



Surface Mount Schottky Barrier Diode



Forward Current - 100 mA
Reverse Voltage - 45 V

Description

- Power Dissipation of 200mW
- Fast Switching Device (TRR<10nS)
- Low Forward Voltage Schottky Rectifier
- Low Reverse Capacitance

Mechanical Data

- Case: SOD323 Package
- Case Material: "Green" Molding Compound UL Flammability Classification Rating 94V-0
- Terminals: Matte tin plated, solderable per MIL-STD-750, method 2026
- Component in accordance to RoHS
- Halogen Free

Note: Products with logo  or  are made by HY Electronic (Cayman) Limited.

Ordering Information

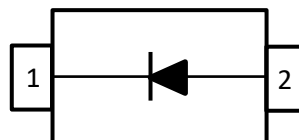
- Package :SOD323
- Reel Size :7 (inches)
- Quantity Per Reel :3,000/Tape & Reel
- Quantity One Box :45,000/Tape & Reel

Package Outline

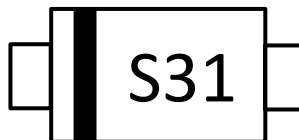


SOD323 Top View

Device Schematic & PIN Configuration



Product Type Marking Code



"S31" = Product Type Marking Code

Maximum Ratings (@TA = +25°C, unless otherwise specified.)

Absolute Ratings

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	45	V
Forward Rectified Current	I_{FM}	100	mA
Peak Forward Surge Current @ t = 8.3ms	I_{FSM}	1	A
Power Dissipation	P_D	200	mW
Junction Temperature	T_J	125	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	500	°C/W

Electrical Characteristics

Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Reverse Voltage	$I_R=100\mu A$	V_{BR}	40	-	-	V
Reverse Current	$V_R=40V$	I_R	-	-	5	μA
Forward Voltage	$I_F=1mA$	V_F	-	-	0.35	V
	$I_F=10mA$		-	-	0.45	
	$I_F=100mA$		-	-	0.60	
Reverse Recovery Time	$I_F=I_R=10mA$, $I_{rr}=0.1 \times I_R$, $R_L=100\Omega$	T_{RR}	-	-	10	ns
Junction Capacitance	$V_R=0V$, $F=1MHz$	C_T	-	-	25	pF



