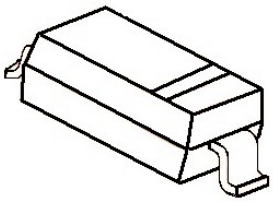
BAT54WS

SOD-323 Plastic-Encapsulate Schottky Barrier Diode

SOD-323



Marking: S1

Features

- High Current Capability
- Low Forward Voltage Drop

Mechanical Data

- SOD-323 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Epoxy UL: 94V-0
- Mounting Position: Any

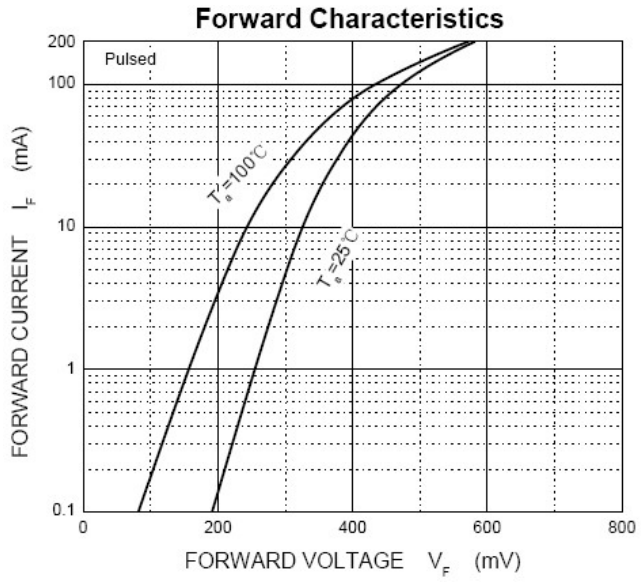
Maximum Ratings & Thermal Characteristics (Ratings at 25℃ ambient temperature unless otherwise specified.)

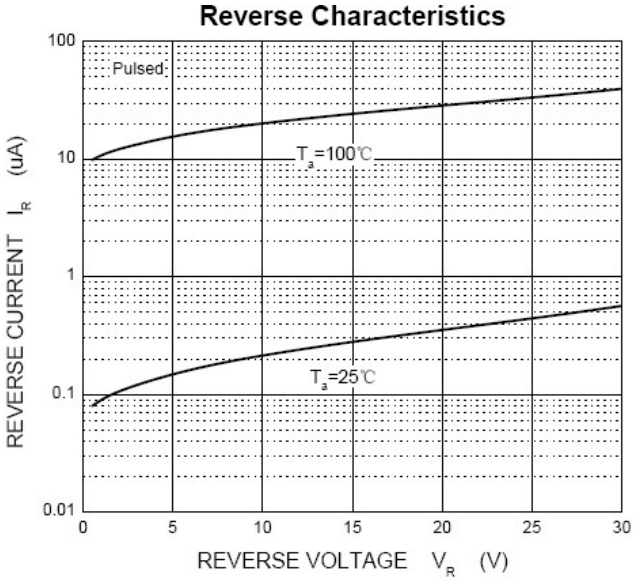
Parameters	Symbol	Limit	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	30	V
Maximum RMS voltage	V_{RMS}	21	V
Maximum DC blocking voltage	V_{DC}	30	V
Maximum average forward rectified current	I_{FM}	300	mA
Peak forward surge current 8.3 ms single half sine-wave	I_{FSM}	600	mA
Typical thermal resistance	$R_{\theta JA}$	500	℃/W
Power Dissipation	PD	200	mW
Junction Temperature	TJ	-55-+125	℃
Storage temperature range	T_{STG}	-55-+150	℃

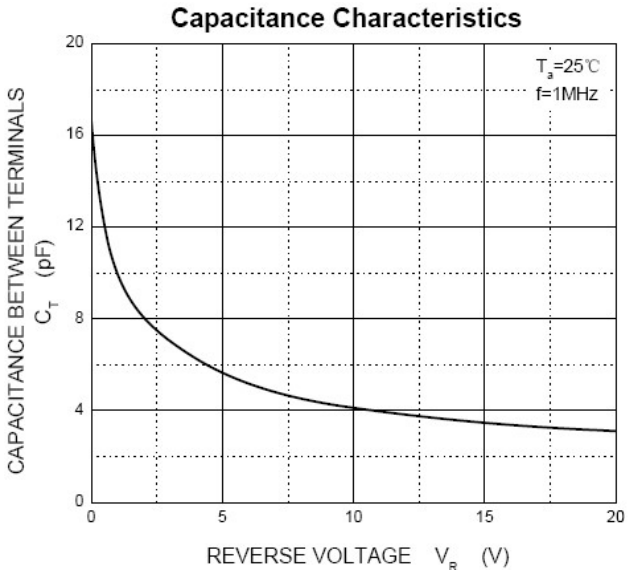
Electrical Characteristics (Ratings at 25℃ ambient temperature unless otherwise specified).

