

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

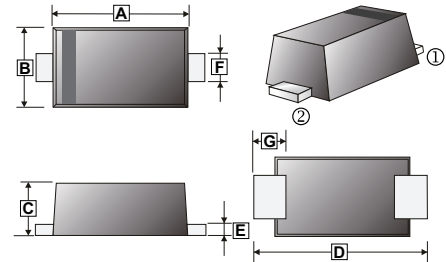
FEATURES

- 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

Product	Marking Code	Product	Marking Code
SM320JD	S34	SM3100JD	S310
SM340JD	S34	SM3150JD	S315
SM360JD	S36	SM3200JD	S320

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
		SM 320JD	SM 340JD	SM 360JD	SM 3100JD	SM 3150JD	SM 3200JD	
Maximum Recurrent Reverse Voltage	V_{RRM}	20	40	60	100	150	200	V
Maximum RMS Voltage	V_{RMS}	14	28	42	70	120	160	V
Maximum DC Blocking Voltage	V_{DC}	20	40	60	100	150	200	V
Maximum Instantaneous Forward Voltage @ $I_{FM} = 3A$	V_F	0.55		0.7	0.85	0.95		V
Maximum Average Forward Rectified Current	$I_{(AV)}$	3						A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	80			70			A
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A = 25^\circ C$	0.5		0.3				mA
	$T_A = 100^\circ C$	10		5				
Typical Junction Capacitance ¹	C_J	250			160			pF
Typical thermal resistance junction to Lead ²	$R_{\theta JL}$	20						°C / W
Typical thermal resistance junction to Case ²	$R_{\theta JC}$	40						°C / W
Operating Temperature Range	T_J	-55~125						°C
Storage Temperature Range	T_{STG}	-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

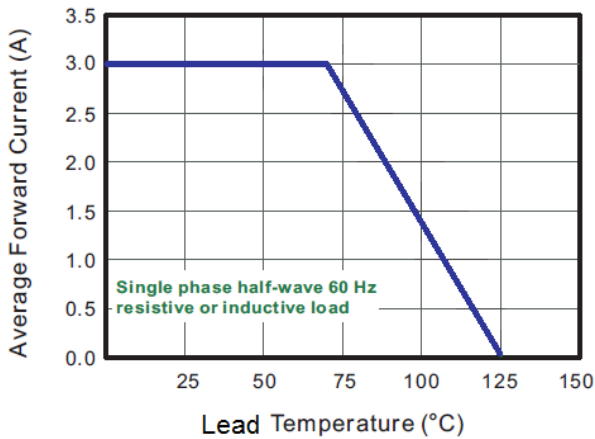


Fig.2 Typical Reverse Characteristics

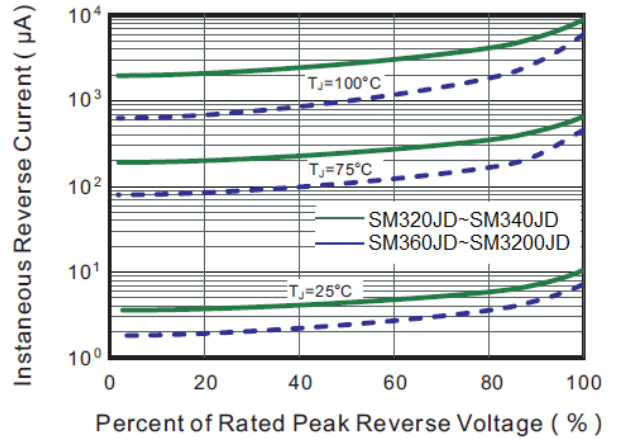


Fig.3 Typical Forward Characteristic

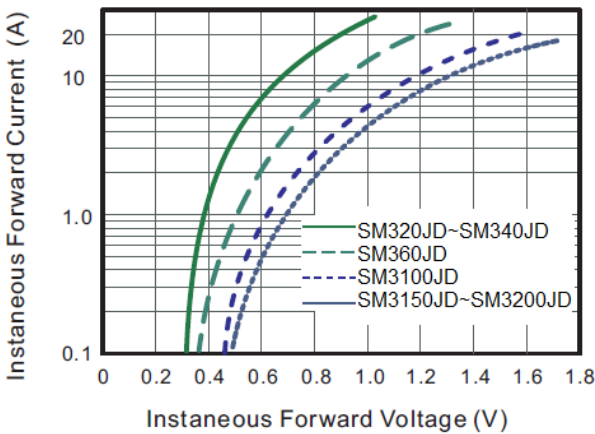


Fig.4 Typical Junction Capacitance

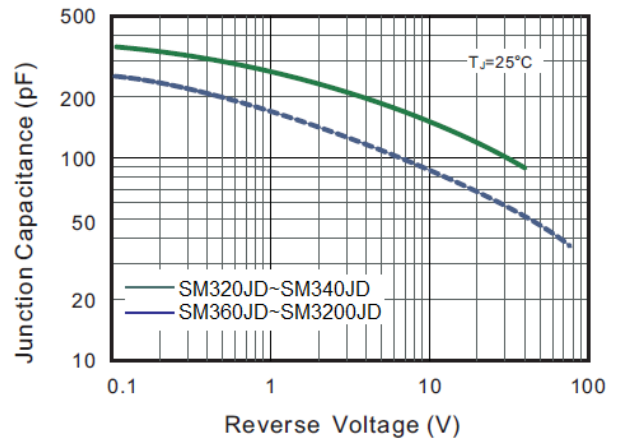


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

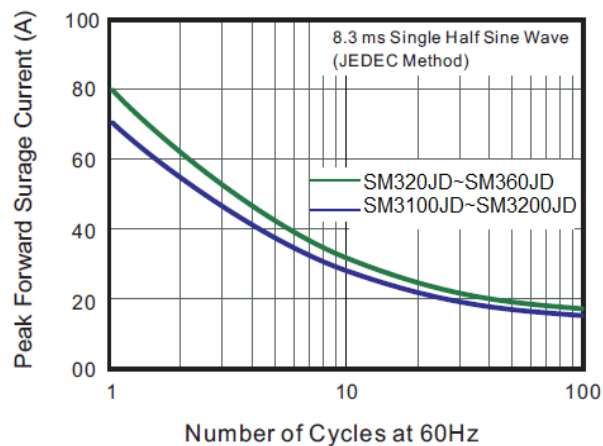


Fig.6- Typical Transient Thermal Impedance

