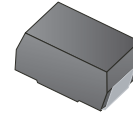


RoHS Compliant Product
A suffix of "-C" specifies halogen-free

FEATURES

- For surface mounted applications
- Low profile package
- Glass Passivated Chip Junction
- Fast reverse recovery time

SMA



MECHANICAL DATA

- Case: SMA
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band

PACKAGE INFORMATION

Package	MPQ	Leader Size
SMA	5K	13 inch

ORDER INFORMATION

Part Number	Type
SMF101AR-C~SMF107AR-C	Lead (Pb)-free and Halogen-free



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	Part Number							Unit
		SMF 101AR-C	SMF 102AR-C	SMF 103AR-C	SMF 104AR-C	SMF 105AR-C	SMF 106AR-C	SMF 107AR-C	
Marking		RS1A	RS1B	RS1D	RS1G	RS1J	RS1K	RS1M	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	
Maximum Average Forward Rectified Current	I_F $T_C=125^\circ C$	1							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30							A
Maximum Instantaneous Forward Voltage @1A	V_F	1.3							V
Maximum DC Reverse Current @Rated DC Blocking Voltage	I_R $T_A=25^\circ C$	5							μA
	$T_A=125^\circ C$	50							
Typical Junction Capacitance ¹	C_J	15							pF
Maximum Reverse Recovery Time ²	T_{RR}	150			250	500		nS	
Thermal Resistance, Junction-Ambient ³	$R_{\theta JA}$	75							$^\circ C/W$
Operating & Storage Temperature Range	T_J, T_{STG}	-55~150							$^\circ C$

Notes:

1. Measured at 1MHz and applied reverse voltage of 4V D.C.
2. Measured with $I_F=0.5A$, $I_R=1A$, $I_{RR}=0.25A$.
3. P.C.B. mounted with 1.0 x 1.0" (2.54 x 2.54 cm) copper pad areas.

CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

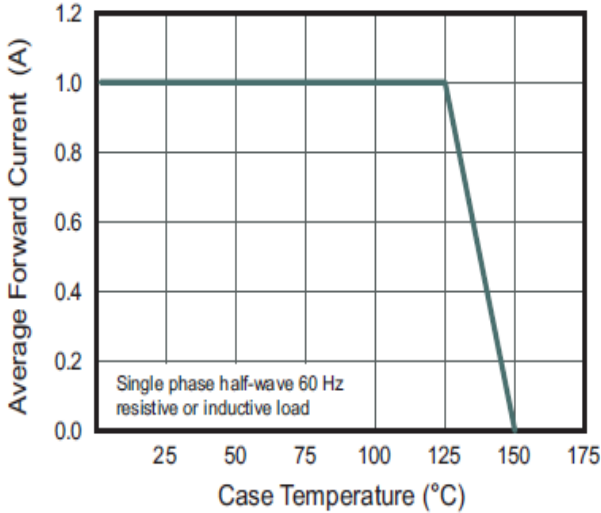


Fig.2 Typical Reverse Characteristics

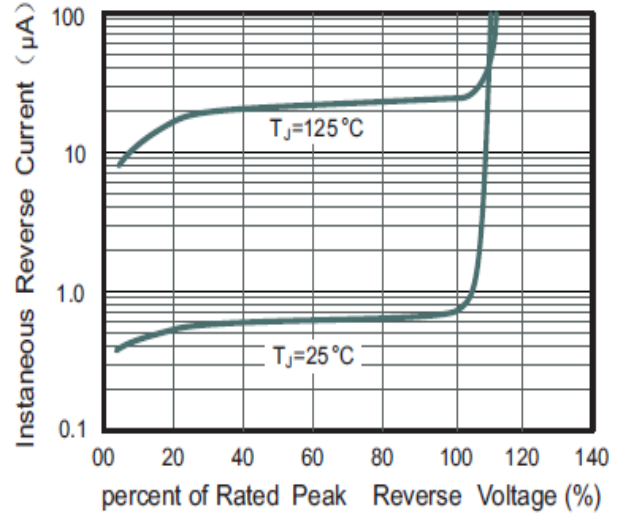


Fig.3 Typical Instantaneous Forward Characteristics

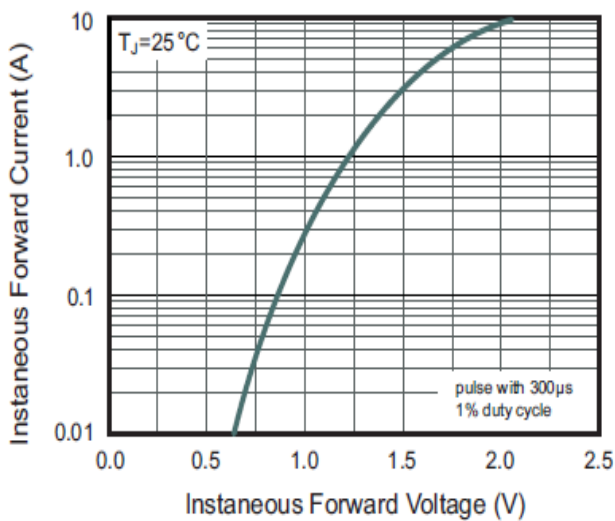


Fig.4 Typical Junction Capacitance

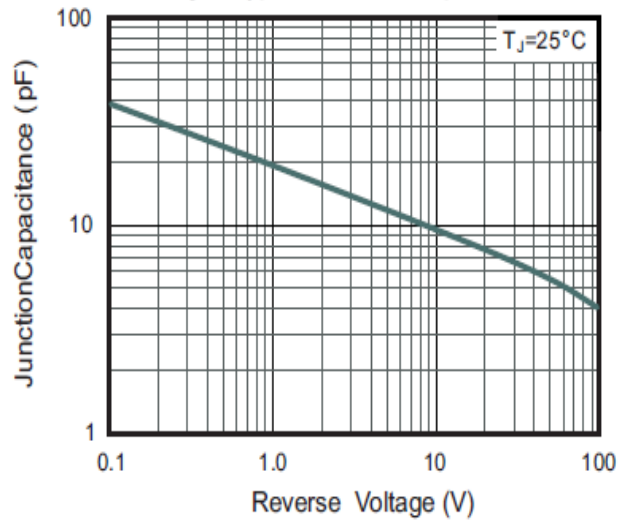
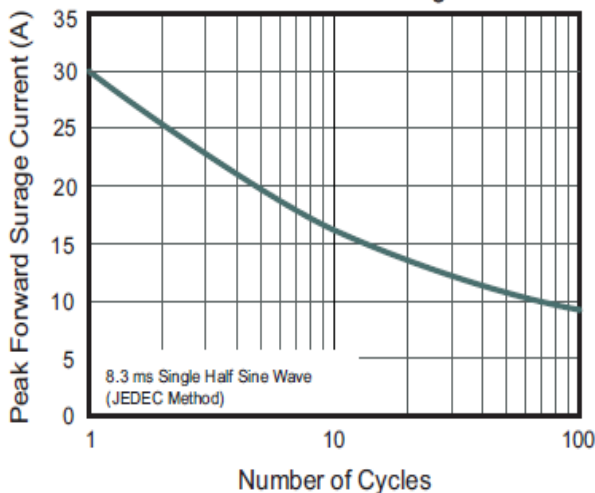
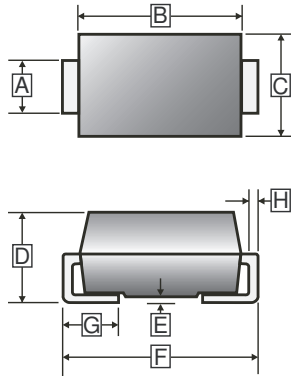


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



PACKAGE OUTLINE DIMENSIONS

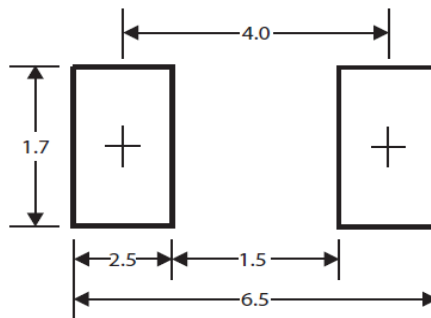
SMA



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