

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

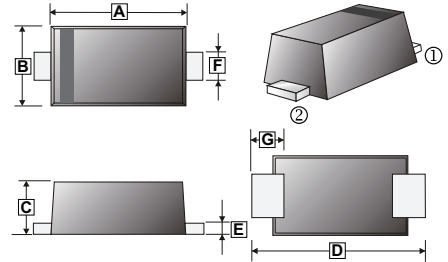
## FEATURES

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

## MECHANICAL DATA

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

### SOD-123JD



## MARKING

S36

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	Rating	Unit
Maximum Recurrent Reverse Voltage	$V_{RRM}$	60	V
Maximum RMS Voltage	$V_{RMS}$	42	V
Maximum DC Blocking Voltage	$V_{DC}$	60	V
Maximum Instantaneous Forward Voltage@ $I_{FM}=1A$	$V_F$	0.55	V
Maximum Average Forward Rectified Current	$I_{(AV)}$	1	A
Peak Forward Surge Current@ 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	50	A
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	$T_A=25^\circ C$	0.5
		$T_A=100^\circ C$	10
Typical Junction Capacitance <sup>1</sup>	$C_J$	80	pF
Typical thermal resistance junction to Lead <sup>2</sup>	$R_{\theta JL}$	20	°C / W
Typical thermal resistance junction to Case <sup>2</sup>	$R_{\theta JC}$	40	°C / W
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	125, -55~150	°C

Notes :

1. Measured at  $f=1.0MHz$ ,  $V_R=4.0V$
2. FR4 Board Heat sink size:  $10*10*0.2mm$ .

**CHARACTERISTIC CURVES**

Fig.1 Forward Current Derating Curve

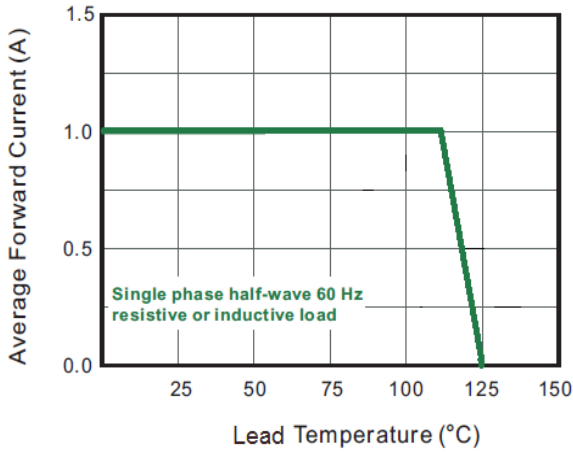


Fig.2 Typical Reverse Characteristics

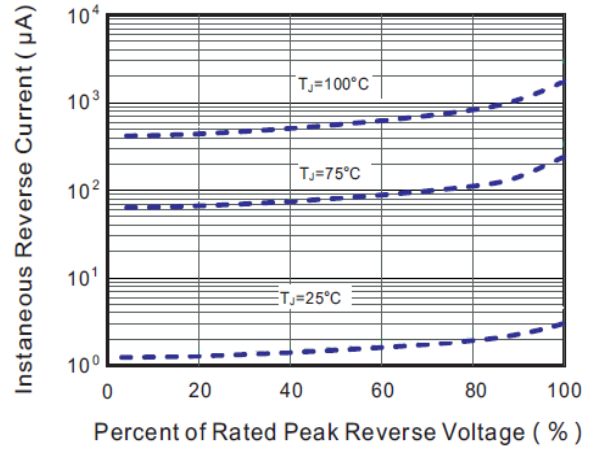


Fig.3 Typical Forward Characteristic

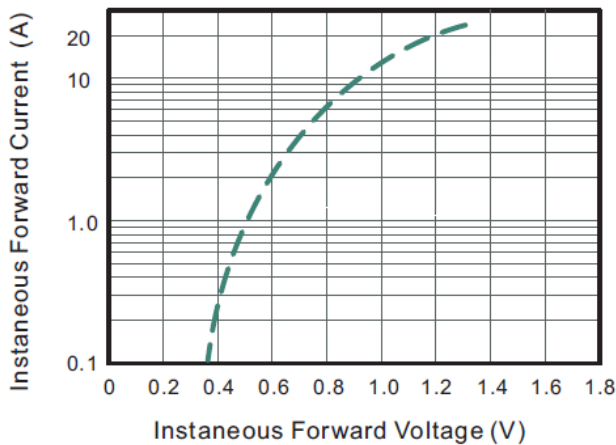


Fig.4 Typical Junction Capacitance

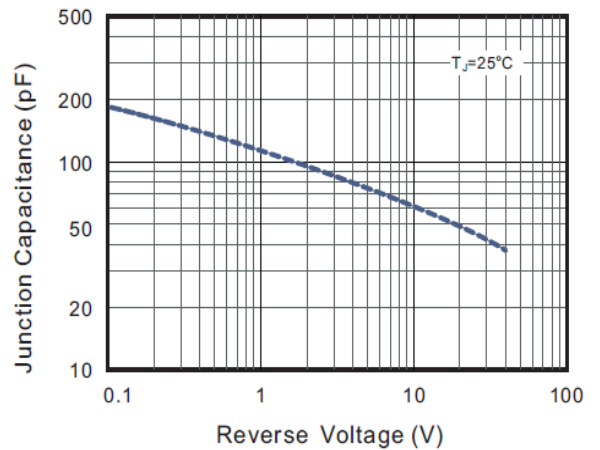


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

