Elektronische Bauelemente

SM140WTCR-C

1A, 40V

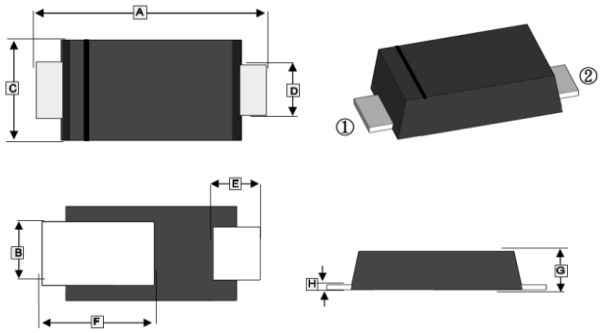
Surface Mount Schottky Barrier Rectifiers

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

FEATURES

- Low reverse current
- Low forward voltage drop
- High efficiency
- Qualified to AEC-Q101 standards for high reliability

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

MARKING

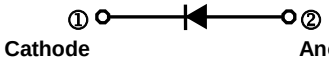
A14S

PACKAGE INFORMATION

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

ORDER INFORMATION

Part Number	Type
SM140WTCR-C	Lead (Pb)-free and Halogen-free



Cathode **Anode**

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25°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=8.3ms	I_{FSM}	25	A
Maximum Instantaneous Forward Voltage @I_F=1A	V_F	0.5	V
Maximum DC Reverse Current at Rated DC Blocking Voltage @V_R=40V	I_R	20	uA
Typical Thermal Resistance from Junction to Ambient [1]	$R_{\theta JA}$	103	°C/W
Typical Thermal Resistance from Junction to Lead [1]	$R_{\theta JL}$	24	
Junction and Storage Temperature Range	T_J, T_{STG}	-55~150	°C

Note:

