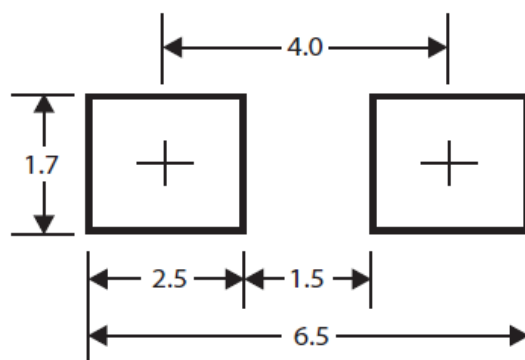
SMA



REF.	Millimeter	
	Min.	Max.
A	1.23	1.65
B	3.99	4.75
C	2.30	2.90
D	1.90	2.62
E	-	0.30
F	4.70	5.28
G	0.75	1.52
H	0.15	0.31

MOUNTING PAD LAYOUT

SMA



*Dimensions in millimeters