

RoHS Compliant Product

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

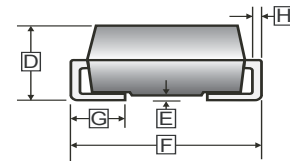
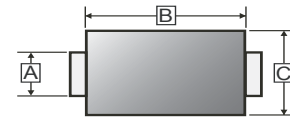
## FEATURES

- Surface mount device
- High surge current capability
- Low reverse current
- Component in accordance to RoHS 2002/95/EC

## MECHANICAL DATA

- Cases : DO-214AC(SMA)
- 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
- Weight : 0.064 grams(approximate)

SMA



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.24	1.65	E	-	0.203
B	3.99	4.60	F	4.80	5.28
C	2.40	2.90	G	0.76	1.52
D	1.90	2.44	H	0.15	0.305

## PACKAGE INFORMATION

Package	MPQ	Leader Size
SMA	5K	13 inch

## 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 101A	SMF 102A	SMF 103A	SMF 104A	SMF 105A	SMF 106A	SMF 107A	
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	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum average forward rectified current $T_A=55^\circ\text{C}$	$I_F$	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 at Rated DC Blocking Voltage	$T_J=25^\circ\text{C}$	5							$\mu\text{A}$
	$T_J=125^\circ\text{C}$	100							
Typical Junction Capacitance <sup>1</sup>	$C_J$	15							pF
Maximum Reverse Recovery Time <sup>2</sup>	$T_{rr}$	150			250		500		ns
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	105							$^\circ\text{C/W}$
Thermal Resistance, Junction to Lead	$R_{\theta JL}$	32							$^\circ\text{C/W}$
Storage and Operating Temperature Range	$T_{STG}, T_J$	-55 ~ 150							$^\circ\text{C}$

NOTES:

1. Measured at 1.0MHz and applied reverse voltage of 4.0V D.C.
2. Measured with  $I_F=0.5\text{A}$ ,  $I_R=1\text{A}$ ,  $I_{RR}=0.25\text{A}$

**CHARACTERISTIC CURVES**

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

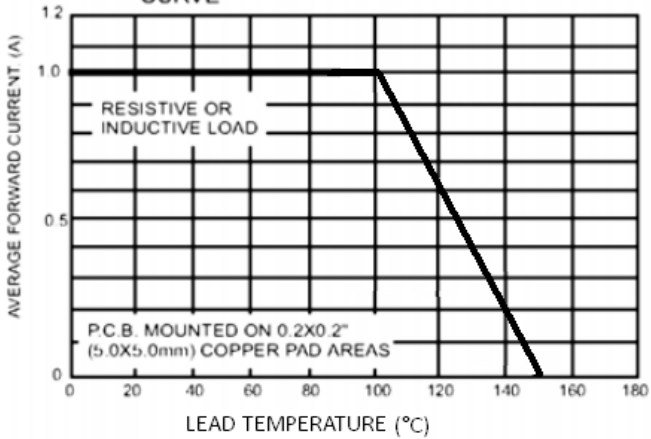


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

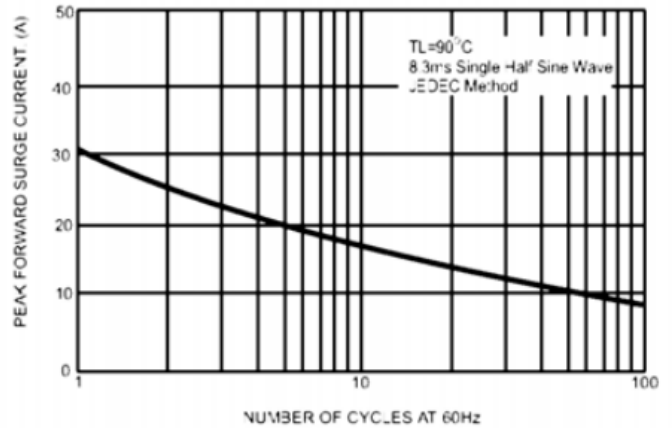


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

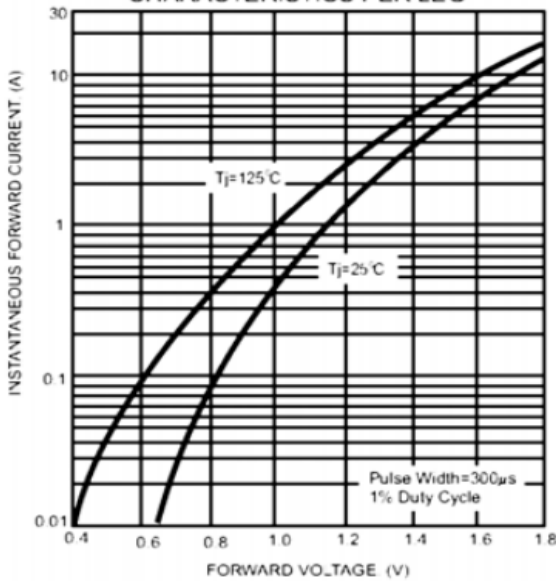


FIG.4- TYPICAL REVERSE CHARACTERISTICS

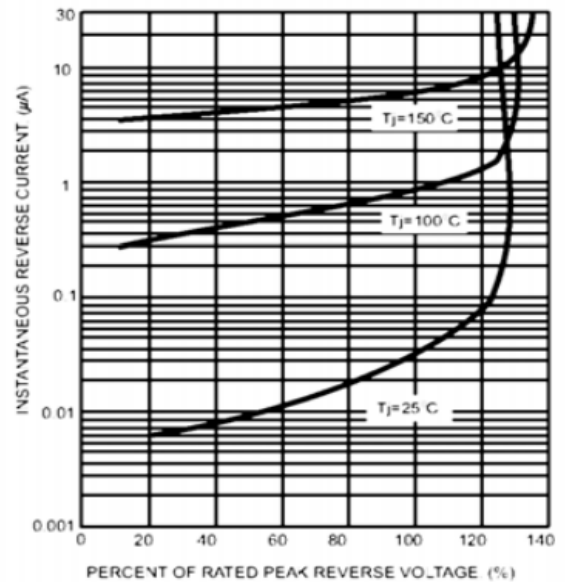


FIG.5- TYPICAL JUNCTION CAPACITANCE

