

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

FEATURES

- High Current Capability
- 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

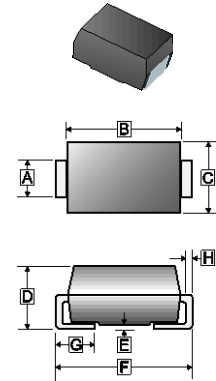
PACKAGE INFORMATION

Package	MPQ	Leader Size
SMA	5K	13 inch

ORDER INFORMATION

Part Number	Type
SUF101ACR-C~SUF105ACR-C	Lead (Pb)-free and Halogen-free

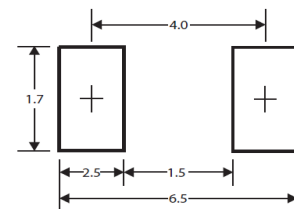
SMA



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

Cathode  Anode

Mounting Pad Layout



*Dimensions in millimeters

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
		SUF 101A-C	SUF 102A-C	SUF 103A-C	SUF 104A-C	SUF 105A-C	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	V
Maximum Average Forward Rectified Current	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 $I_F=1A @25^{\circ}C$	V_F	0.98		1.3	1.7	V	
Maximum DC Reverse Current @ Rated DC Blocking Voltage	$T_A=25^{\circ}C$	5					μA
	$T_A=100^{\circ}C$	100					
Typical Junction Capacitance ¹	C_J	20					pF
Maximum Reverse Recovery Time ²	T_{RR}	35					nS
Typical Thermal Resistance	$R_{\theta JC}$	60					$^{\circ}C/W$
Operating & Storage Temperature	T_J, T_{STG}	-55~150					$^{\circ}C$

Notes:

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

RATINGS AND CHARACTERISTIC CURVES

FIG. 1-Typical Forward Current Derating Curve

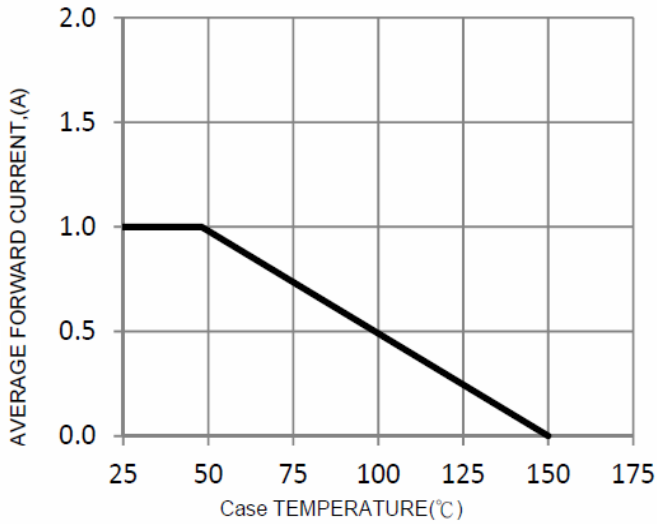


FIG. 2-Typical Forward Characteristics

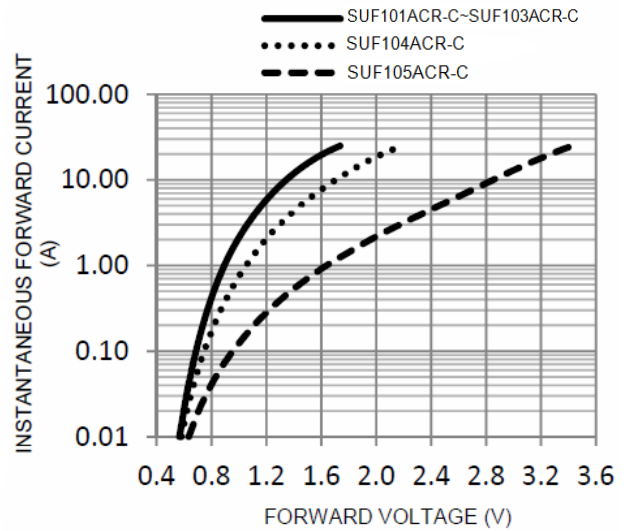


FIG. 3-Maximum Non-Repetitive Forward Surge Current

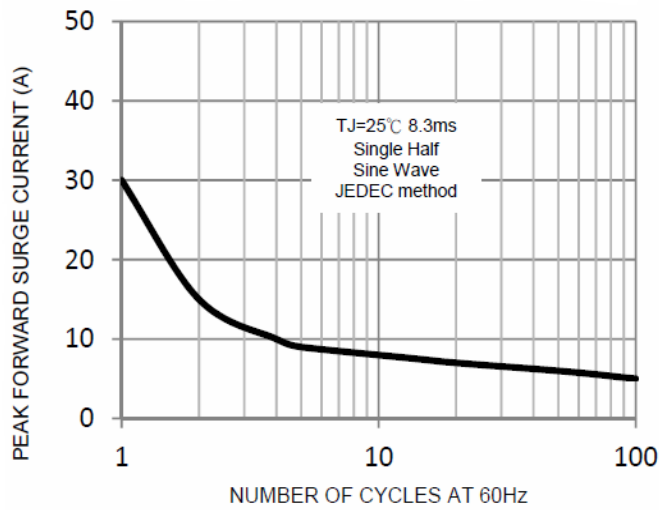


FIG. 4-Typical Reverse Characteristics

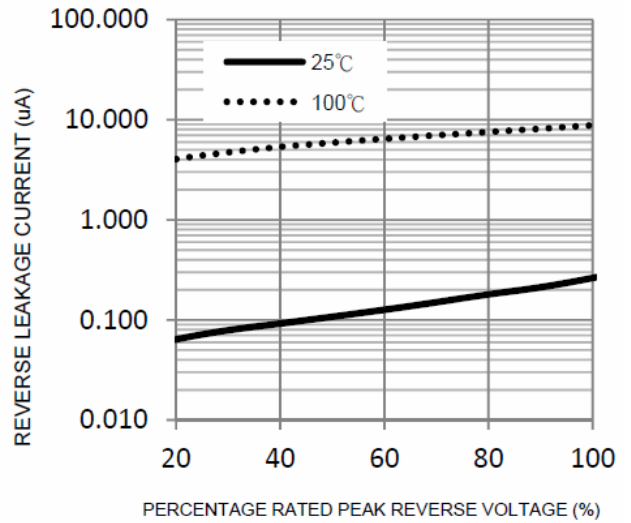


FIG. 5-Typical Junction Capacitance

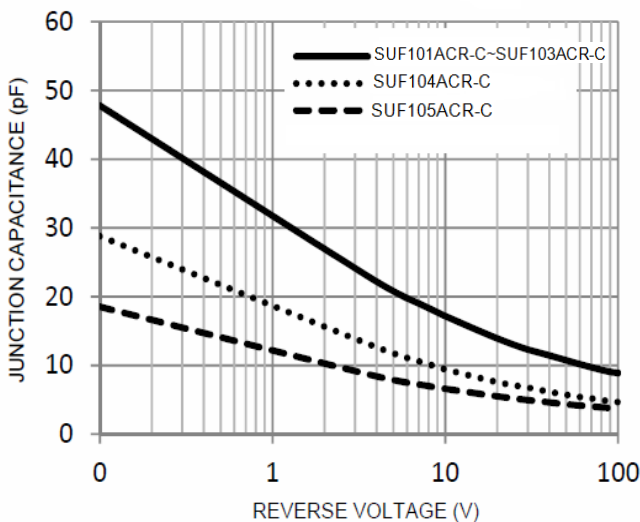


FIG. 6-Reverse Recovery Time Characteristic and Test Circuit

