

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

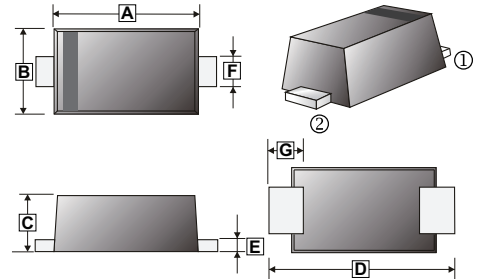
FEATURES

- Easy pick and place
- Ideal for surface mounted applications
- Low profile package
- Built-in strain relief
- Superfast recovery times for high efficiency

MECHANICAL DATA

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

SOD-123JD



MARKING

Part Number	Marking	Part Number	Marking
SUF201JD-C	E2L	SUF204JD-C	E2M
SUF202JD-C		SUF205JD-C	E2H
SUF203JD-C			

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.6	2.9	E	0.10	0.20
B	1.7	1.9	F	0.80	1.10
C	0.9	1.1	G	0.70	0.90
D	3.5	3.8			

PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-123JD	3K	7 inch

ORDER INFORMATION

Part Number	Type
SUF201JD-C~SUF205JD-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%.)

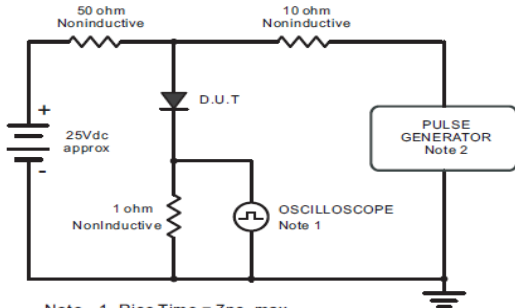
Parameter	Symbol	Part Number					Unit
		SUF201 JD-C	SUF202 JD-C	SUF203 JD-C	SUF204 JD-C	SUF205 JD-C	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	
Maximum Average Forward Rectified 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 @ $I_F=2A$	V_F	1			1.25	1.7	V
Maximum DC Reverse Current @ Rated DC Blocking Voltage	$T_A=25^\circ C$	5					μA
	$T_A=125^\circ C$	100					
Maximum Reverse Recovery Time ¹	T_{RR}	35					nS
Typical Junction Capacitance ³	C_J	30					pF
Typical Thermal Resistance ²	$R_{\theta JA}$	75					$^\circ C/W$
	$R_{\theta JC}$	22					
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 2.0" x 2.0" (5 x 5cm) copper pad areas.
3. Measured at 1MHz and applied reverse voltage of 4V 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. Rises Time = 10ns, max.
Source Impedance = 50 ohms.

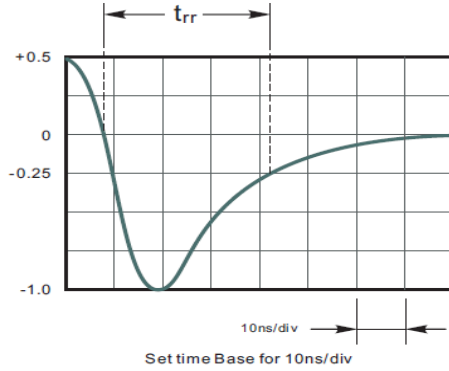


Fig.2 Maximum Average Forward Current Rating

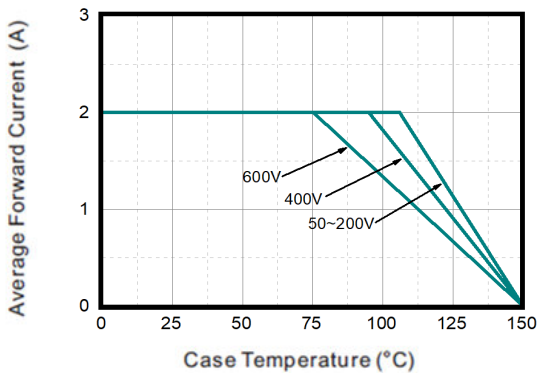


Fig.3 Typical Reverse Characteristics

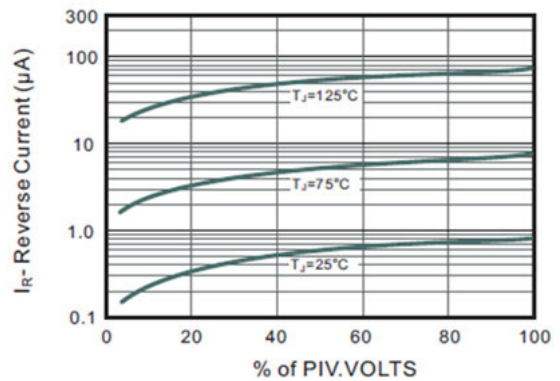


Fig.4 Typical Forward Characteristics

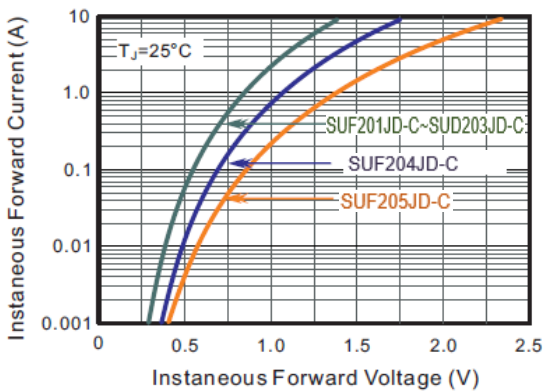


Fig.5 Typical Junction Capacitance

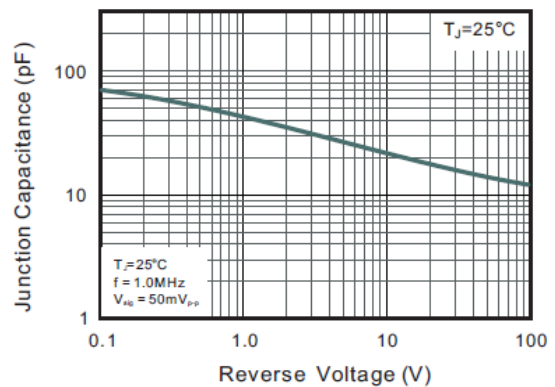


Fig.6 Maximum Non-Repetitive Peak Forward Surge Current

