

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

FEATURES

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

MARKING

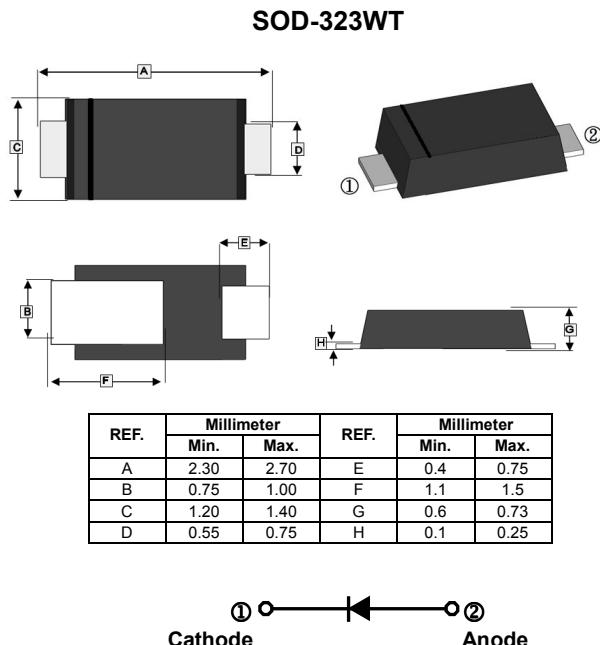
14S

PACKAGE INFORMATION

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

ORDER INFORMATION

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



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	uA
Typical Thermal Resistance from Junction to Ambient ¹	$R_{\theta JA}$	103	$^\circ\text{C}/\text{W}$
Typical Thermal Resistance from Junction to Lead ¹	$R_{\theta JL}$	24	
Junction and Storage Temperature Range	T_J, T_{STG}	-55~150	$^\circ\text{C}$

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.

