

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

MARKING

S36

PACKAGE INFORMATION

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

ORDER INFORMATION

Part Number	Type
SK16JD-C	Lead (Pb)-free and Halogen-free

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

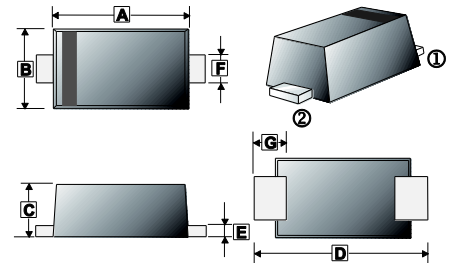
(Rating 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, de-rate current by 20%.)

Parameter	Symbol	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	$T_A=25^\circ C$	0.5	mA
	$T_A=100^\circ C$	10	
Typical Junction Capacitance ¹	C_J	80	pF
Typical Thermal Resistance Junction-Lead ²	$R_{\theta JL}$	20	°C/W
Typical Thermal Resistance Junction-Case ²	$R_{\theta JC}$	40	
Operating Junction & Storage Temperature Range	T_J, T_{STG}	125, -55~150	°C

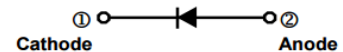
Notes:

1. Measured at $f=1MHz, V_R=4V$.
2. FR-4 Board Heat sink size: $10*10*0.2mm$.

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			



CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

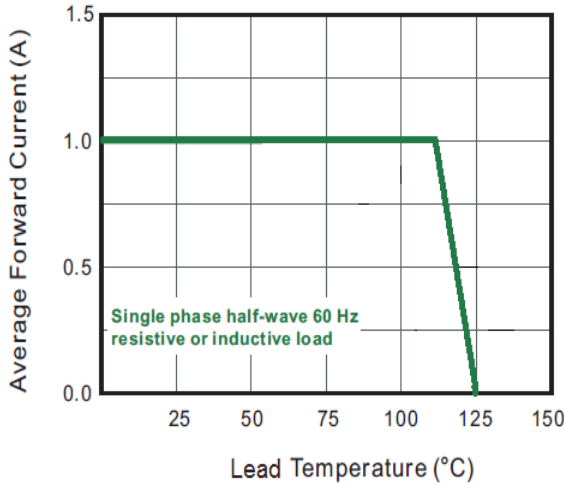


Fig.2 Typical Reverse Characteristics

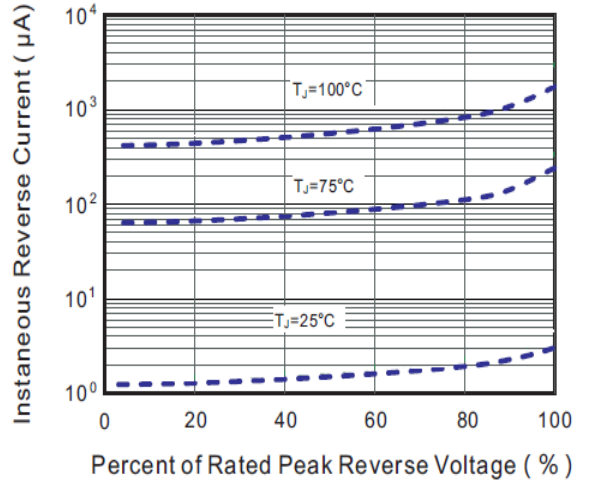


Fig.3 Typical Forward Characteristic

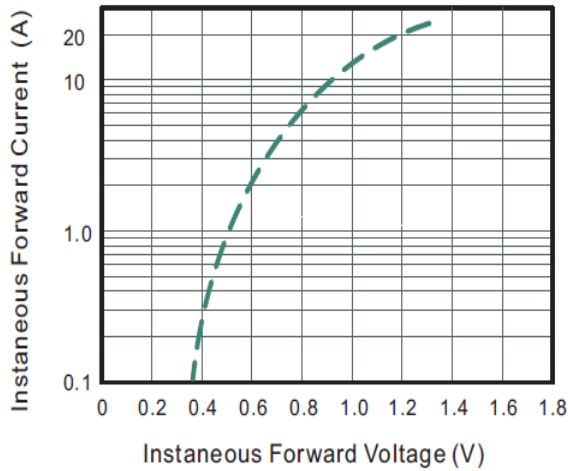


Fig.4 Typical Junction Capacitance

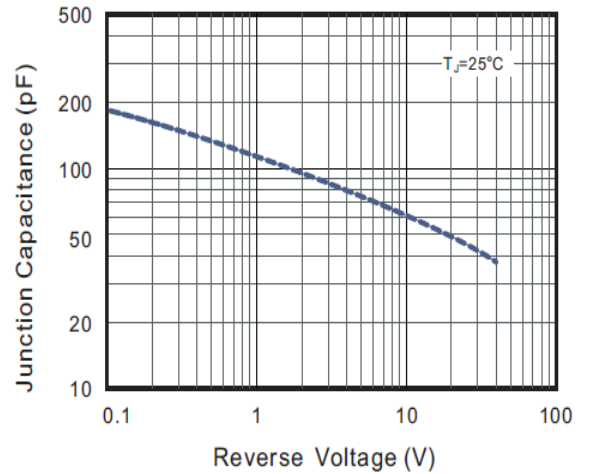


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

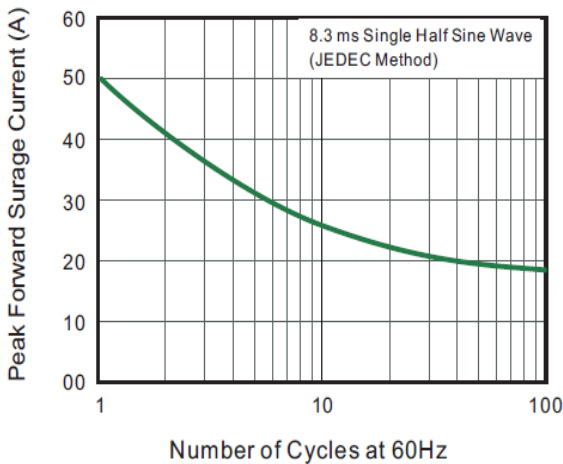
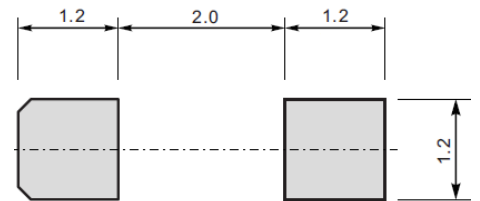


Fig.6 Mounting Pad Layout



*Dimensions in millimeters