

Schottky Barrier Rectifier

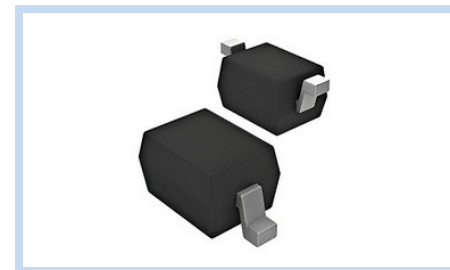
1A 20~200V SOD-323

SD1-S323 series

MERITEK

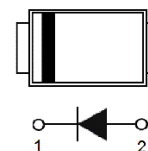
FEATURES

- Schottky Barrier for High Efficiency and Low Power Loss
- High Surge Capability Up to 25A
- Ultra-Fast Switching Performance
- Compact Construction Desing



APPLICATIONS

- Output Rectification and Freewheeling Diode in DC/DC and AC/DC Converters
- High-Frequency Rectification in Switching Power Supplies
- Reverse Polarity Protection in Space-Constrained Designs



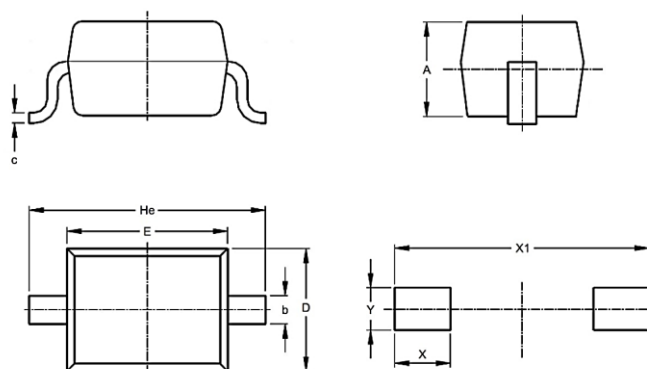
ELECTRICAL CHARACTERISTICS

Parameter		Symbol	SD12 S323	SD14 S323	SD16 S323	SD18 S323	SD110 S323	SD112 S323	SD115 S323	SD120 S323	Unit
Maximum Recurrent Peak Reverse Voltage		V _{RRM}	20	40	60	80	100	120	150	200	V
Maximum RMS Voltage		V _{RMS}	14	28	42	56	70	84	105	140	V
Maximum DC Blocking Voltage		V _{DC}	20	40	60	80	100	120	150	200	V
Maximum Average Forward Rectified Current		I _(AV)	1.0								A
Peak Forward Surge Current, 8.3ms single half-sine-wave (JEDEC method)		I _{FSM}	25								A
Maximum Forward Voltage at I _F =1.0A		V _F	0.55		0.70		0.85		0.90		V
Maximum Reverse Current at Rated DC Blocking Voltage	T _J =25°C	I _R	0.3								mA
Operating Junction Temperature		T _J	-55 to +125								°C
Storage Temperature Range		T _{STG}	-55 to +150								°C

Note: Ratings at 25°C ambient temperature unless otherwise specified.

DIMENSIONS

Item	Min (mm)	Max (mm)
A	0.80	1.00
b	0.25	0.40
c	0.08	0.20
D	1.20	1.40
E	1.60	1.80
He	2.45	2.75
X	1.20	
X1	3.80	
Y	1.20	



