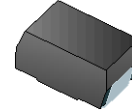


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Ideal For Surface Mount Applications
- Easy Pick and Place
- Built-In Strain Relief
- Low Forward Voltage Drop

SMA



MECHANICAL DATA

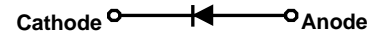
- Metallurgically bonded construction
- Polarity: Color band denotes cathode end
- Case: Molded plastic
- Epoxy: UL94-V0 rate flame retardant

PACKAGE INFORMATION

Package	MPQ	Leader Size
SMA	5K	13 inch

ORDER INFORMATION

Part Number	Type
SM120A-C~SM1100A-C	Lead (Pb)-free and Halogen-free



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Parameters	Symbol	Part Number				Unit
		SM120A-C	SM140A-C	SM160A-C	SM1100A-C	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	40	60	100	V
Maximum RMS Voltage	V_{RMS}	14	28	42	70	
Working DC Blocking Voltage	V_{DC}	20	40	60	100	
Average Rectified Output Current @ $T_L=100^\circ C$	I_o	1				A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	35				A
Forward Voltage @ $I_F=1A$	V_F	0.50		0.67	0.82	V
Peak Reverse Current @Rated DC Blocking Voltage	$T_A=25^\circ C$	0.1			0.05	mA
	$T_A=100^\circ C$	10			5	
Typical Junction Capacitance ¹	C_J	50			35	pF
Thermal Resistance Junction-Lead ²	$R_{\theta JL}$	75				$^\circ C/W$
Operating Temperature Range	T_J	-50~150				$^\circ C$
Storage Temperature Range	T_{STG}	-50~150				

Notes:

1. Measured at 1MHz and applied reverse voltage of 4V D.C.
2. Device mounted on FR-4 substrate, 1" x 1", 2oz, single-sided, PC boards with 0.1" x 0.15" copper pad.