RATINGS AND CHARACTERISTIC CURVES

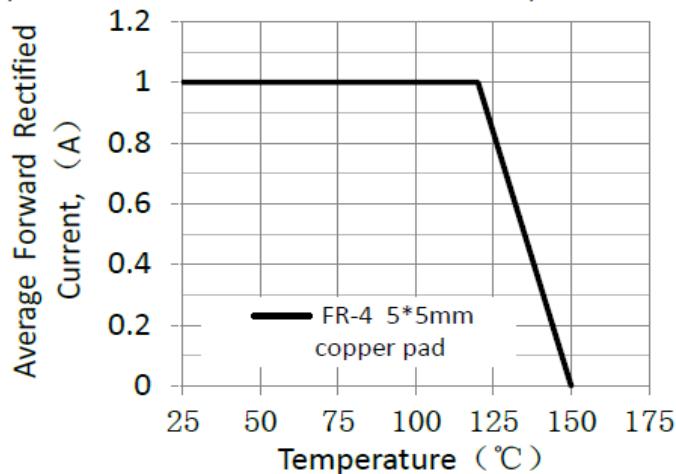


Figure 1. Forward Current Derating Curve

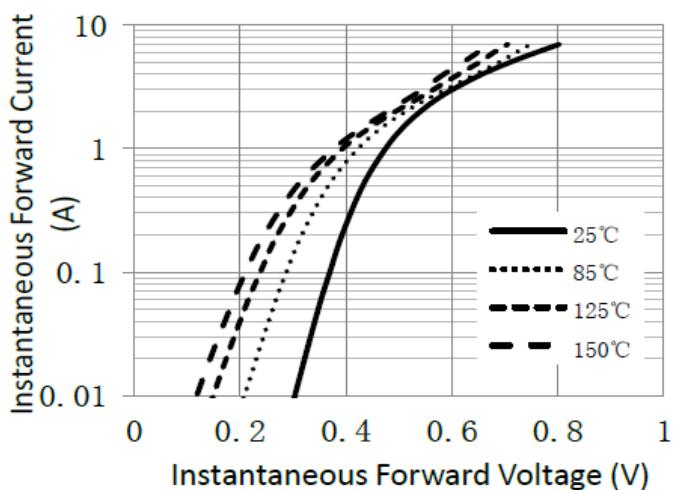


Figure 2. Typical Instantaneous Forward Characteristics

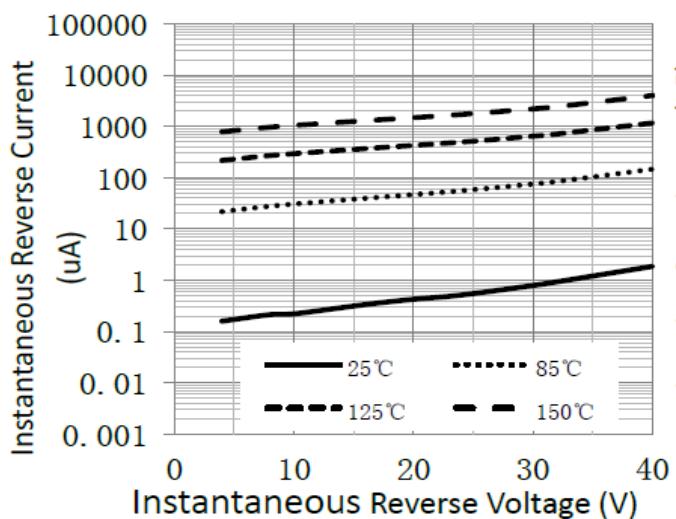


Figure 3. Typical Reverse Characteristics

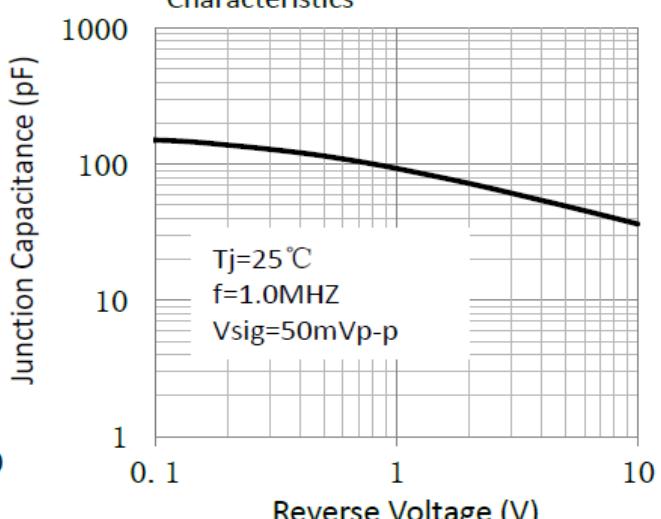


Figure 4. Typical Junction Capacitance

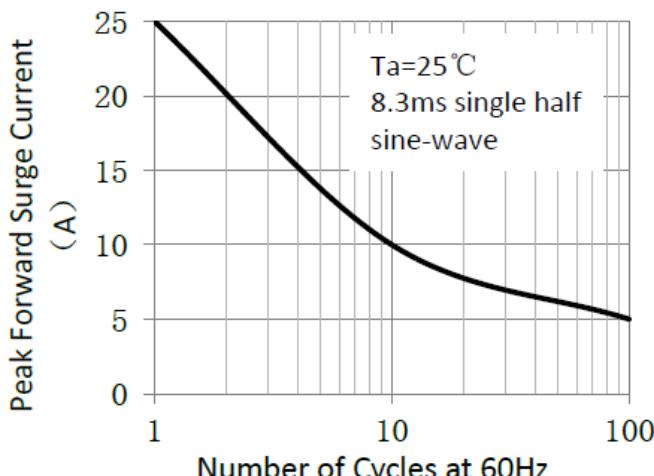


Figure 5. Maximum Non-Repetitive Peak Forward Surge Current