Rating and Characteristic Curves

FIG.1 - Forward Characteristics

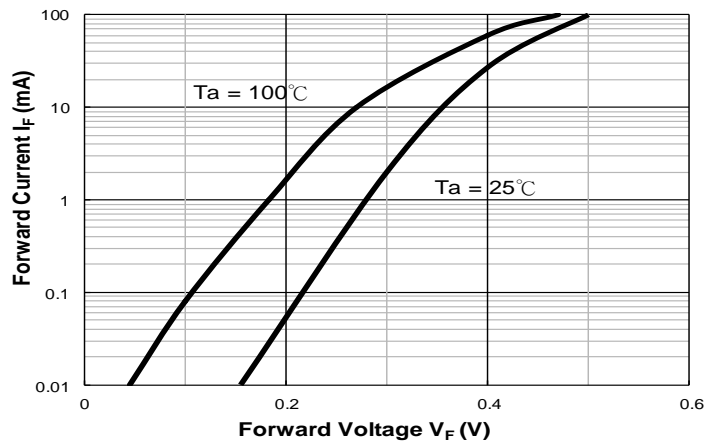


FIG.2 - Reverse Characteristics

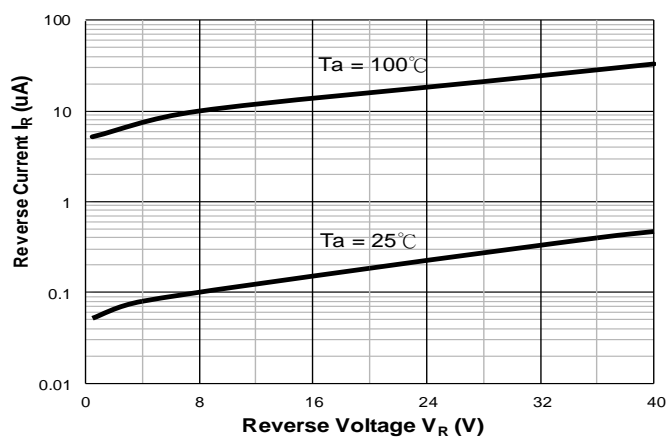


FIG.3 - Power Derating Curve

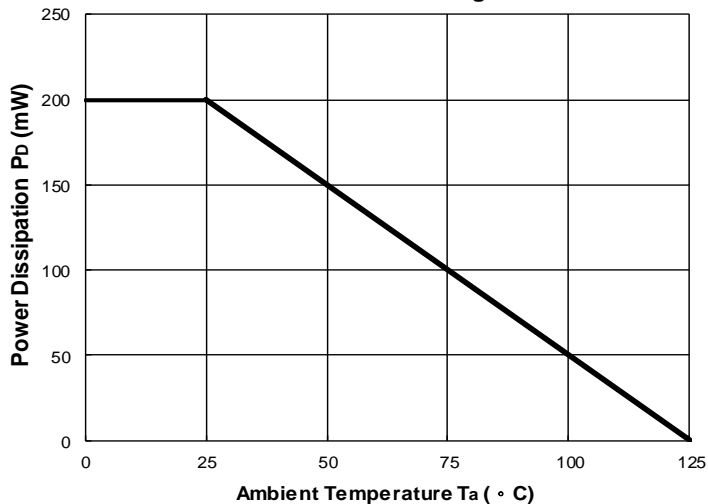
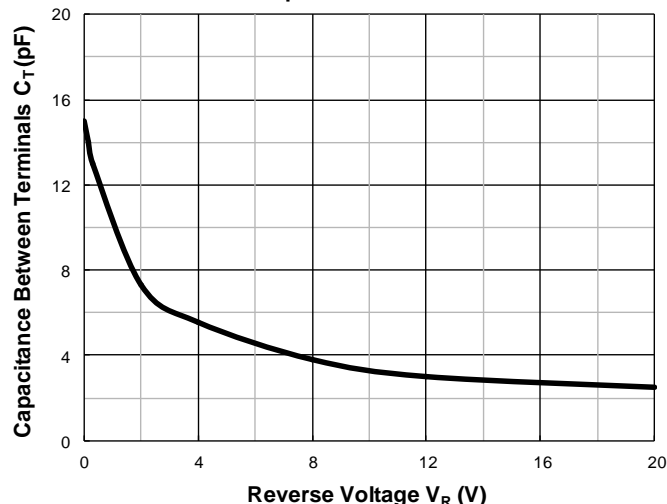
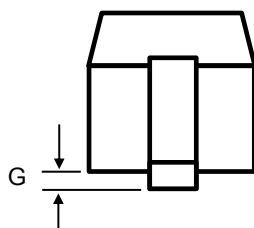
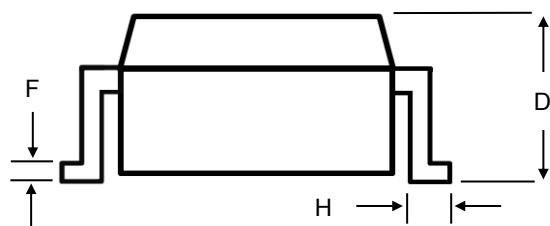
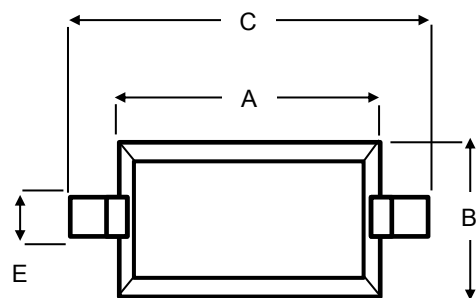


FIG.4 - Capacitance Characteristics



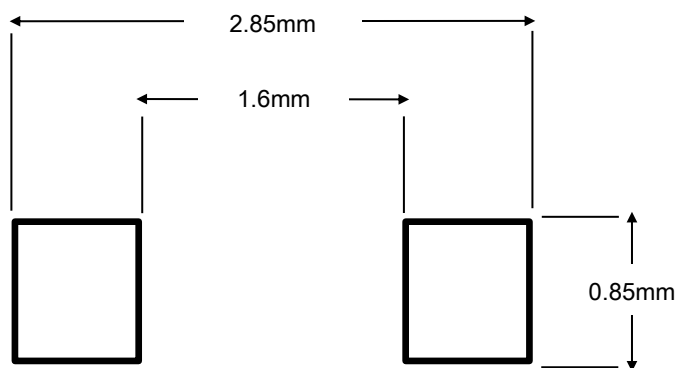


Package Outline Dimensions



SOD323 Package		
Dim	Min	Max
A	1.6	1.8
B	1.2	1.4
C	2.5	2.7
D	-	1.0
E	0.25	0.35
F	0.08	0.15
G	-	0.1
H	0.25	0.4
All Dimensions in mm		

Suggested Soldering Pad Layout



Note:

- 1.The pad layout is for reference purposes only.
- 2.General tolerance $\pm 0.05\text{mm}$



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