High Speed Switching Diode

Forward Current - 300 mA
Reverse Voltage - 100 V

Description

- Power Dissipation of 200mW
- Fast Switching Device (TRR<4nS)
- High Stability and High Reliability
- Low Reverse Leakage

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.

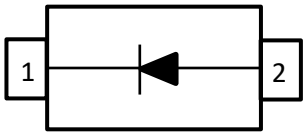
Ordering Information

- 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

"T4" = Product Type Marking Code

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

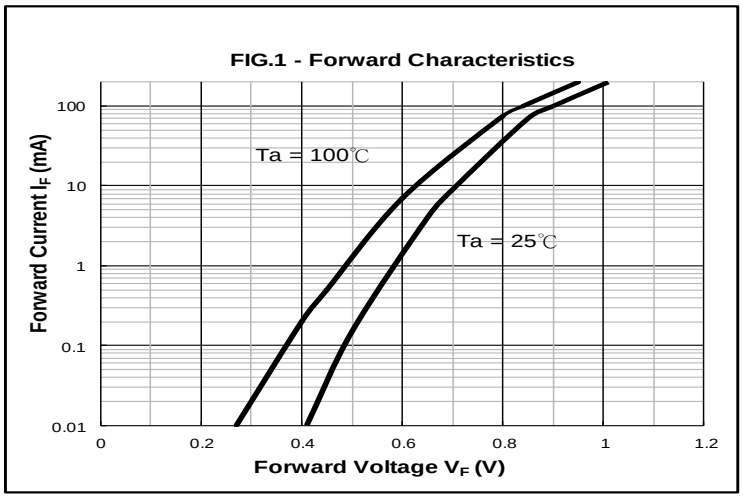
Absolute Ratings

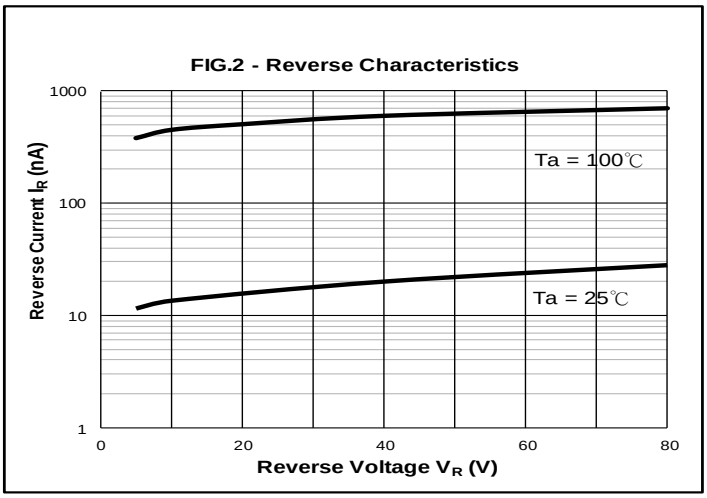
Parameter	Symbol	Value	Unit
Reverse Voltage	V_{RM}	100	V
Peak Forward Surge Current @ tp=1us	I_{FSM}	2	A
Non-Repetitive Peak Forward Current	I_{FM}	300	mA
Average Rectified Current	I_O	150	mA
Power Dissipation	P_D	200	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	625	° C/W
Junction Temperature	T_J	125	° C
Storage Temperature Range	T_S	-55 to +150	° C