RATINGS AND CHARACTERISTIC CURVES

Fig. 1 Forward Current Derating Curve

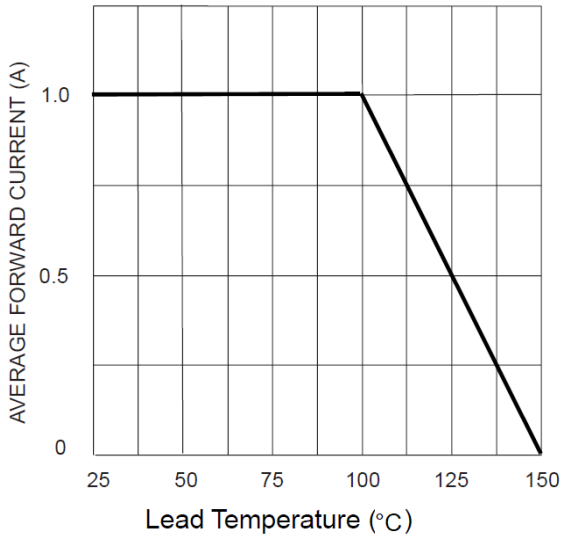


Fig. 2 Typ. Forward Characteristics

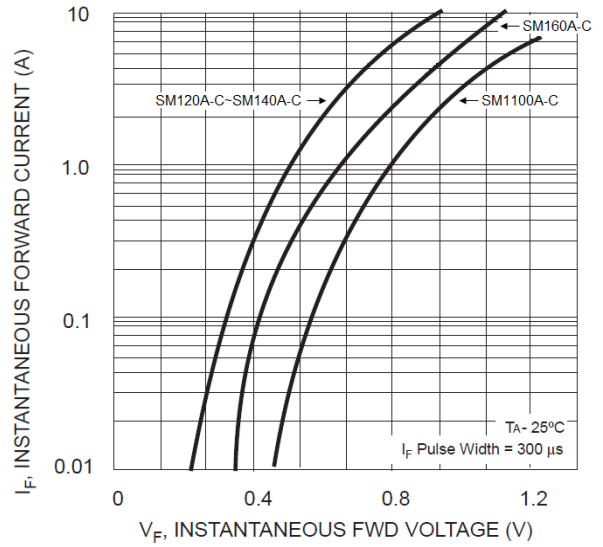


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

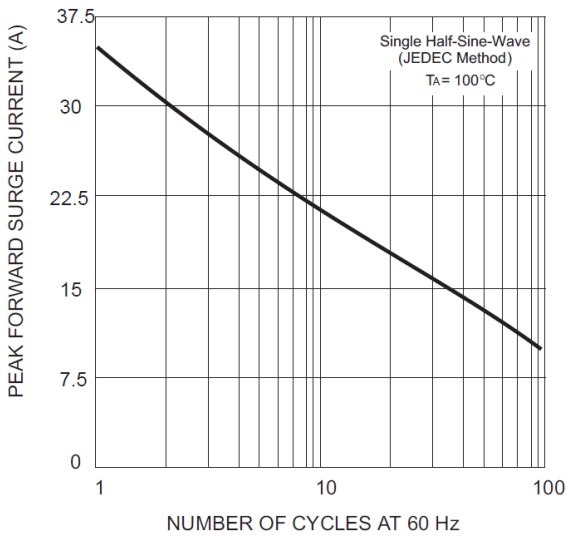
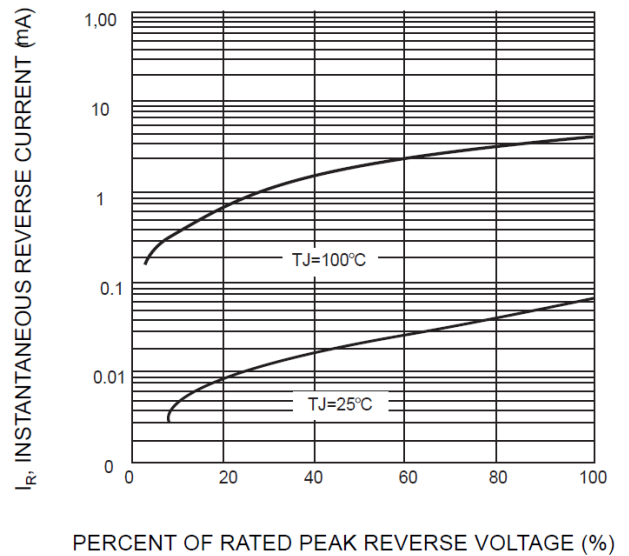
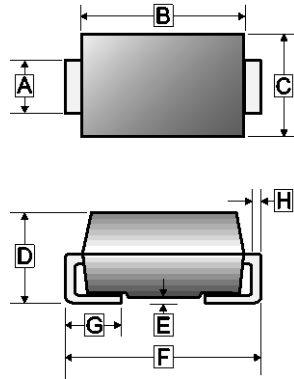


Fig. 4 Typical Reverse Characteristics (per element)



PACKAGE OUTLINE DIMENSIONS

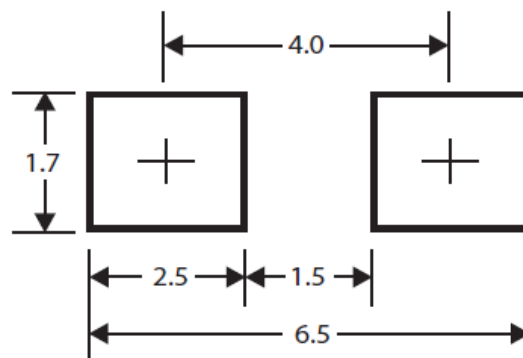
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REF.	Millimeter	
	Min.	Max.
A	1.23	1.65
B	3.99	4.75
C	2.30	2.90
D	1.90	2.62
E	-	0.30
F	4.70	5.28
G	0.75	1.52
H	0.15	0.31

MOUNTING PAD LAYOUT

SMA



*Dimensions in millimeters