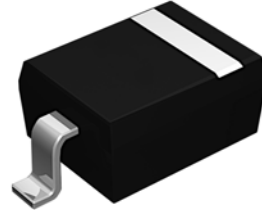


GSBAT42WS-GSBAT43WS Schottky Diode

Features

- Low forward voltage schottky diode
- RoHS compliant/Green EMC
- SOD-323 Thin SMD package
- Matte Tin (Sn) lead finish
- Cathode band/Device marking



SOD-323



Schematic Diagram

Absolute Maximum Ratings ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Units
Peak Repetitive Peak Reverse Voltage Working	V_{RRM}	30	V
Peak Reverse Voltage	V_{RM}		V
DC Blocking Voltage	V_R		V
RMS Reverse Voltage	$V_{R(RMS)}$	21	V
Forward Continuous Current	I_{FM}	200	mA
Repetitive Peak Forward Current @ $t < 1.0s$	I_{FSM}	500	mA
Non-Repetitive Peak Forward Surge Current ¹	I_{FSM}	4.0	A
Power Dissipation	P_D	200	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	500	mW/ $^{\circ}\text{C}$
Junction Temperature	T_J	125	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-65 to +125	$^{\circ}\text{C}$

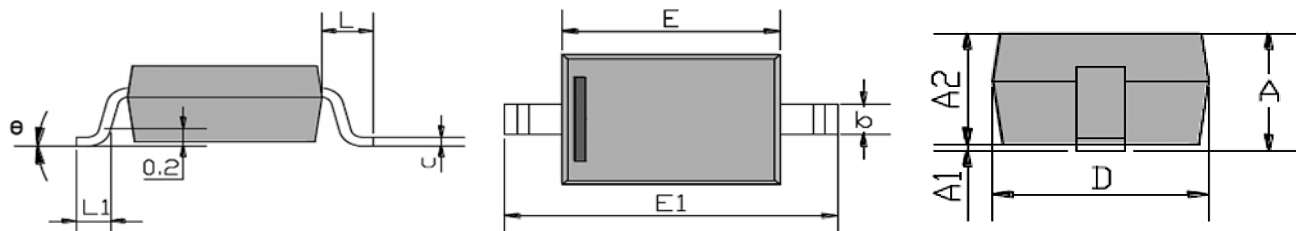
Note:

1. 8.3ms single half sine-wave.

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Reverse Breakdown Voltage	V_{BR}	$I_R=100\mu\text{A}$	30	-	-	V
Forward Voltage	Both Types	$I_F=200\text{mA}$	-	-	1.0	V
	GSBAT42WS	$I_F=10\text{mA}$	-	-	0.40	
	GSBAT42WS	$I_F=50\text{mA}$	-	-	0.65	
	GSBAT43WS	$I_F=2.0\text{mA}$	0.26	-	0.33	
	GSBAT43WS	$I_F=15\text{mA}$	-	-	0.45	
Reverse Current	I_R	$V_R=25\text{V}$	-	-	500	nA
Capacitance	C_T	$V_R=1\text{V}$, $f=1\text{MHz}$	-	-	10	pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=10\text{mA}$, $I_{rr}=0.1 \times I_R$, $R_L=100\Omega$	-	-	5.0	nS

Package Outline Dimensions (SOD-323)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	-	1.00	-	0.039
A1	0.00	0.10	0.000	0.004
A2	0.80	0.90	0.031	0.035
b	0.25	0.35	0.010	0.014
c	0.08	0.15	0.003	0.006
D	1.20	1.40	0.047	0.055
E	1.60	1.80	0.063	0.071
E1	2.50	2.70	0.098	0.106
L	0.475 REF		0.019 REF	
L1	0.25	0.40	0.010	0.016
θ	0°	8°	0°	8°

Order Information

Device	Package	Marking	Carrier	Quantity
GSBAT42WS	SOD-323	S7	Tape & Reel	3,000 Pcs / Reel
GSBAT43WS	SOD-323	S8	Tape & Reel	3,000 Pcs / Reel