

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

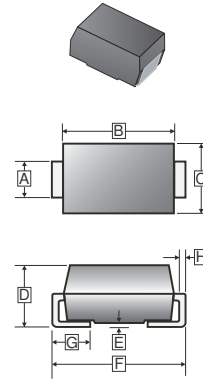
### FEATURES

- Glass Passivated Junction
- Surface mount device
- High surge current capability
- Low reverse current
- Qualified to AEC-Q101 standards for high reliability

### 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

### SMA



### PACKAGE INFORMATION

Package	MPQ	Leader Size
SMA	5K	13 inch

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.23	1.65	E	-	0.3
B	3.99	4.75	F	4.70	5.28
C	2.30	2.90	G	0.75	1.52
D	1.90	2.62	H	0.15	0.31

### ORDER INFORMATION

Part Number	Type
SEF101ACR-C~SEF107ACR-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
		SEF101 ACR-C	SEF102 ACR-C	SEF103 ACR-C	SEF104 ACR-C	SEF105 ACR-C	SEF106 ACR-C	SEF107 ACR-C	
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 @ $T_A=55^\circ\text{C}$	$I_F$	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		1.3	1.5	1.7		V	
Maximum DC Reverse Current @Rated DC Blocking Voltage	$T_A=25^\circ\text{C}$	5							$\mu\text{A}$
	$T_A=100^\circ\text{C}$	100							
Typical Junction Capacitance <sup>1</sup>	$C_J$	20				15			pF
Maximum Reverse Recovery Time <sup>2</sup>	$T_{RR}$	50				75			nS
Thermal Resistance from Junction-Ambient	$R_{\theta JA}$	55							$^\circ\text{C}/\text{W}$
Operating Junction and Storage Temperature	$T_J, T_{STG}$	-55~150							$^\circ\text{C}$

Notes:

1. Measured at 1MHz and applied reverse voltage of 4V D.C.
2. Measured with  $I_F=0.5\text{A}$ ,  $I_R=1\text{A}$ ,  $I_{RR}=0.25\text{A}$ .

**RATINGS AND CHARACTERISTIC CURVES**

FIG.1 - FORWARD CURRENT DERATING CURVE

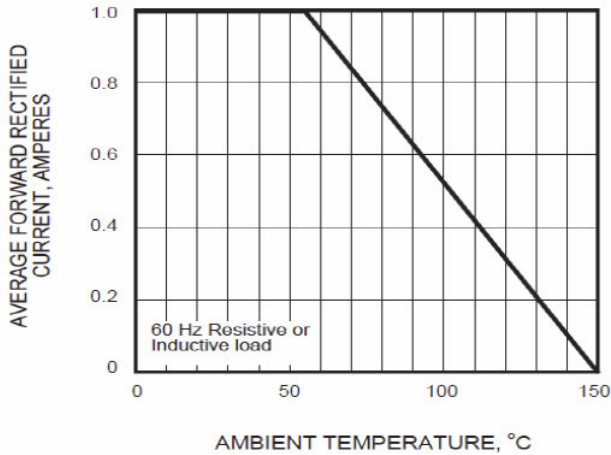


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

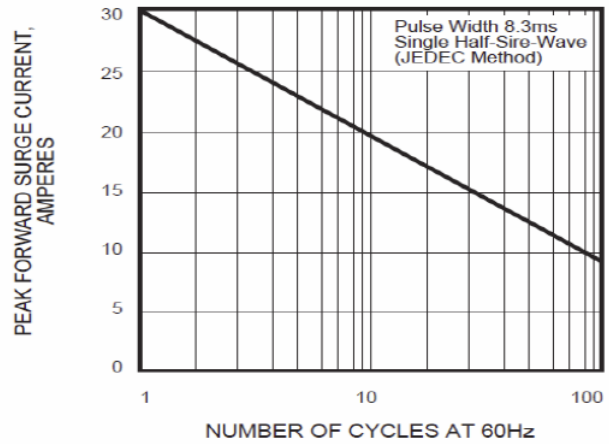


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

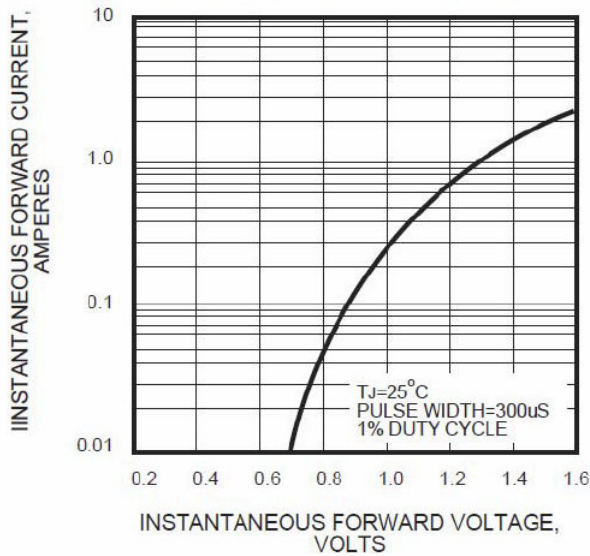


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

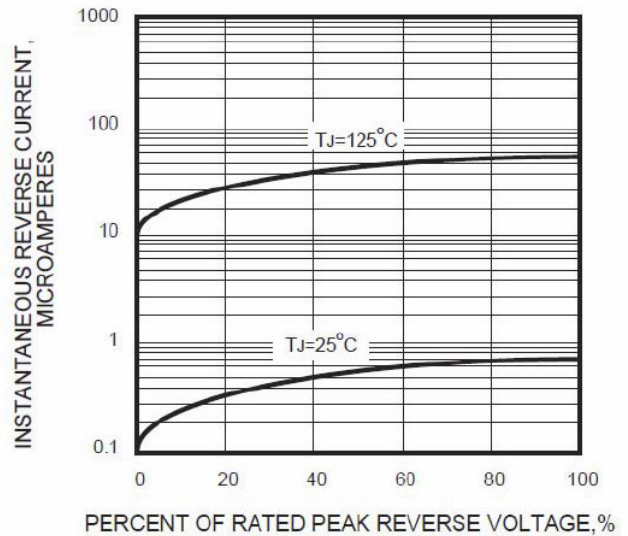


FIG.5 - TYPICAL JUNCTION CAPACITANCE