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

RATINGS AND CHARACTERISTIC CURVES

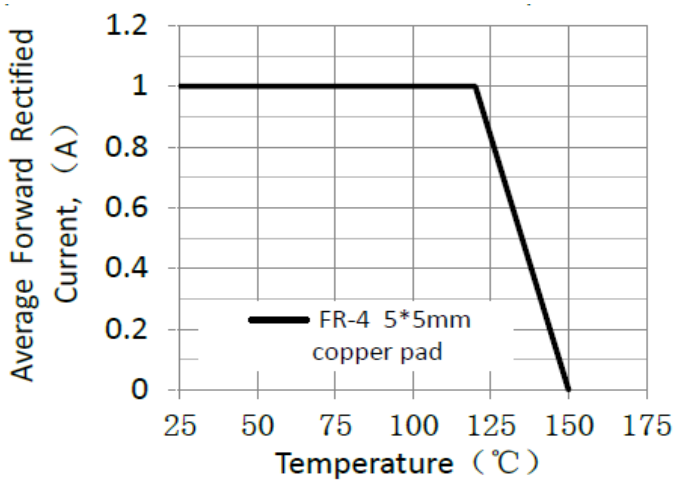


Figure 1.Forward Current Derating Curve

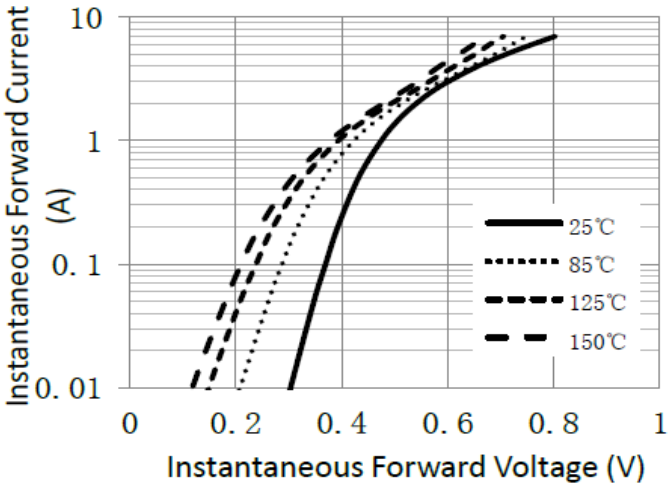


Figure 2. Typical Instantaneous Forward Characteristics

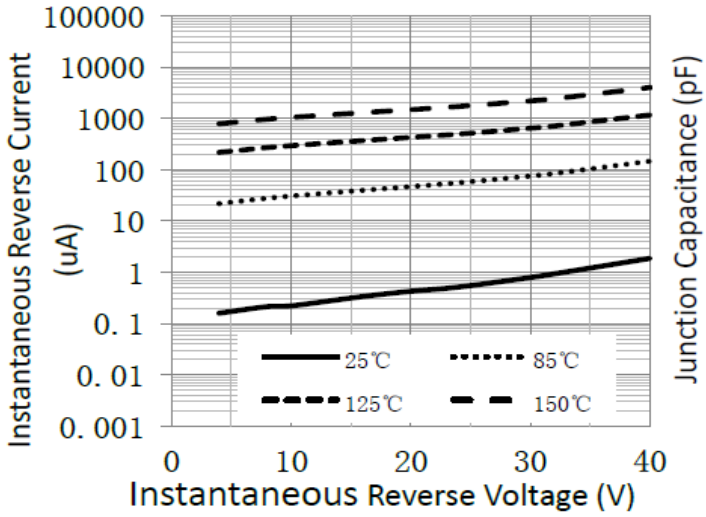


Figure 3. Typical Reverse Characteristics

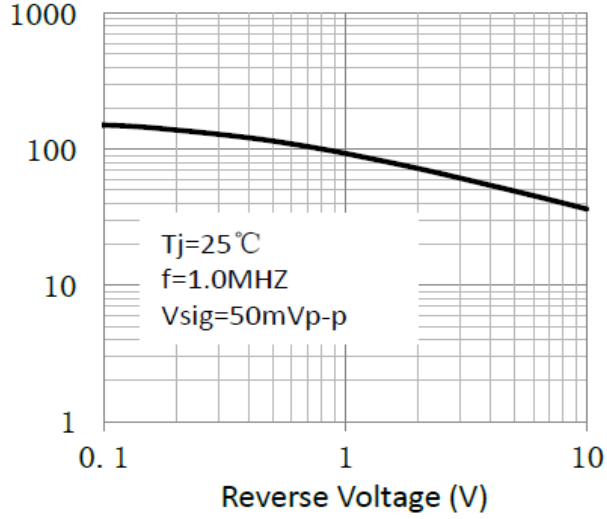


Figure 4. Typical Junction Capacitance

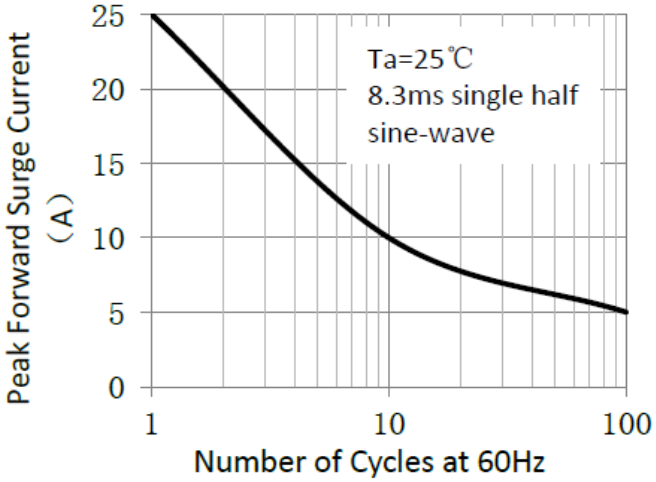
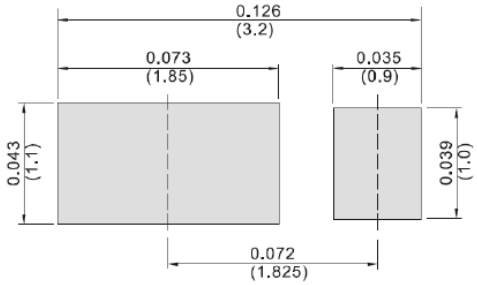


Figure 5.Maximum Non-Repetitive Peak Forward Surge Current



*Dimensions in inch & millimeters

Figure 6. Mounting Pad Layout