

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

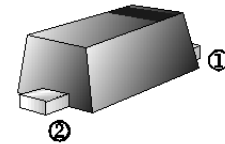
FEATURES

- Low Forward Voltage Drop
- Glass Passivated Chip Junction
- Low Leakage Current

SOD-323L

MECHANICAL DATA

- Case: JEDEC SOD-323L, molded plastic over passivated chip
- Terminals: Solder Plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end

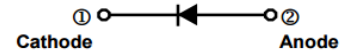


MARKING

Part Number	Marking Code
SM4001V-C~SM4007V-C	GP7A

PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-323L	3K	7 inch



ORDER INFORMATION

Part Number	Type
SM4001V-C~SM4007V-C	Lead (Pb)-free and Halogen-free

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise specified)

Parameter	Symbol	Part Number							Unit
		SM400 1V-C	SM400 2V-C	SM400 3V-C	SM400 4V-C	SM400 5V-C	SM400 6V-C	SM400 7V-C	
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	I _F	1							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	25							A
Forward Drop Voltage @ I _F =1A	V _F	1.1							V
Reverse Leakage Current @ V _R	T _J =25°C	5							µA
	T _J =125°C	50							
Typical Reverse Recovery Time @ I _F =0.5A, I _R =1.0A, I _{RR} =0.25A	t _{rr}	1.8							µS
Typical Junction Capacitance @4V, 1MHz	C _J	5							pF
Typical Thermal Resistance ¹	R _{θJA}	120							°C/W
	R _{θJC}	40							
	R _{θJL}	40							
Operating & Storage Temperature	T _J , T _{STG}	-55~150							°C

Note:

1. Mounted on copper pad area of 0.2x0.2" (5.0 x 5.0mm) to each terminal.

CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

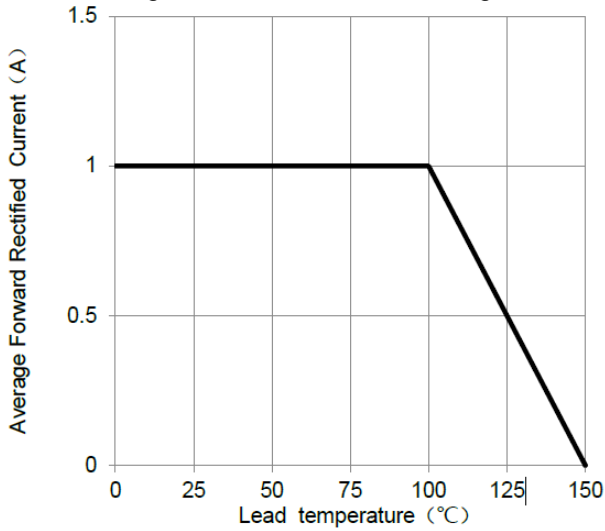


Fig.2 Maximum Non-Repetitive Surge Current

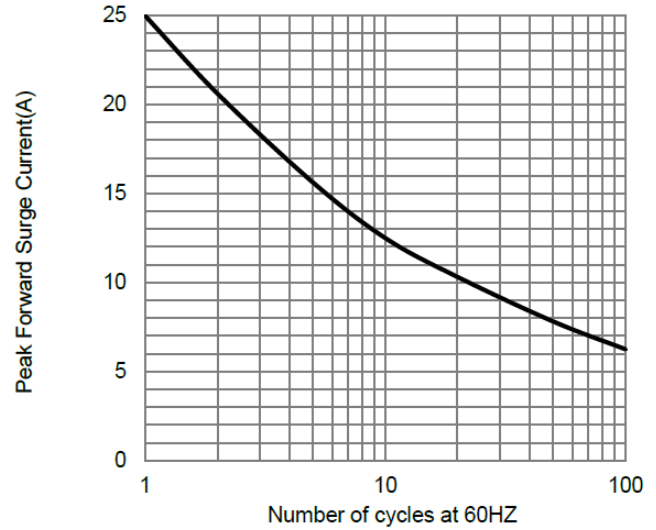


Fig.3 Typical Forward Voltage Characteristics

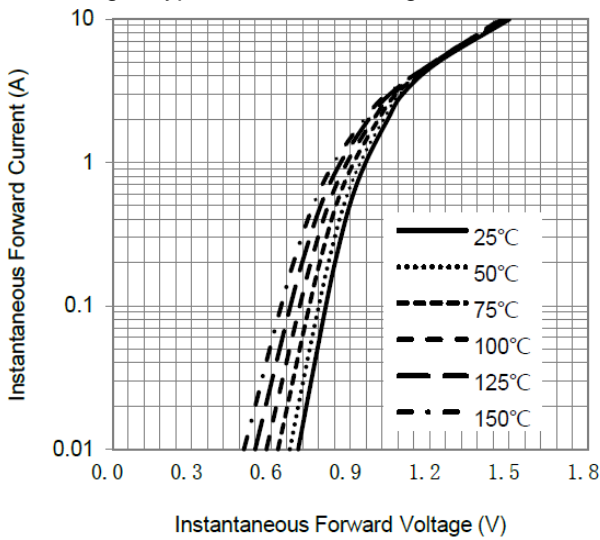


Fig.4 Typical Reverse Current Characteristics

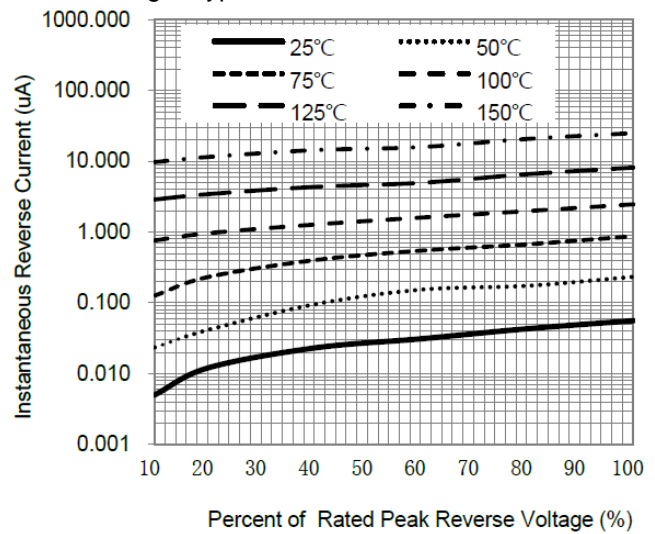
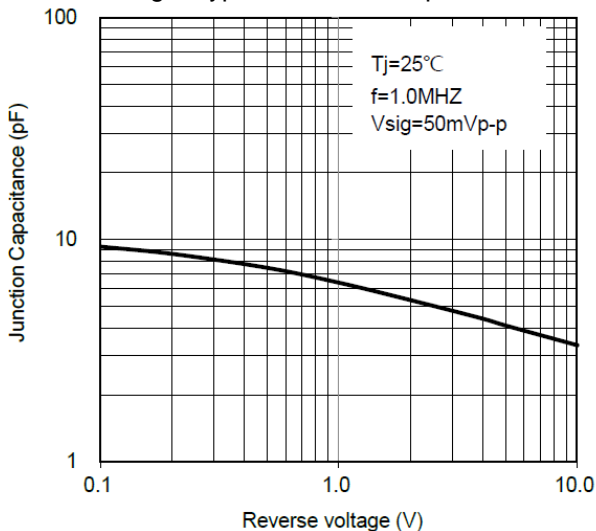
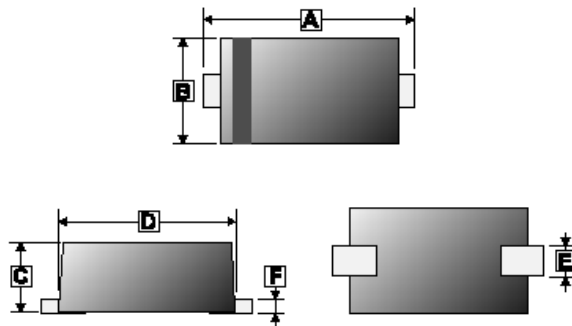


Fig.5 Typical Junction Capacitance



PACKAGE OUTLINE DIMENSIONS

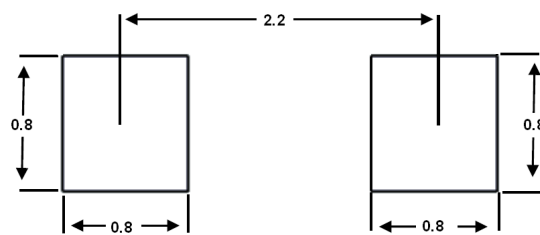
SOD-323L



REF.	Millimeter	
	Min.	Max.
A	2.30	2.80
B	1.05	1.60
C	0.60	1.08
D	1.60	2.20
E	0.25	0.70
F	0.05	0.25

MOUNTING PAD LAYOUT

SOD-323L



*Dimensions in millimeters