

Schottky Barrier Rectifier

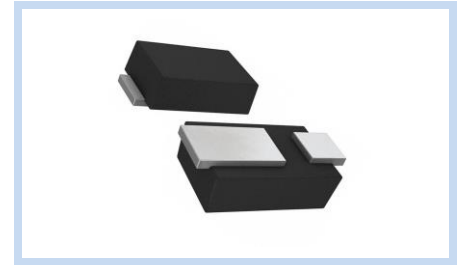
1A 60V SOD-323T

SD16WST

MERITEK

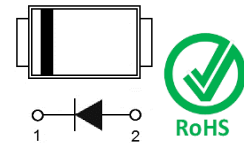
FEATURE

- High-Speed Switching
- Low Forward Voltage Drop
- PN Junction Guard Ring for Transient and ESD Protection
- Applications: DC-DC Converter, Polarity Protection, Switch Mode Power Supply,



MECHANICAL DATA

- Case: SOD-323T Package, Epoxy Molded Meets UL 94V-0
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: Color Band Denotes Cathode End



MAXIMUM RATINGS

Parameter, $T_A=25^\circ\text{C}$	Symbol	Value	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	60	V
Maximum RMS Voltage	V_{RMS}	42	V
Maximum DC Blocking Voltage	V_{DC}	60	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	1	A
Peak Forward Surge Current 8.3ms Single Half-Sinewave Superimposed on Rated Load	I_{FSM}	22	A
Typical Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	173	$^\circ\text{C/W}$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-65 to +150	$^\circ\text{C}$

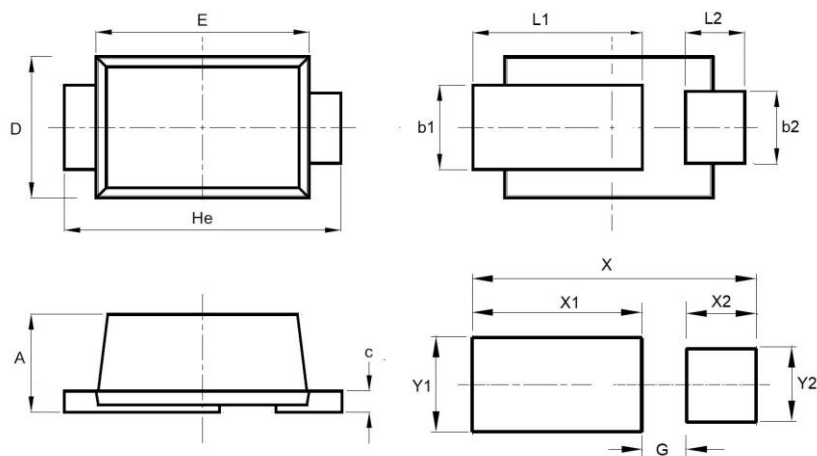
ELECTRICAL CHARACTERISTICS

Parameter, $T_A=25^\circ\text{C}$	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	$I_R=100\mu\text{A}$ V_{BR}	60	--	--	V
Maximum Forward Voltage	$I_F=0.1\text{mA}$ V_F	--	--	0.45	V
	$I_F=0.7\text{mA}$	--	--	0.58	
	$I_F=1\text{A}$	--	--	0.64	
Maximum Reverse Current	$V_R=5\text{V}, T_J=25^\circ\text{C}$ I_R	--	--	5	μA
	$V_R=60\text{V}, T_J=25^\circ\text{C}$	--	--	100	
Junction Capacitance	$V_R=10\text{V}, F=1\text{MHz}$ C_T	--	38	--	pF

Note: Device mounted on FR-4 substrate PC board, 2oz copper, with minimum recommended pad layout.

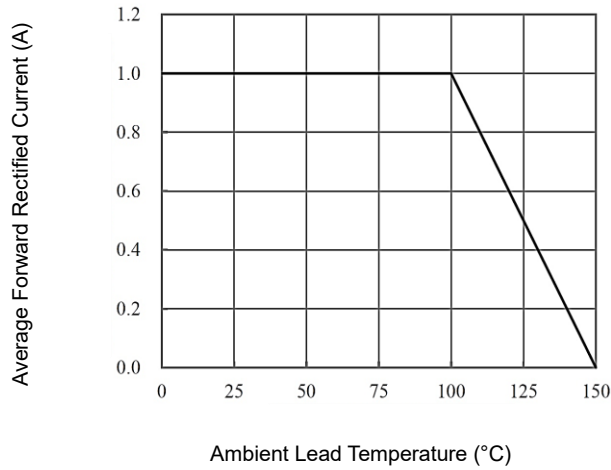
DIMENSIONS

Item	Min. (mm)	Max. (mm)
A	0.50	0.70
b1	0.75	0.95
b2	0.50	0.70
c	0.10	0.20
D	1.15	1.35
E	1.80	2.00
He	2.40	2.60
L2	0.40	0.60
C	1.30	1.50
G	0.50	
X	3.30	
X1	2.00	
X2	0.80	
Y1	1.10	
Y2	1.00	

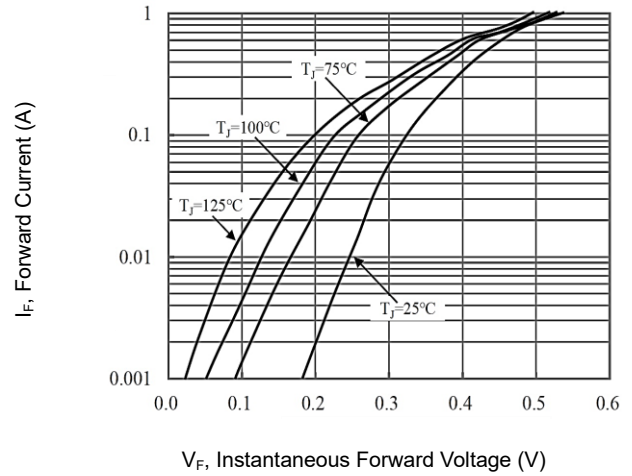


CHARACTERISTIC CURVES

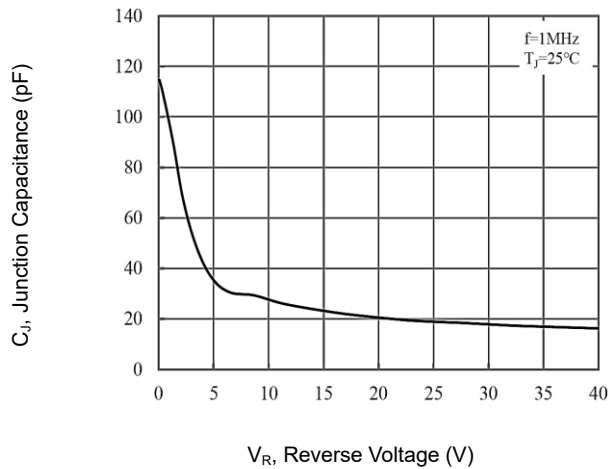
Typical Forward Current Derating Curve



Typical Forward Characteristics



Typical Junction Capacitance



Typical Reverse Characteristics

