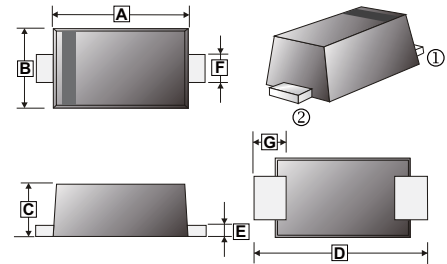


RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## FEATURES

- For surface mounted applications
- Low profile package
- Glass Passivated Chip Junction
- Ideal for automated placement
- Lead free in comply with EU RoHS 2011/65/EU directives

## SOD-123JD



## MECHANICAL DATA

- Case: SOD-123JD
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 15mg 0.0053oz

## MARKING

Part Number	Marking Code	Part Number	Marking Code
QG201JD	2A1	QG205JD	2A5
QG202JD	2A2	QG206JD	2A6
QG203JD	2A3	QG207JD	2A7
QG204JD	2A4		

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
		QG 201JD	QG 202JD	QG 203JD	QG 204JD	QG 205JD	QG 206JD	QG 207JD	
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ $T_A=65^\circ\text{C}$	$I_{F(AV)}$	2							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	50							A
Maximum Instantaneous Forward Voltage @ $I_F=2\text{A}$	$V_F$	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A=25^\circ\text{C}$	5							$\mu\text{A}$
	$T_A=125^\circ\text{C}$	50							
Typical Junction Capacitance <sup>1</sup>	$C_J$	30							pF
Typical Thermal Resistance <sup>2</sup>	$R_{\theta JL}$	20							$^\circ\text{C/W}$
Typical Thermal Resistance <sup>2</sup>	$R_{\theta JC}$	40							$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55~ 150							$^\circ\text{C}$

Notes :

1. Measured at 1 MHz and applied reverse voltage of 4 V D.C.
2. P.C.B. mounted with 0.2 X 0.2" (5 X 5 mm) copper pad areas.

**CHARACTERISTIC CURVES**

Fig.1 Forward Current Derating Curve

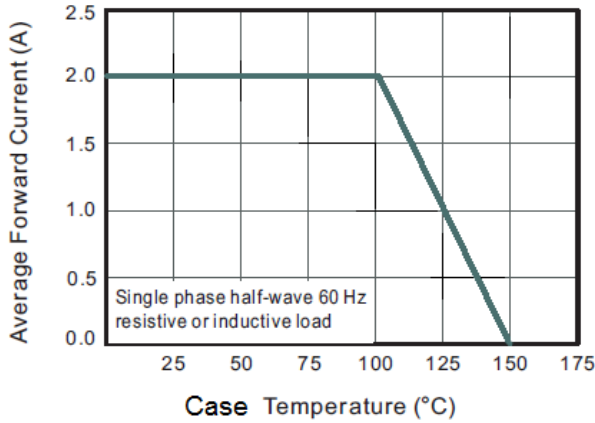


Fig.2 Typical Instaneous Reverse Characteristics

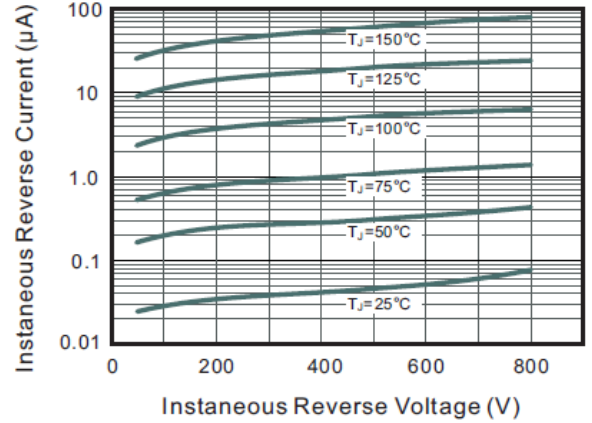


Fig.3 Typical Forward Characteristic

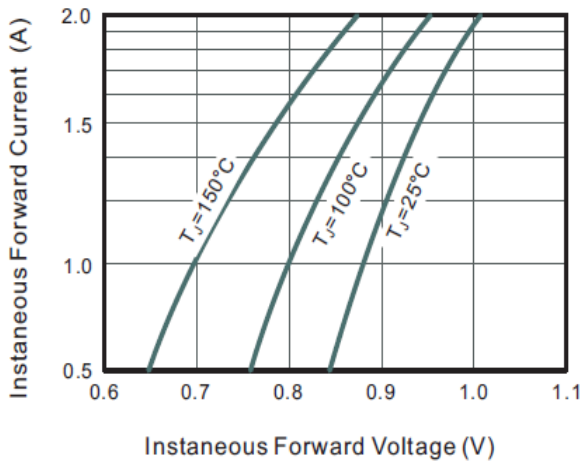


Fig.4 Typical Junction Capacitance

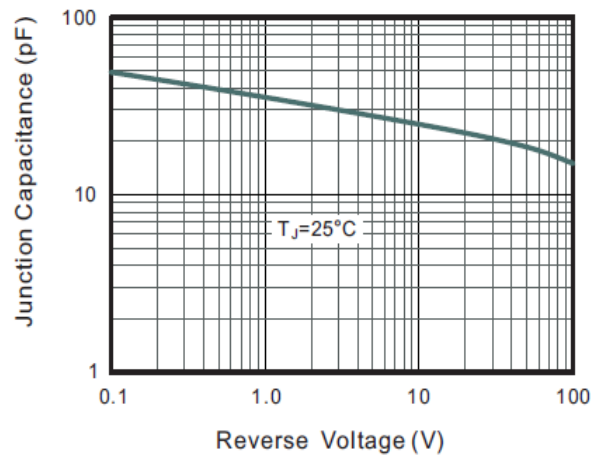


Fig. 5 Maximum Non-Repetitive Peak Forward Surge Current

