

Schottky Diodes

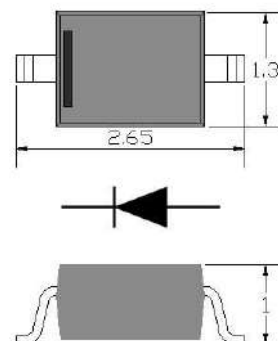
Features

- Low Forward Voltage Schottky Rectifier
- RoHS compliant / Green EMC
- SOD-323 Thin SMD package
- Matte Tin (Sn) Lead finish
- Cathode Band / Device marking
- AEC-Q101 Compliant

Device Marking Code	
S-BAT54H-V	L9

SOD-323

Unit:mm



Maximum Ratings @Ta=25°C

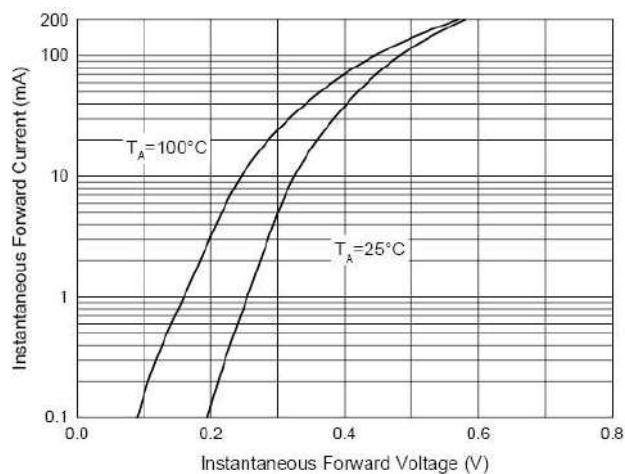
Symbol	Parameter	Value	Units
V_R	DC Blocking Voltage	30	V
I_O	Continuous Forward Current	100	mA
I_F	Forward continuous current	200	mA
I_{FRM}	Repetitive peak forward current	300	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current *1	600	mA
P_D	Power Dissipation	200	mW
T_J	Junction Temperature	125	°C
T_{STG}	Storage Temperature	-65 to +125	°C

*1 8.3 ms single half sine-wave

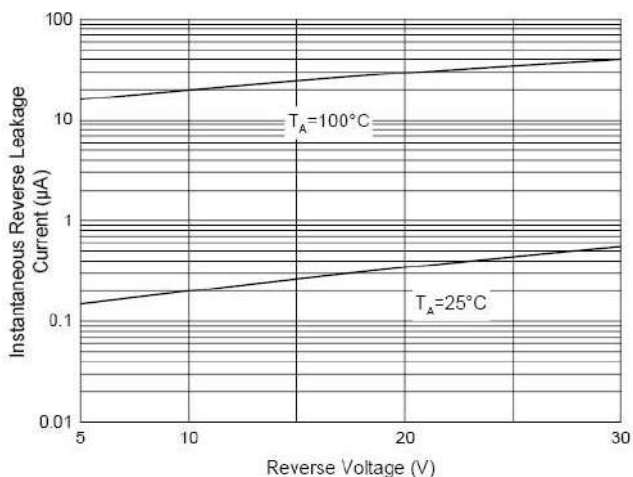
Electrical Characteristics @Ta=25°C

Symbol	Parameter	Conditions	Min	Typ	Max	Units
V_{BR}	Reverse breakdown voltage	$I_R = 100 \mu A$	30			V
V_F	Forward Voltage	$I_F = 0.1 mA$ $I_F = 1.0 mA$ $I_F = 10 mA$ $I_F = 30 mA$ $I_F = 100 mA$			240 320 400 500 1000	mV
I_R	Reverse Current	$V_R = 25 V$			2.0	μA
C_T	Capacitance	$V_R = 1 V, f = 1 MHz$			10	pF
trr	Reverse recovery time	$I_F = 10 mA$, $I_R = 10 mA$ to $1 mA$, $R_L = 100 \Omega$			5.0	ns

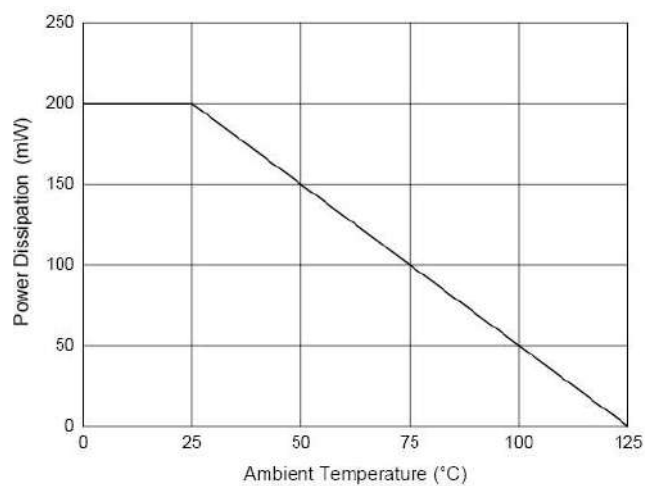
Typical Characteristics



Typical Instantaneous Forward Characteristics



Typical Reverse Leakage Characteristics

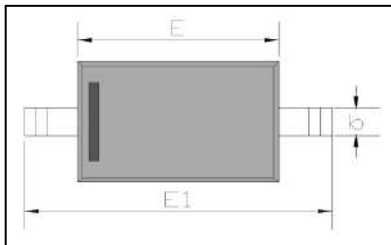


Power Derating Curve

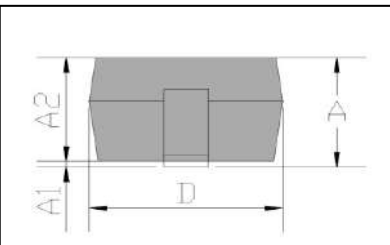
Package Dimensions

Package outline : SOD-323

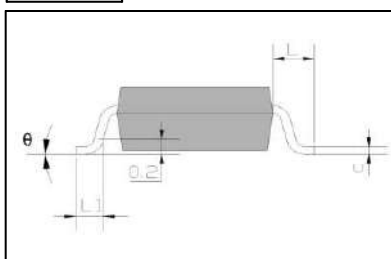
Top View



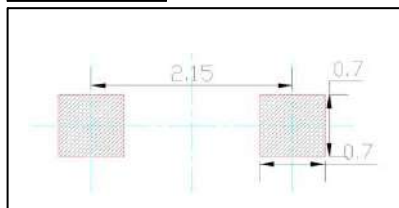
Side View



Front View



Soldering Pattern



Symbol	Dimensions in mm	
	Min.	Max.
A		1.000
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.350
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
L	0.475 REF.	
L1	0.250	0.400
θ	0°	8°

Notice:

- 2. Lead plating: Pb free solder
- 3. Lead thickness includes solder plating
- 4. Other Tolerance: ± 0.05
- 5. Unit: mm

Ordering Information

Device	Package	Shipping	Tape wide	Emboss pitch	Tape specification
S-BAT54H-V	SOD-323	Tape & Reel 3000pcs / 7" Reel	8 mm	4 mm	Conductive