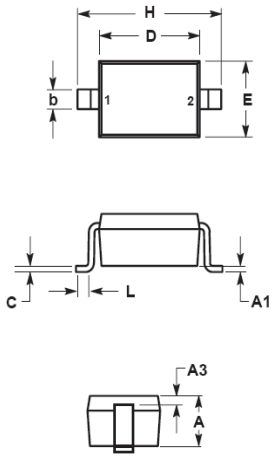
HAICHUANG SEMI

SD101AWS

SURFACE MOUNT SCHOTTKY BARRIER DIODE

Features

- Low Forward Voltage Drop.
- Guard Ring Construction for Transient Protection.
- Negligible Reverse Recovery Time.
- Ultra-small Surface Mount Package.
- Marking: S1



SOD-323		
Dim.	Min.	Max.
A	0.80	1.10
A1	0.00	0.10
A3	0.15 REF	
B	0.25	0.40
C	0.10	0.15
D	1.60	1.80
E	1.15	1.35
L	0.20	0.50
H	2.30	2.80
Dimensions in millimeter		

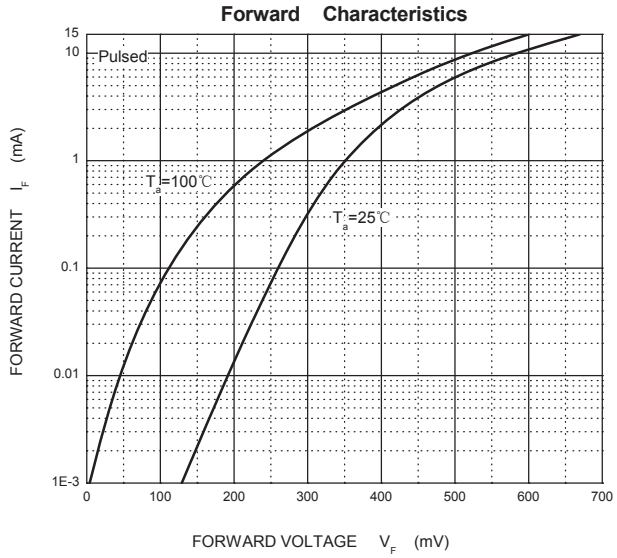
Maximum Ratings @ T_A = 25°C unless otherwise specified

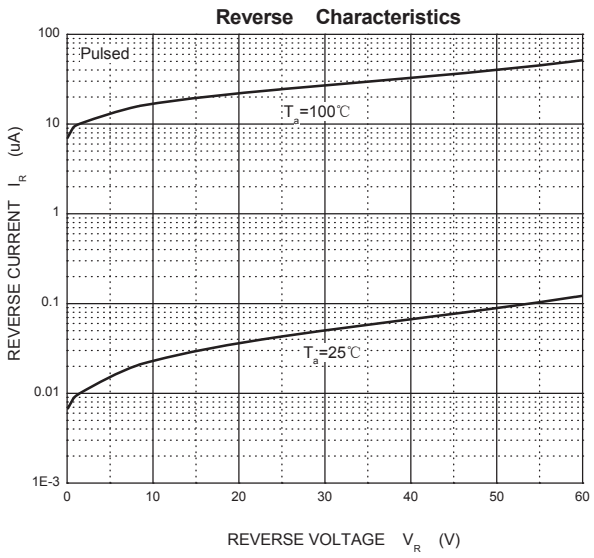
Symbol	Parameter	Value	Unit
V_{RRM}	Repetitive Peak Reverse Voltage	60	V
V_{RWM}	Working Peak Reverse Voltage		
V_R	DC Blocking Voltage		
$V_{R(RMS)}$	RMS reverse voltage	42	V
I_{FM}	Forward Continuous Current	15	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current @t=8.3ms	2	A
P_D	Power Dissipation	200	mW
$R_{\Theta JA}$	Thermal Resistance from Junction to Ambient	500	℃/W
T_j	Junction Temperature	125	℃
T_{stg}	Storage Temperature	-50~+150	℃

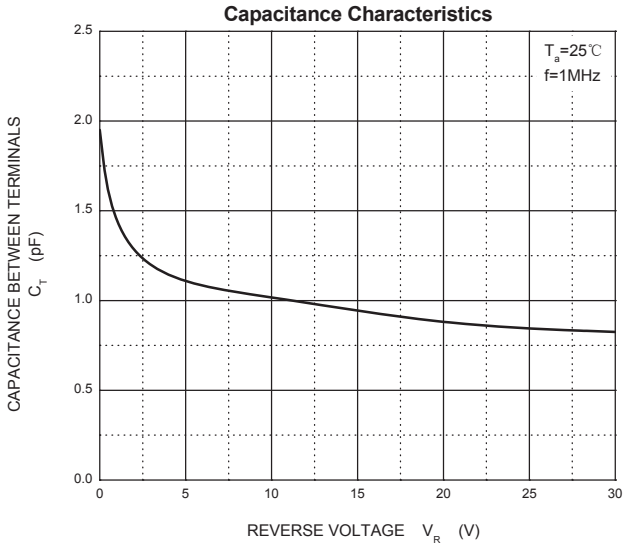
Electrical Characteristics @ T_A = 25°C unless otherwise specified

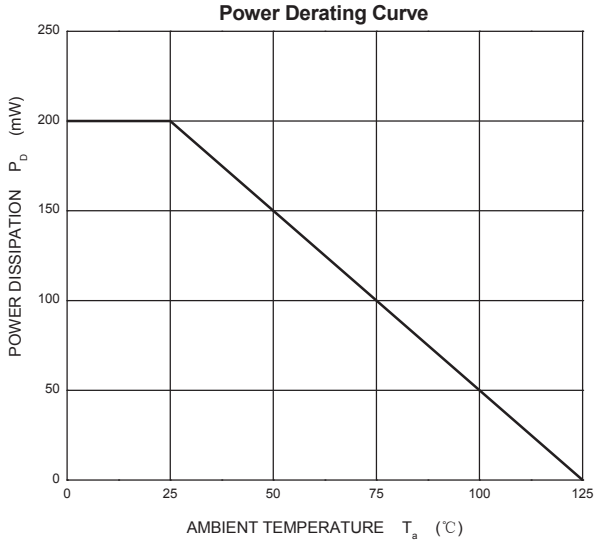
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	I_R=10μA	60			V
Reverse current	I_R	V_R=50V			0.2	μA
Forward voltage	V_F	I_F=1mA			0.41	V
		I_F=15mA			1	
Total capacitance	C_{tot}	V_R=0V,f=1MHz			2	pF
Reverse recovery time	t_{rr}	I_F= I_R=5mA, I_{rr}=0.1×I_R, R_L=100Ω			1	ns

TYPICAL TRANSIENT CHARACTERISTICS









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