

Schottky Barrier Diode

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RoHS
Compliant



Features

- Power Dissipation of 200mW
- Fast Switching Device (TRR<6nS)
- Low Forward Voltage Schottky Rectifier
- High Current Capability
- Halogen Free

Schematic and PIN Configuration



Marking Code



Specifications

Forward Current	: 300mA
Reverse Voltage	: 30V
Terminals	: Matte tin plated
Case	: SOD323 Package

Maximum Ratings (@TA = +25°C, unless otherwise specified.)

Absolute Ratings

Parameter	Symbol	Value	Unit
Junction Temperature	VRRM	300	V
Forward Rectified Current	IFM	200	mA
Peak Forward Surge Current @ t = 8.3ms	IFSM	600	mA
Power Dissipation	PD	30	mW
Repetitive Peak Reverse Voltage	TJ	125	°C
Thermal Resistance from Junction to Ambient	TSTG	500	°C
Storage Temperature Range	RθJA	-50 to +150	°C/W

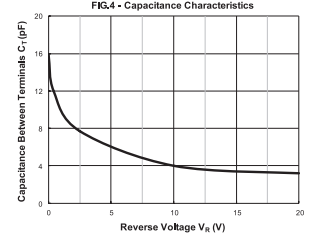
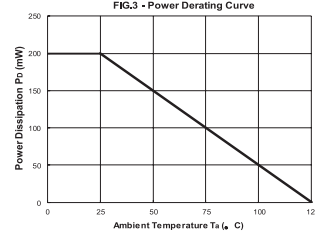
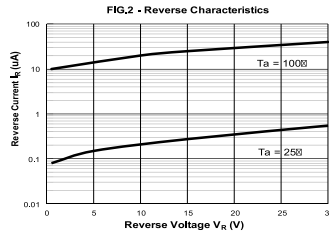
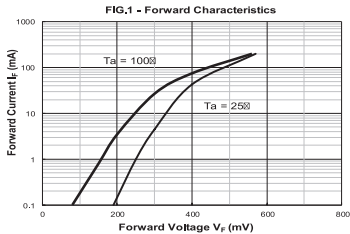
Electrical Characteristics

Parameter	Test Conditions	Symbol	Min.	Typ.	Max.	Unit
Reverse Voltage	IR = 100μA	VBR	30	-	-	V
Reverse Current	VR = 25V	IR	-	-	2	μA
Forward Voltage	IF = 0.1mA	VF	-	-	0.24	V
	IF = 1mA		-	-	0.32	
	IF = 10mA		-	-	0.40	
	IF = 30mA		-	-	0.50	
	IF = 100mA		-	-	1.00	
Reverse Recovery Time	IF=IR = 10mA, IRR=1mA, RL=100Ω	TRR	-	-	6	pF
Junction Capacitance	VR = 1V, F = 1MHz	CD	-	-	10	ns

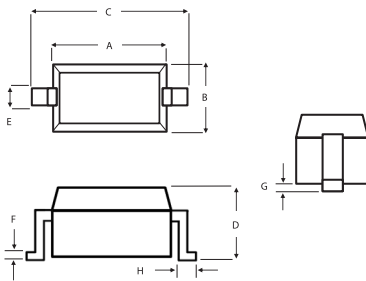
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Rating and Characteristic Curves

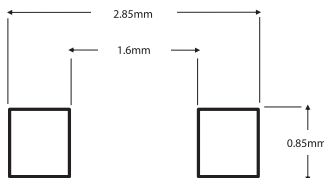


Diagram



SOD323 Package		
Dim	Min.	Max.
A	1.6	1.8
B	1.2	1.4
C	2.5	2.7
D	-	1.0
E	0.25	0.35
F	0.08	0.15
G	-	0.1
H	0.25	0.4

Soldering Pad Layout



Dimensions : Millimetres
Tolerance $\pm 0.05\text{mm}$

Part Number Table

Description	Part Number
Schottky Barrier Diode, 30V, 300mA, SOD-323	BAT54WS

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