

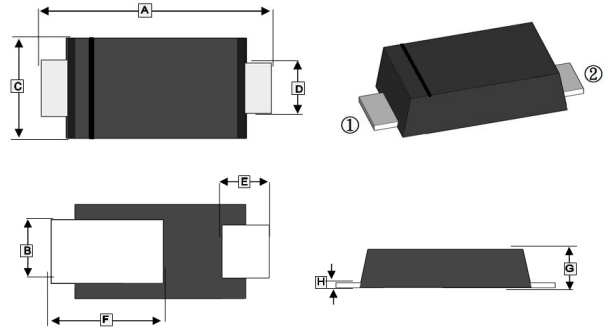
RoHS Compliant Product

A suffix of "-C" specifies halogen-free and RoHS Compliant

FEATURES

- Heatsink Structure
- Low Profile, Typical Thickness 0.65mm
- Low Forward Voltage Drop
- Low Leakage Current
- Moisture Sensitivity: Level 1, Per J-STD-020
- High Temperature Soldering Guaranteed: 260°C/10 Seconds

SOD-323WT



MARKING



Cathode

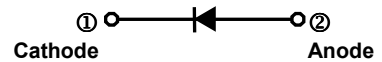
PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-323WT	15K	13 inch

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.30	2.70	E	0.4	0.75
B	0.75	1.00	F	1.1	1.5
C	1.20	1.40	G	0.6	0.73
D	0.55	0.75	H	0.1	0.25

ORDER INFORMATION

Part Number	Type
SM4001WT-C~SM4005WT-C	Lead (Pb)-free and Halogen-free



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

Parameter	Symbol	Part Number					Unit
		SM4001 WT-C	SM4002 WT-C	SM4003 WT-C	SM4004 WT-C	SM4005 WT-C	
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	V
Maximum Average Forward Rectified Current	I _F	1					A
Peak Forward Surge Current @8.3ms Single Half Sine-Wave Superimposed on Rate Load	I _{FSM}	20					A
Maximum Instantaneous Forward Voltage @I _F =1A	V _F	1.1					V
Maximum DC Reverse Current @Rated DC Blocking Voltage	I _R	T _A =25°C					μA
		T _A =125°C					
Typical Reverse Recovery Time	t _{rr}	I _F =0.5A, I _R =1A I _{rr} =0.25A					μs
Typical Junction Capacitance	C _J	4V, 1MHz					pF
Typical Thermal Resistance from Junction-Ambient ¹	R _{θJA}	84					°C/W
Typical Thermal Resistance from Junction-Lead ¹	R _{θJL}	3					
Operating Junction and Storage Temperature	T _J , T _{STG}	-55~150					°C

Notes:

