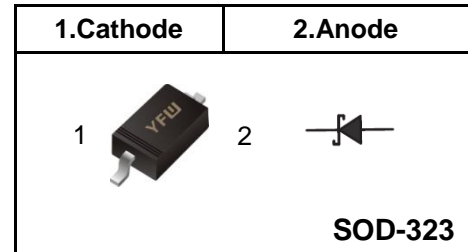


■ Surface Mount Schottky Barrier Diode

Pinning



Features

- Low Forward Voltage Drop
- Fast Switching
- Pb-Free Package May be Available. The G-Suffix Denotes a Pb-Free Lead Finish

Marking Code

BAT54WS	L9
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Absolute Maximum Ratings Ta = 25°C

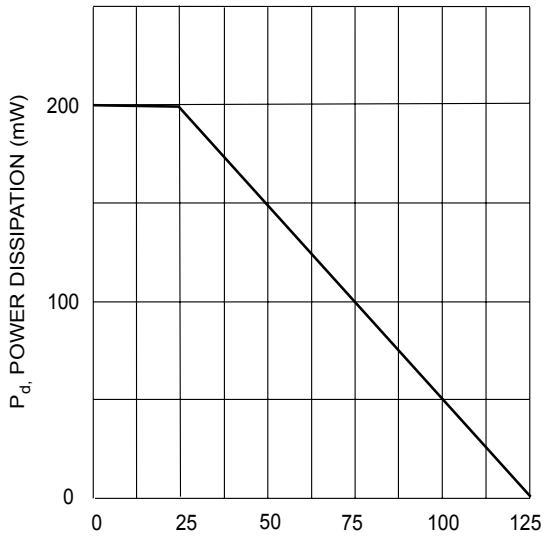
Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage	VRRM		
Working Peak Reverse Voltage	VRWM	30	V
DC Blocking Voltage	VR		
RMS Reverse Voltage	VR(RMS)	21	V
Average Rectified Forward Current	Io	100	mA
Forward Continuous Current (Note 1)	IF	200	mA
Repetitive Peak Forward Current (Note 1)	IFRM	300	mA
Forward Surge Current (Note 1) @ t < 1.0s	IFSM	600	mA
Power Dissipation (Note 1)	Pd	200	mW
Thermal Resistance, Junction to Ambient Air (Note 1)	RθJA	625	K/W
Operating and Storage Temperature Range	Tj, TSTG	-65 to 125	°C

Note 1.Part mounted on FR-4 PC board with recommended pad layout.

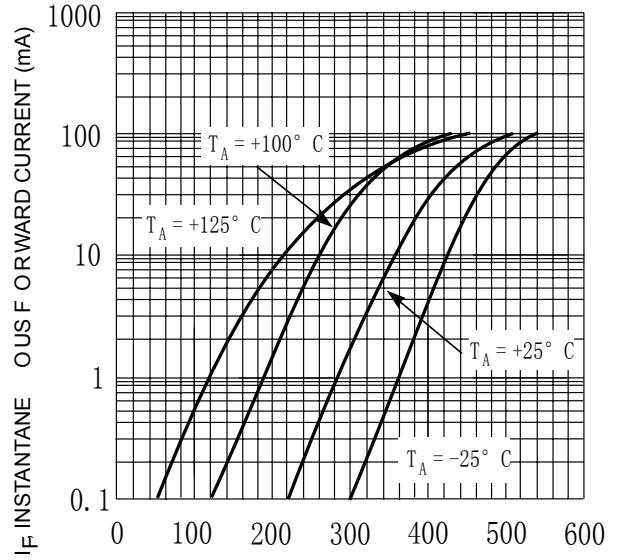
Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test conditons	Min	Typ	Max	Unit
Reverse Breakdown Voltage	V(BR)R	IR=100 μ A	30			V
Forward Voltage	VF	IF = 0.1mA			240	mV
		IF = 1mA			320	
		IF = 10mA			400	
		IF = 30mA			500	
		IF = 100mA			1000	
Reverse Leakage	IR	VR=25V			2.0	μ A
Total Capacitance	CT	VR=0V, f=1.0MHz			10	pF
Reverse Recover Time	Trr	IF = 10mA through IR = 10mA to IR = 1.0mA, RL = 100 Ω			5.0	ns

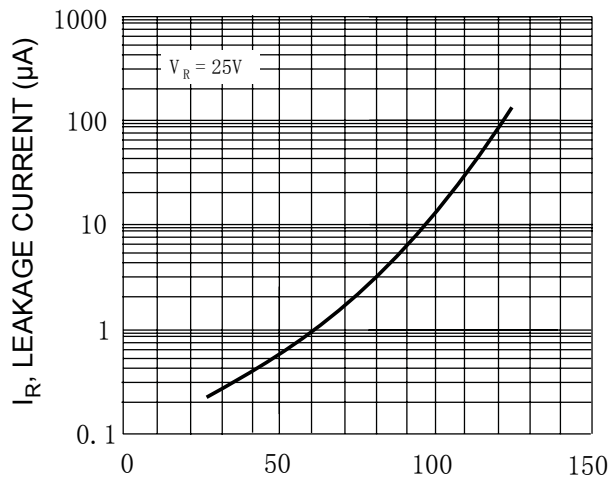
Typical Characteristics



T_A, AMBIENT TEMPERATURE (°C)
Fig. 1 Power Derating Curve



T_j, INSTANTANEOUS FORWARD VOLTAGE (mV)
Fig. 2, Typical Forward Characteristics



T_j, JUNCTION TEMPERATURE (°C)
Fig. 3, Typical Reverse Characteristics

Ordering information

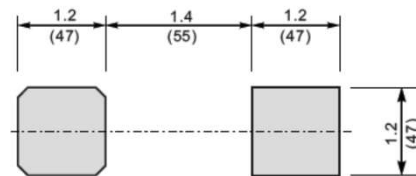
Package	Packing Description	Packing Quantity
SOD-323	Tape/Reel,7"reel	3000PCS/Reel 120000PCS/Carton

Package Dimensions

SOD-323

Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	0.8	1.1	32	43
C	0.08	0.15	3.1	5.9
D	1.2	1.4	47	55
E	1.4	1.8	63	70
E1	2.55	2.75	100	108
b	0.25	0.4	9.8	16
L1	0.2	0.45	7.9	16
A1	-	0.2	-	8
∠	9°			

The recommended mounting pad size



Unit: $\frac{\text{mm}}{\text{mil}}$

Disclaimer

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