

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

## FEATURES

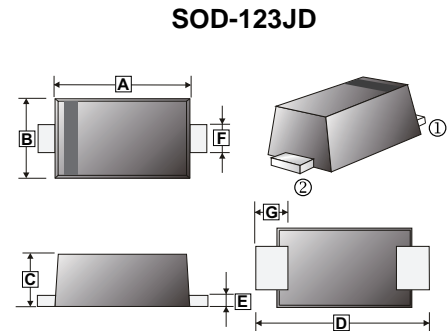
- Low forward surge current
- Ideal for surface mounted applications
- Low leakage current

## MECHANICAL DATA

- Case: JEDEC SOD-123JD
- Terminals: Solder Plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end

## MARKING

Part Number	Marking Code	Part Number	Marking Code
SUF201JD	E2L	SUF204JD	E2M
SUF202JD		SUF205JD	E2H
SUF203JD			



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.6	2.9	E	0.1	0.2
B	1.7	1.9	F	0.8	1.1
C	0.9	1.1	G	0.7	0.9
D	3.5	3.8			

## PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-123JD	3K	7' 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%.)

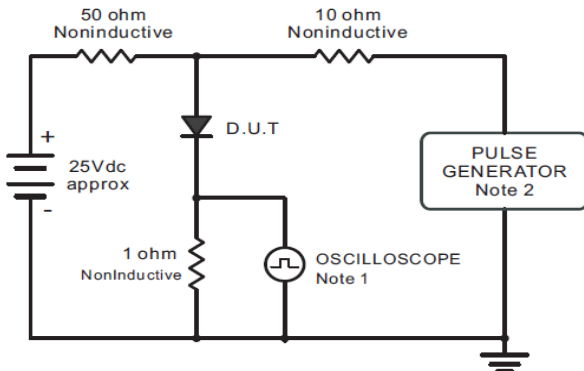
Parameter	Symbol	Part Number					Unit
		SUF201JD	SUF202JD	SUF203JD	SUF204JD	SUF205JD	
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	V
Maximum Average Forward Rectified Current	$I_F$	2					A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	50					A
Maximum Instantaneous Forward Voltage $I_F=2A @ 25^\circ C$	$V_F$	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>	$C_J$	62					pF
Typical Thermal Resistance <sup>2</sup>	$R_{\theta JL}$	20					°C/W
Typical Thermal Resistance <sup>2</sup>	$R_{\theta JC}$	40					°C/W
Operating & Storage Temperature	$T_J, T_{STG}$	-55~ 150					°C

### Notes :

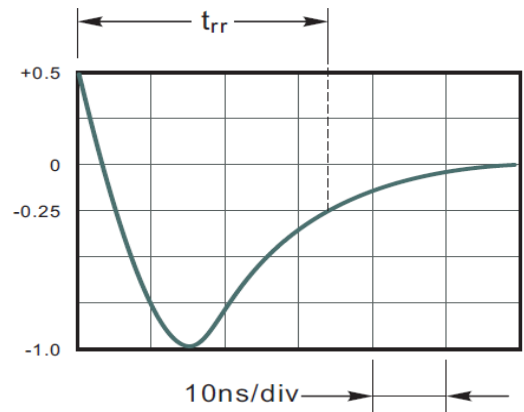
1. Measured with  $I_F=0.5A, I_R=1A, I_{RR}=0.25A$
2. P.C.B. mounted with 10 X 10 x 0.2 mm copper pad areas.
3. Measured at 1 MHz and applied reverse voltage of 4 V D.C

## 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

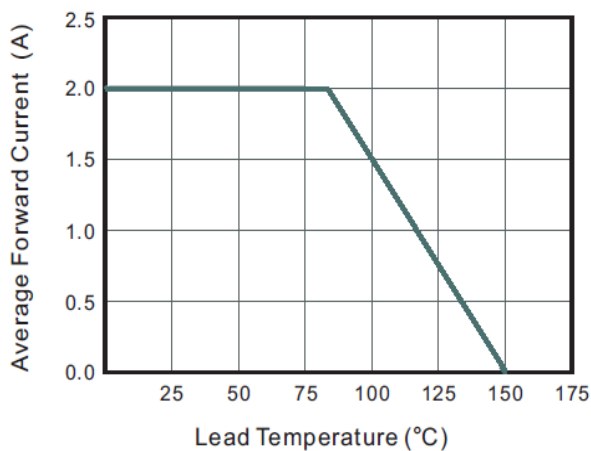


Fig.3 Typical Reverse Characteristics