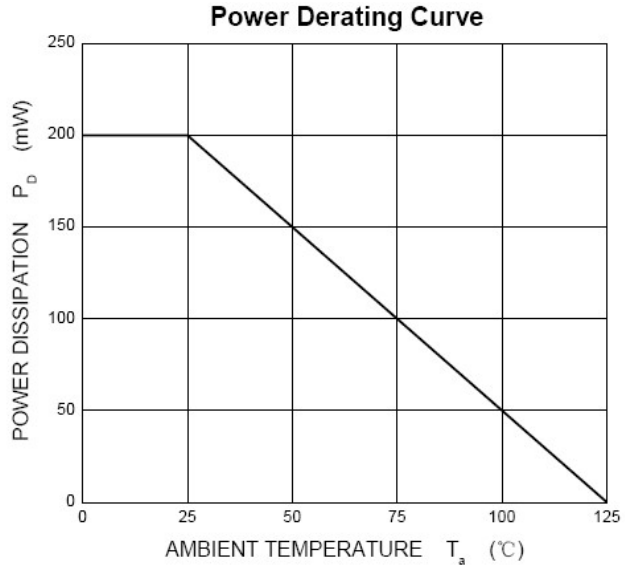
Parameters	Symbol	Test conditions	Min	Typ	Max	Unit
Maximum forward voltage	V_{F1}	IF = 0.1mA			240	mV
	V_{F2}	IF = 1.0mA			320	
	V_{F3}	IF = 10mA			400	
	V_{F4}	IF = 30mA			500	
	V_{F5}	IF = 100mA			1000	
Maximum reverse breakdown voltage	VR	IR=100uA	30			V
Maximum reverse current	I_R	VR=25V			2.0	uA
Type junction capacitance	Cj	VR = 1.0V, f = 1MHz			10	pF
Reverse Recovery Time	Trr	IF=10mA,VR=6V, IR=10mA			6	nS

Typical Characteristics

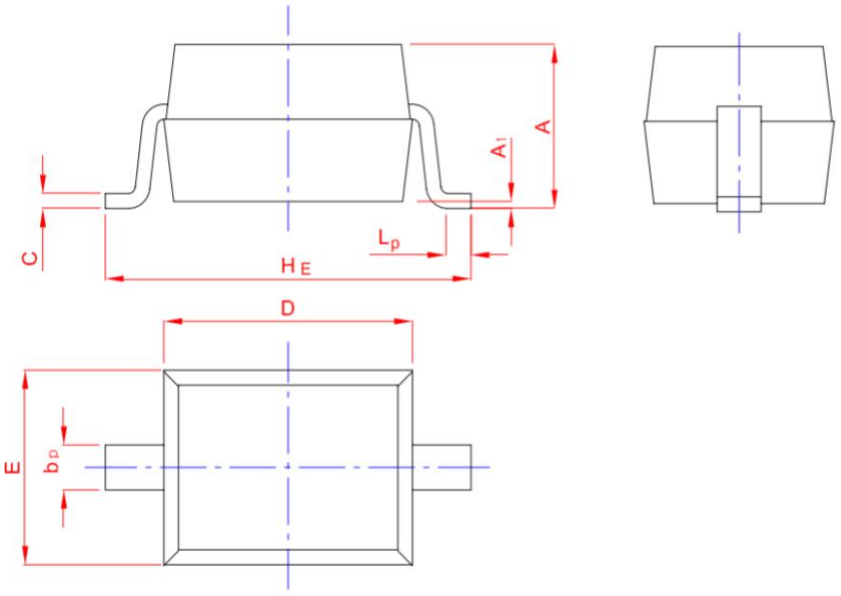








SOD-323 PACKAGE OUTLINE Plastic surface mounted package



UNIT	A	b_p	C	D	E	H_E	A_1	L_p
mm	1.20 0.80	0.40 0.25	0.18 0.08	1.80 1.60	1.40 1.15	2.80 2.30	0.10 0.00	0.50 0.10