

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

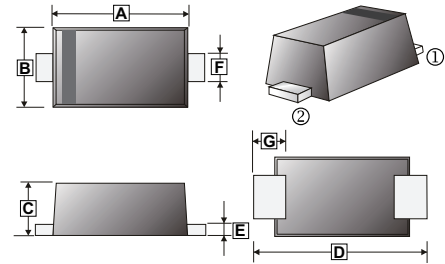
FEATURES

- Glass passivated device
- Ideal for surface mounted applications
- Metallurgically bonded construction

MECHANICAL DATA

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

SOD-123JD



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			

MARKING

Product	Marking	Product	Marking
SMF102JD	F2	SMF105JD	F5
SMF103JD		SMF106JD	F7
SMF104JD		SMF107JD	

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%.)

Parameters	Symbol	Part Number						Unit
		SMF 102JD	SMF 103JD	SMF 104JD	SMF 105JD	SMF 106JD	SMF 107JD	
Recurrent Reverse Voltage (Max.)	V_{RRM}	100	200	400	600	800	1000	V
RMS Voltage (Max.)	V_{RMS}	70	140	280	420	560	700	V
DC Blocking Voltage (Max.)	V_{DC}	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	$I_{(AV)}$	1.0						A
Peak Forward Surge Current 8.3 ms Single HalfSine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	30						A
Maximum Instantaneous Forward Voltage @ 1 A	V_F	1.3						V
Maximum DC reverse current At rated DC blocking voltage	$T_A = 25^\circ C$	5						μA
	$T_A = 125^\circ C$	100						
Maximum reverse recovery time ¹	T_{RR}	150		250	500		ns	
Typical junction capacitance ²	C_J	15						pF
Typical Thermal Resistance ³	$R_{\theta JL}$	20						°C/W
Typical Thermal Resistance ³	$R_{\theta JC}$	40						°C/W
Operating & Storage Temperature Range	T_j, T_{STG}	-55~150						°C

Notes :

1. Measured with $I_F=0.5A$, $I_R=1A$, $IRR=0.25A$.
2. Measured at 1.0MHz and applied average voltage of 4.0V DC.
3. FR4 Board Heat sink size: 10*10*0.2mm.

RATINGS AND CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

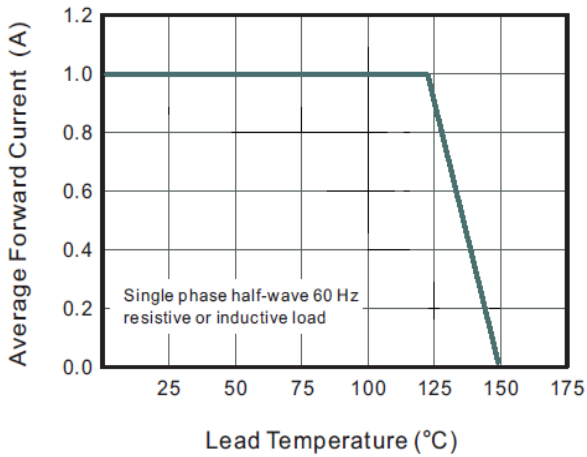


Fig.2 Typical Reverse Characteristics

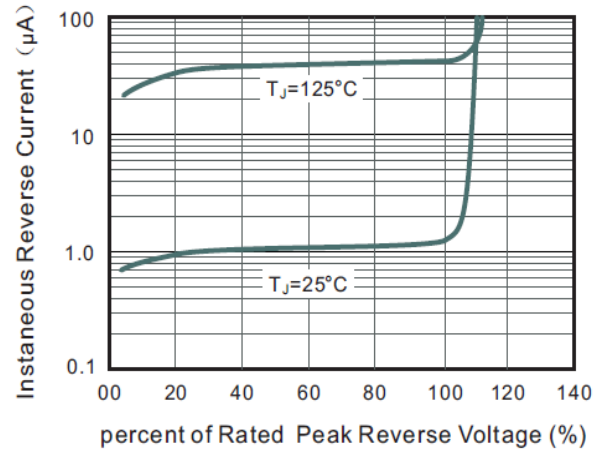


Fig.3 Typical Instantaneous Forward Characteristics

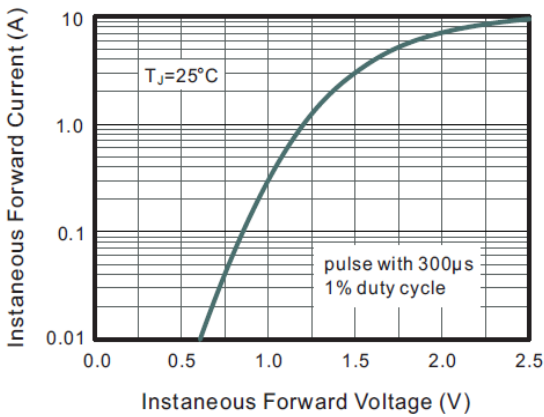


Fig.4 Typical Junction Capacitance

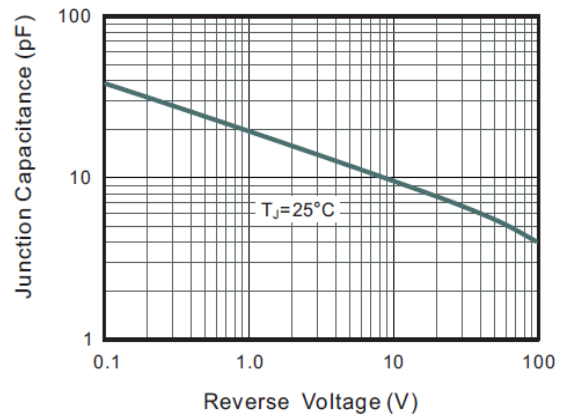


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