Schottky Barrier Rectifier

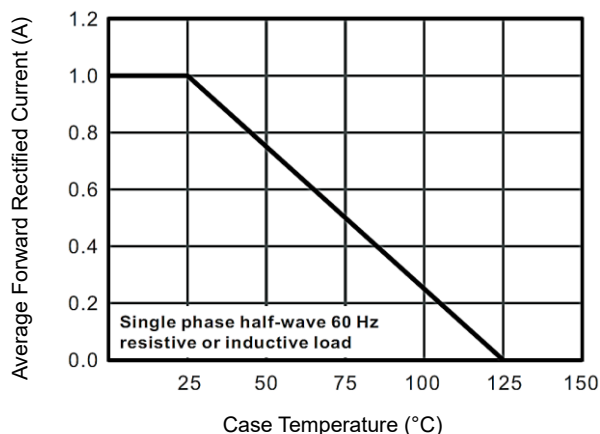
1A 20~200V SOD-323

SD1-S323 series

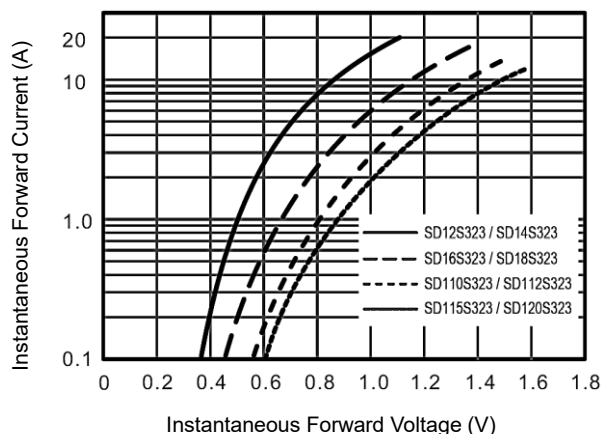
MERITEK

CHARACTERISTIC CURVES

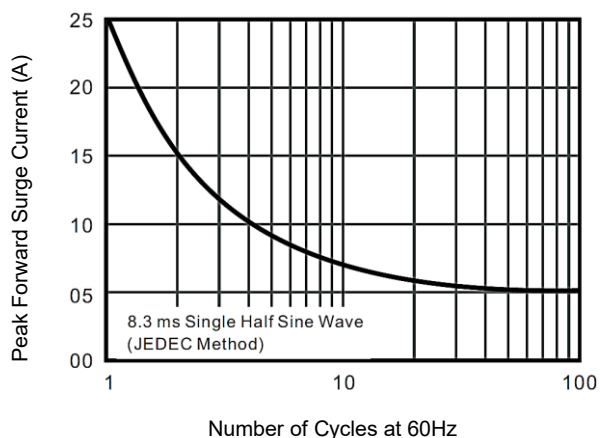
Typical Forward Current Derating Curve



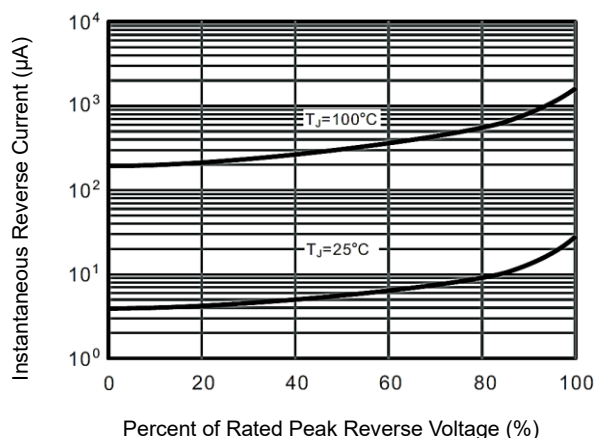
Typical Instantaneous Forward Characteristics



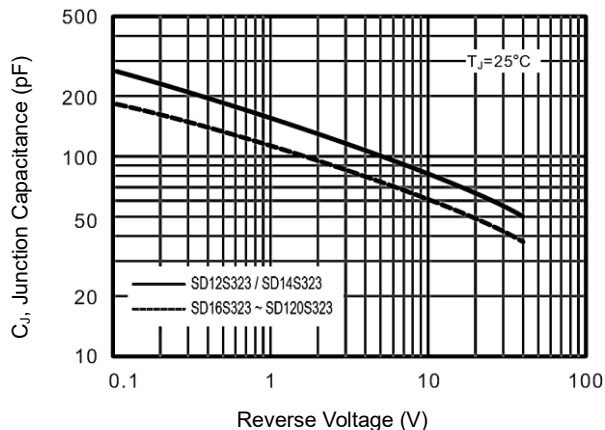
Maximum Non-Repetitive Peak Forward Surge Current



Typical Reverse Characteristics



Typical Junction Capacitance



*Specifications subject to change without notice.