

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

**FEATURES**

- Low reverse current
- Low forward voltage drop
- High efficiency

**MARKING**

14S

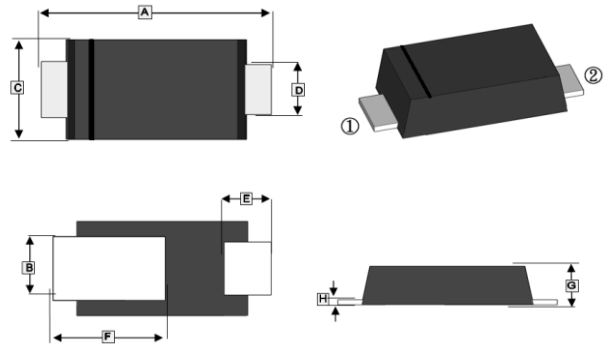
**PACKAGE INFORMATION**

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

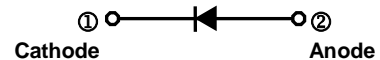
**ORDER INFORMATION**

Part Number	Type
SM140WT-C	Lead (Pb)-free and Halogen-free

**SOD-323WT**



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



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS** ( $T_A=25^{\circ}\text{C}$  unless otherwise specified.)

Parameter	Symbol	Rating	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	40	V
Maximum Average Rectified Forward Current	$I_o$	1	A
Non-Repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	$I_{FSM}$	25	A
Maximum Instantaneous Forward Voltage @ $I_F=1\text{A}$	$V_F$	0.5	V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ $V_R=40\text{V}$	$I_R$	20	$\mu\text{A}$
Typical Thermal Resistance from Junction-Ambient <sup>1</sup>	$R_{\theta JA}$	103	$^{\circ}\text{C/W}$
Typical Thermal Resistance from Junction-Lead <sup>1</sup>	$R_{\theta JL}$	24	
Junction and Storage Temperature Range	$T_J, T_{STG}$	-55~150	$^{\circ}\text{C}$

Note:

1. The thermal resistance from junction to ambient or lead, mounted on P.C.B with 5x5mm copper pads, 2oz, FR-4 PCB.

**RATINGS AND CHARACTERISTIC CURVES**

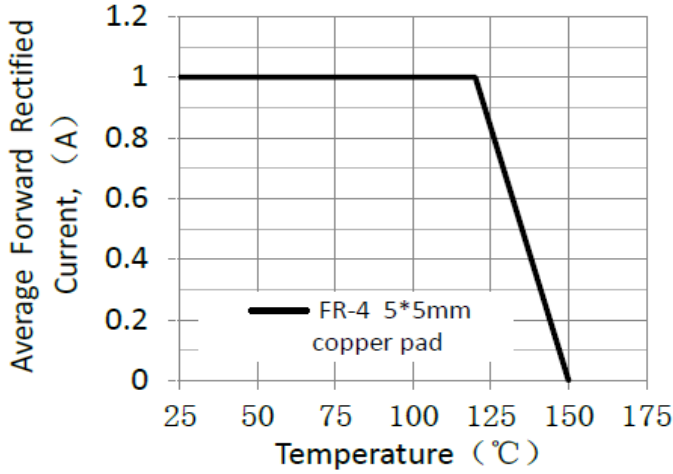


Figure 1. Forward Current Derating Curve

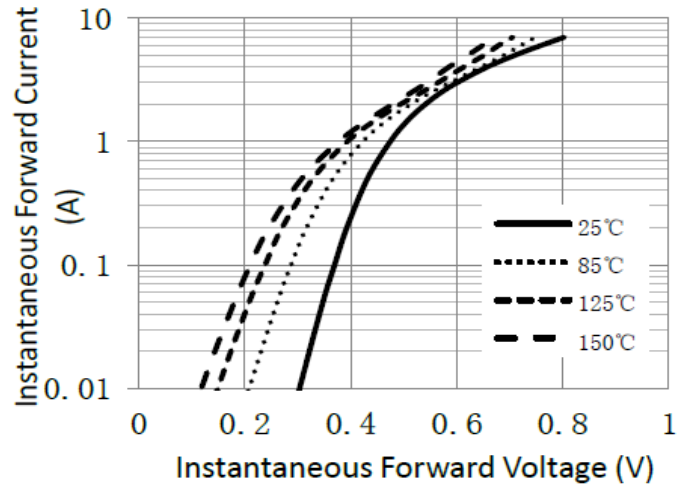


Figure 2. Typical Instantaneous Forward Characteristics

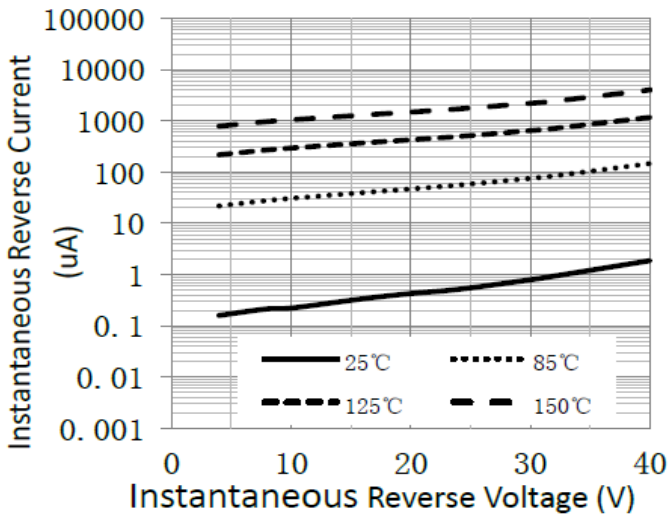


Figure 3. Typical Reverse Characteristics

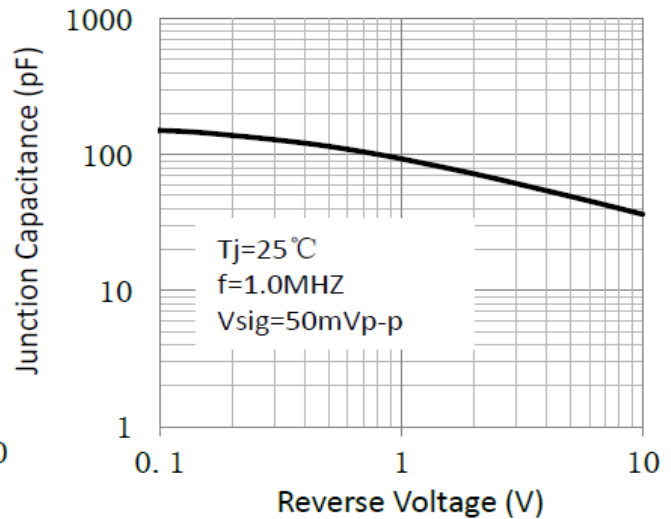


Figure 4. Typical Junction Capacitance

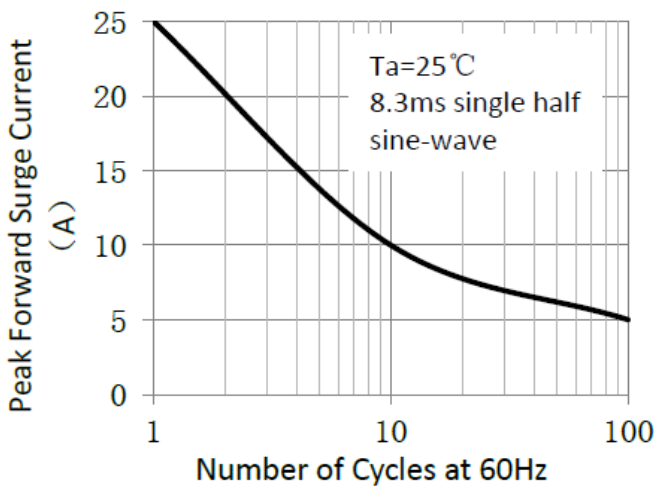
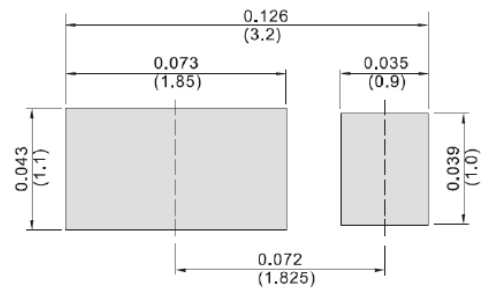


Figure 5. Maximum Non-Repetitive Peak Forward Surge Current



\*Dimensions in inch & millimeters

Figure 6. Mounting Pad Layout