

Plastic-Encapsulate Schottky Barrier Diode

FEATURES

- ◆High Current Capability
- ◆Low Forward Voltage Drop

MECHANICAL DATA

- ◆Case: SOD-323
- ◆Polarity: Color band denotes cathode end
- ◆Epoxy UL: 94V-0
- ◆Mounting Position: Any

Pinning

1.Cathode	2.Anode
	
SOD-323	

Marking Code

BAT54H	S1
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Maximum Ratings & Thermal Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

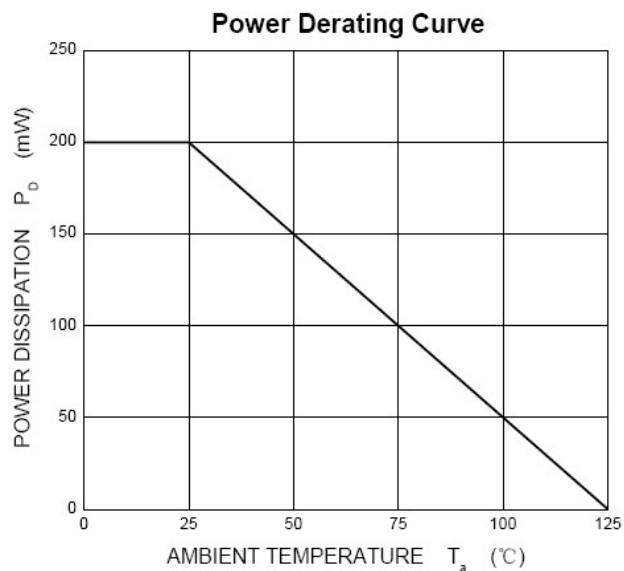
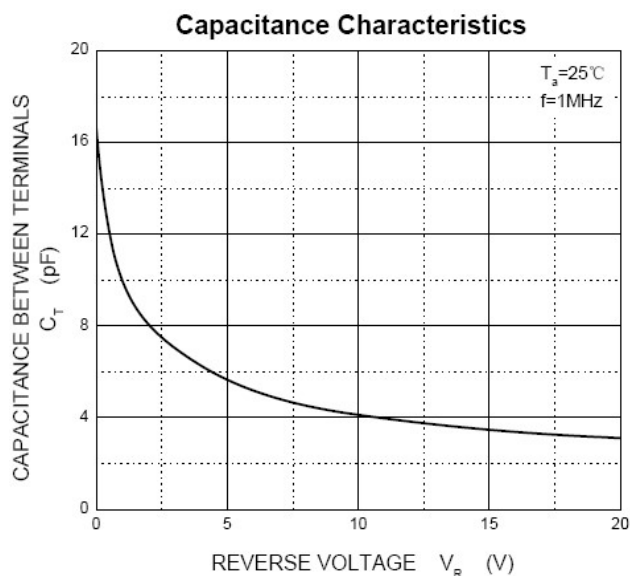
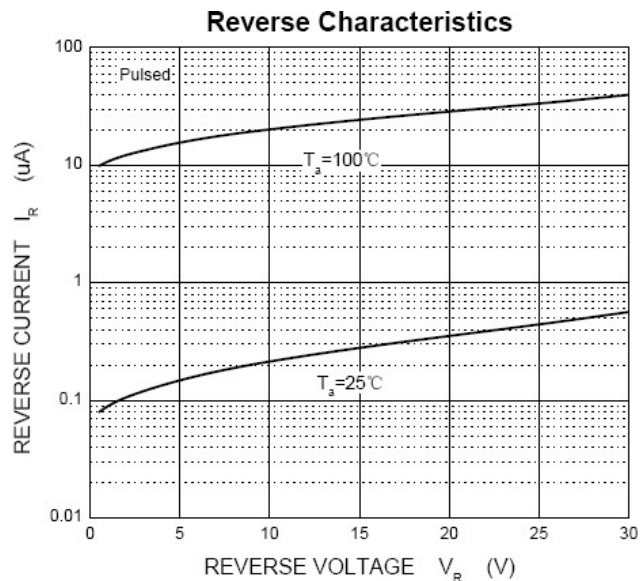
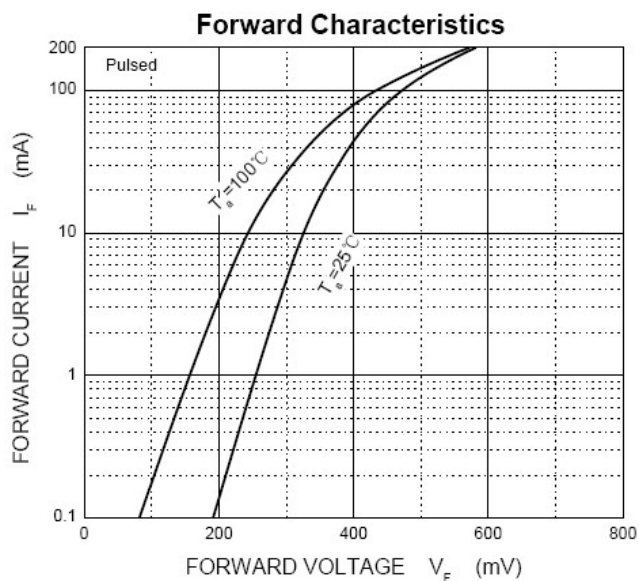
Parameters	Symbol	Limit	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	30	V
Maximum RMS voltage	V_{RMS}	21	V
Maximum DC blocking voltage	V_{DC}	30	V
Maximum average forward rectified current	I_{FM}	300	mA
Peak forward surge current 8.3 ms single half sine-wave	I_{FMS}	600	mA
Typical thermal resistance	$R_{\theta JA}$	500	K/W
Power Dissipation	P_D	200	mW
Junction Temperature	T_J	125	°C
Storage temperature range	T_{STG}	-50-+150	°C

Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Test Condition	Symbols	Limits			Unit
			Min	Typ	Max	
Maximum forward voltage	$I_F = 0.1mA$	V_{F1}			240	mV
	$I_F = 1.0mA$	V_{F2}			320	
	$I_F = 10mA$	V_{F3}			400	
	$I_F = 30mA$	V_{F4}			500	
	$I_F = 100mA$	V_{F5}			1000	
Maximum reverse breakdown voltage	$I_R=100uA$	V_R	30			V
Maximum reverse current	$V_R=25V$	I_R			2.0	uA
Type junction capacitance	$V_R = 1.0V, f = 1MHz$	C_j			10	pF
Reverse Recovery Time	$I_F=10mA, V_R=6V, I_R=10mA$	T_{rr}			6	nS

Typical Characteristics



Ordering information

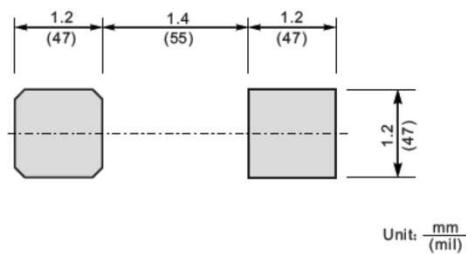
Package	Packing Description	Packing Quantity
SOD-323	Tape/Reel, 7" reel	3000PCS/Reel 120000PCS/Carton

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



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