1. The thermal resistance from junction to ambient or lead, mounted on P.C.B with 5×5mm copper pads, 2 OZ, FR4 PCB.

CHARACTERISTIC CURVES

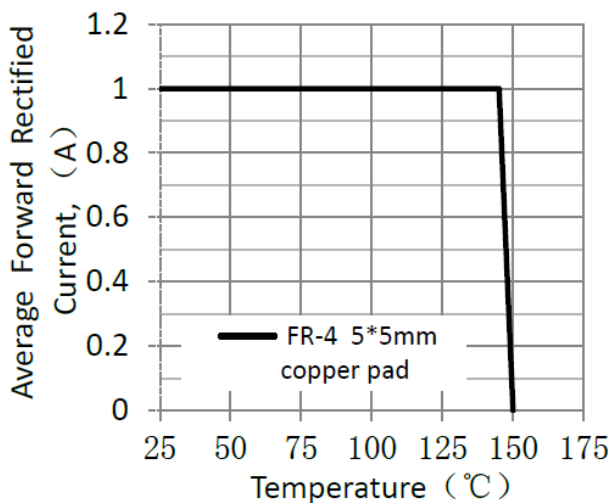


Figure 1. Forward Current Derating Curve

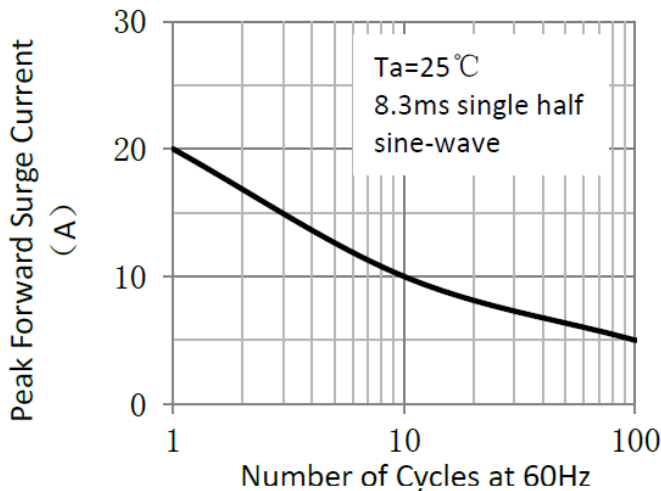


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

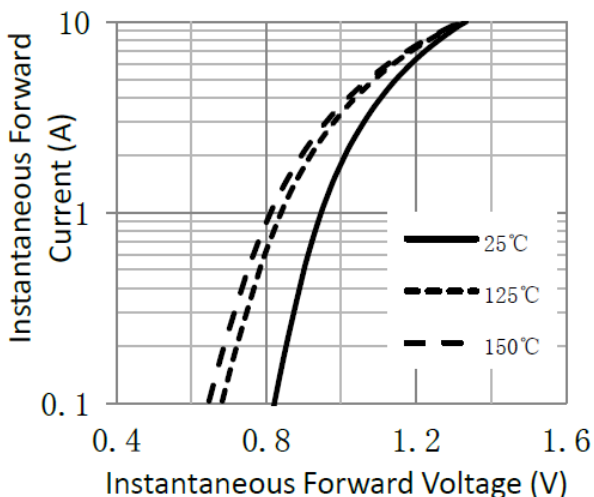


Figure 3. Typical Instantaneous Forward Characteristics

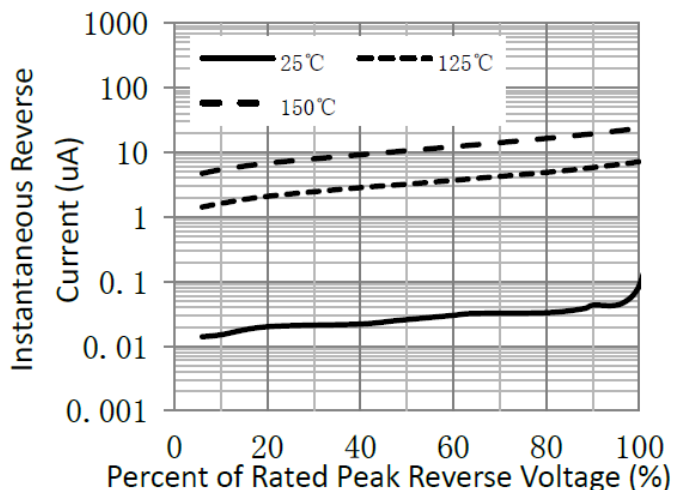


Figure 4. Typical Reverse Characteristics

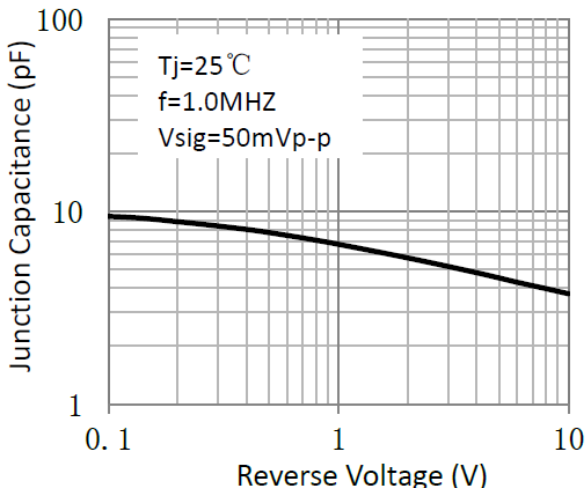


Figure 5. Typical Junction Capacitance