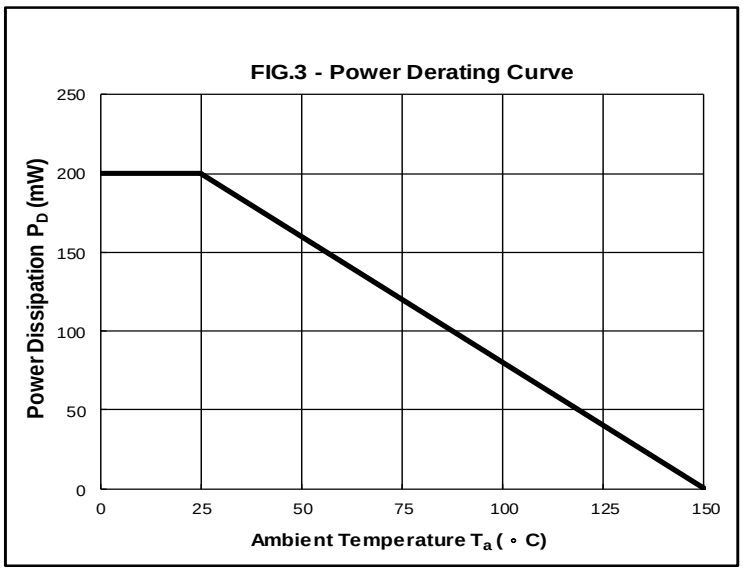
Electrical Characteristics

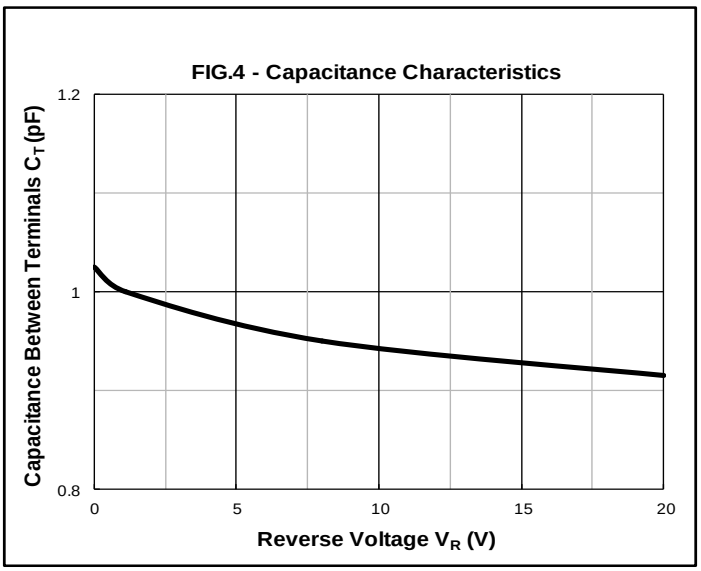
Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Breakdown Voltage	I_R=100uA	V_{BR}	100	-	-	V
	I_R=5uA		75	-	-	
Reverse Current	V_R=20V	I_R	-	-	25	nA
	V_R=75V		-	-	1	uA
Forward Voltage	I_F=1mA	V_F	-	-	0.71	V
	I_F=10mA		-	-	0.85	
	I_F=50mA		-	-	1.00	
	I_F=150mA		-	-	1.25	
Reverse Recovery Time	I_F=I_R=10mA I_{RR}=0.1*I_R,R_L=100Ω	T_{RR}	-	-	4	ns
Junction Capacitance	V_R = 0V, F = 1MHz	C_D	-	-	2	pF

Rating and Characteristic Curves



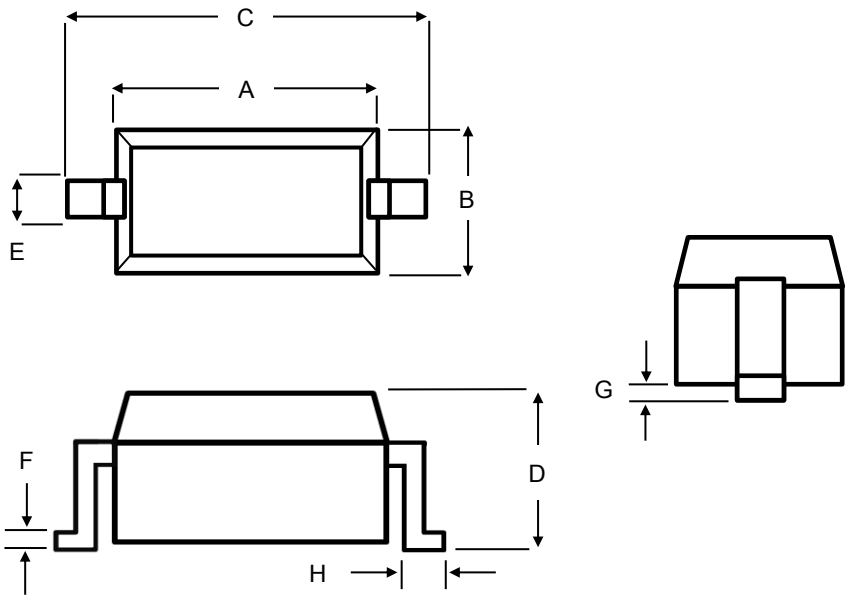






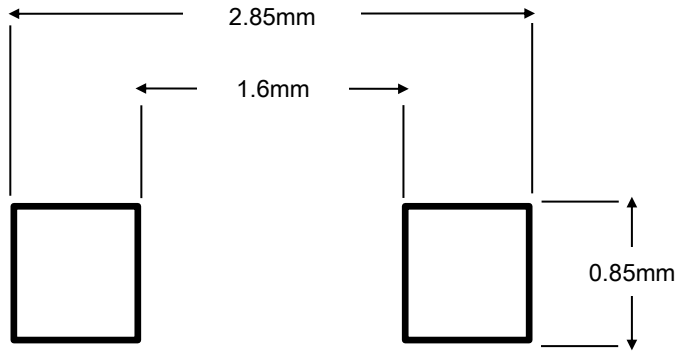
The curve above is for reference only.

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 ±0.05mm

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