

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

## FEATURES

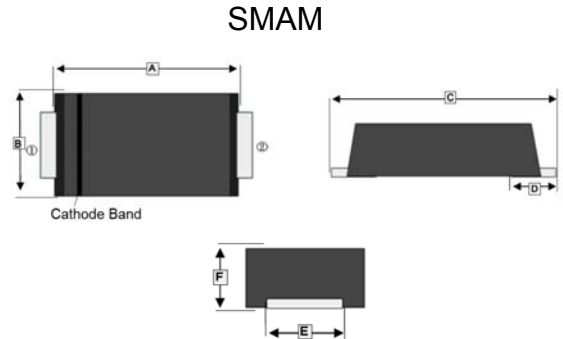
- Low profile package
- Glass Passivated Chip Junction
- Low reverse current
- Lead free in comply with EU RoHS 2011/65/EU directives

## MECHANICAL DATA

- Case : SMAM
- Terminals: Solderable per MIL-STD-750, Method 2026
- Weight: 27 mg (Approximate)

## MARKING

Part Number	Marking Code	Part Number	Marking Code
SUF101AM	ES1A	SUF104AM	ES1G
SUF102AM	ES1B	SUF105AM	ES1J
SUF103AM	ES1D		



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	3.20	3.70	D	1 TYP.	
B	2.40	2.80	E	1.30	1.60
C	4.40	4.90	F	0.90	1.20

## PACKAGE INFORMATION

Package	MPQ	Leader Size
SMAM	3K	7 inch

## ABSOLUTE MAXIMUM RATINGS

(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%.)

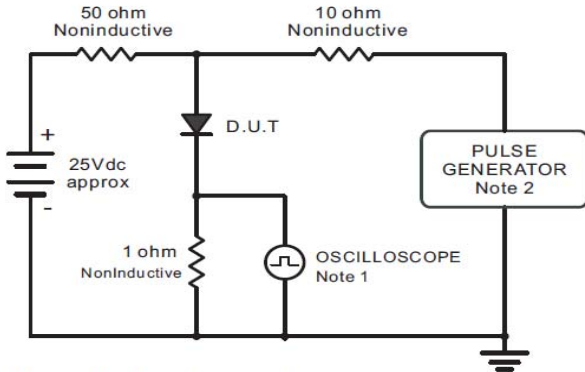
Parameter	Symbol	Part Number					Unit
		SUF101AM	SUF102AM	SUF103AM	SUF104AM	SUF105AM	
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	V
Maximum Average Forward Rectified Current	$I_F$	1					A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	30					A
Maximum Instantaneous Forward Voltage $I_F=1A @ 25^\circ C$	$V_F$	1		1.25	1.7	V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A=25^\circ C$	5					$\mu A$
	$T_A=125^\circ C$	100					
Maximum Reverse Recovery Time <sup>1</sup>	$T_{RR}$	35					nS
Typical Junction Capacitance <sup>3</sup>	$C_J$	10					pF
Typical Thermal Resistance <sup>2</sup>	$R_{\theta JL}$	22					$^\circ C/W$
Typical Thermal Resistance <sup>2</sup>	$R_{\theta JC}$	30					$^\circ C/W$
Operating & Storage Temperature	$T_J, T_{STG}$	-55~ 150					$^\circ C$

### Notes:

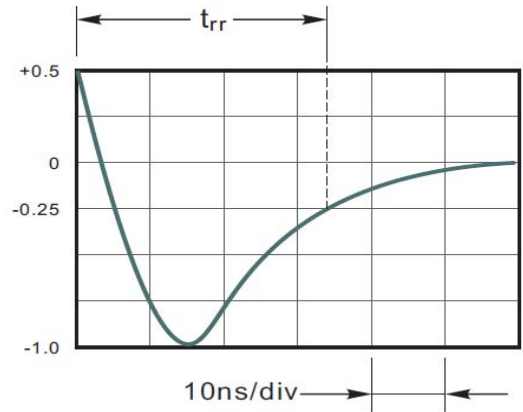
1. Measured with  $I_F=0.5A, I_R=1A, I_{RR}=0.25A$
2. P.C.B. mounted with 10 X 10 x 0.2 mm copper pad areas.
3. Measured at 1 MHz and applied reverse voltage of 4 V D.C

**RATINGS AND CHARACTERISTIC CURVES**

**Fig.1 Reverse Recovery Time Characteristic And Test Circuit Diagram**

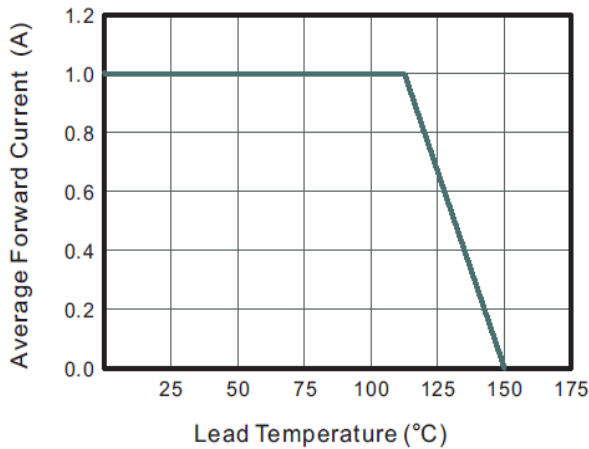


Note: 1. Rise Time = 7ns, max.  
Input Impedance = 1megohm, 22pF.  
2. Rise Time = 10ns, max.  
Source Impedance = 50 ohms.

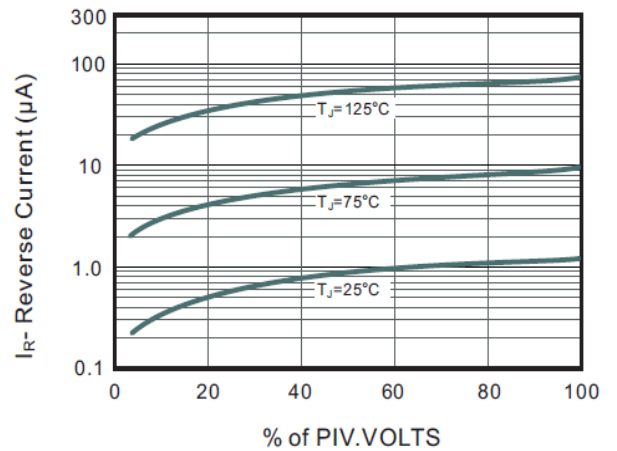


Set time Base for 10ns/div

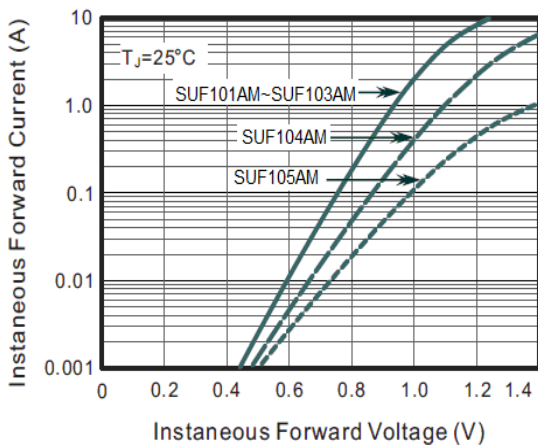
**Fig.2 Maximum Average Forward Current Rating**



**Fig.3 Typical Reverse Characteristics**



**Fig.4 Typical Forward Characteristics**



**Fig.5 Typical Junction Capacitance**

