200mW SOD-323 Schottky Barrier Diode

Features

- Low Current Rectifier Schottky Diode
- 200mW; Power Dissipation of 200mW
- High Stability and High Reliability
- Low reverse leakage

Mechanical Data

- SOD-323 Small Outline Plastic Package
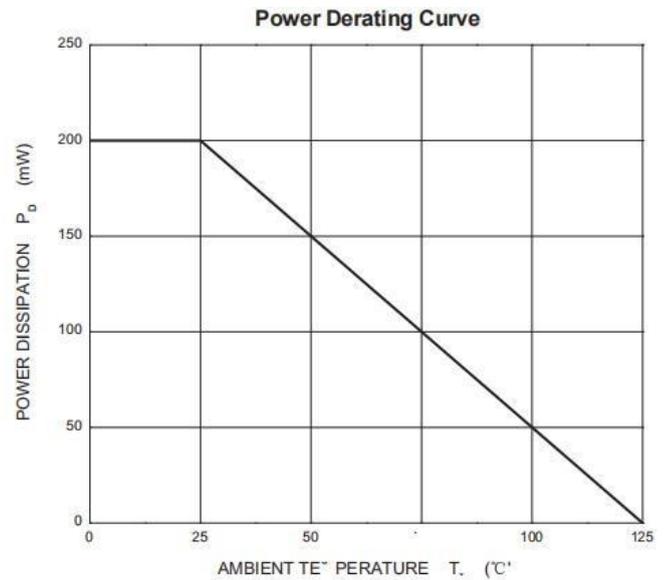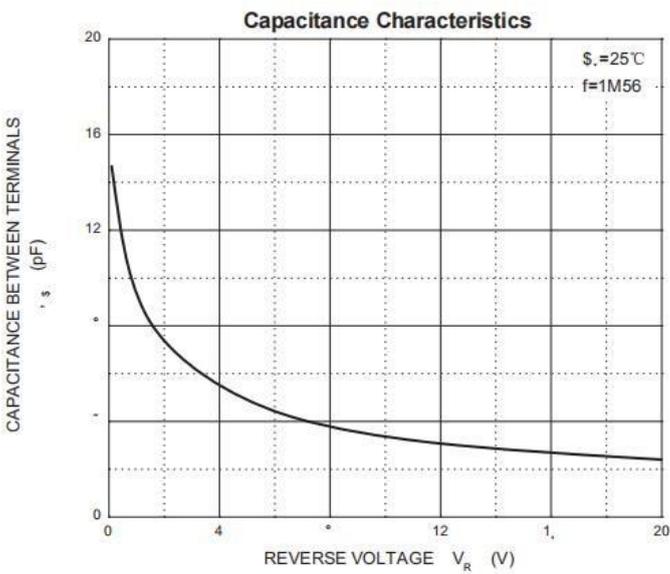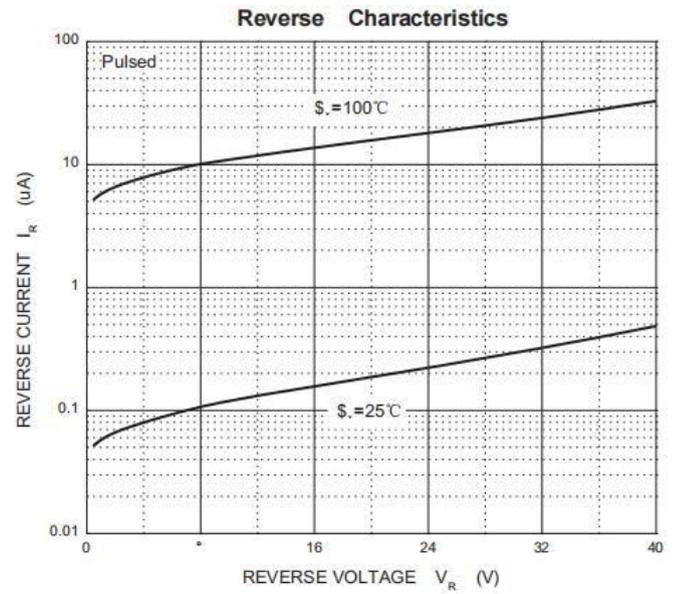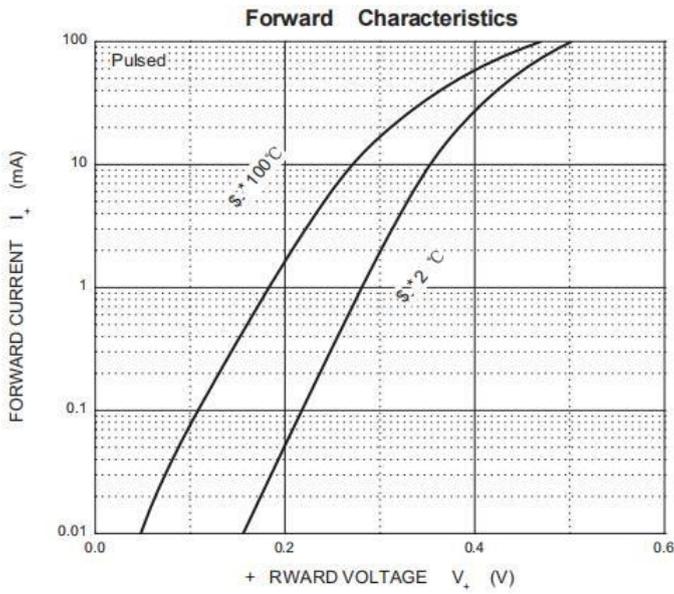- Polarity: Color band denotes cathode end
- Mounting Position: Any

RoHS COMPLIANT

Marking: S31 **SOD-323**

Maximum Ratings & Thermal Characteristics (T$_A$=25°C unless otherwise noted)

Parameters	Symbol	Value	Unit
Reverse Voltage	V$_R$	40	V
Peak Reverse Voltage	V$_{RM}$	45	V
Average Rectified Current	I$_o$	100	mA
Non-Repetitive Peak Forward Surge Current@tp=8.3ms; TA=25℃	I$_{FSM}$	1.0	A
Power Dissipation	P$_D$	200	mW
Thermal Resistance from Junction to Ambient	R$_{\theta JA}$	500	℃/W
Storage Temperature Range	T$_S$	-55-+150	℃
Operating Junction Temperature Range	T$_J$	-40-+150	℃

Electrical Characteristics (T$_A$=25°C unless otherwise noted)

Parameter	Symbols	Test Condition	Limits			Unit
			Min	Typ	Max	
Reverse Current	I$_R$	VR=40V			5	uA
Forward Voltage	V$_F$	IF=1.0mA			0.35	V
		IF=10mA			0.45	
		IF=100mA			0.6	
Capacitance Between Terminals	C$_J$	VR=0V, f=1MHZ			25	pF

Ratings and Characteristics Curves

(T$_A$ = 25℃ unless otherwise noted)

Forward Characteristics

Pulsed

FORWARD CURRENT I$_+$ (mA) vs + RWARD VOLTAGE V$_+$ (V)

Reverse Characteristics

Pulsed

REVERSE CURRENT I$_R$ (uA) vs REVERSE VOLTAGE V$_R$ (V)

Capacitance Characteristics

$_=25℃
f=1M56

CAPACITANCE BETWEEN TERMINALS (pF) vs REVERSE VOLTAGE V$_R$ (V)

Power Derating Curve

POWER DISSIPATION P$_D$ (mW) vs AMBIENT TEMPERATURE T (℃)

Package Outline Dimensions

millimeters
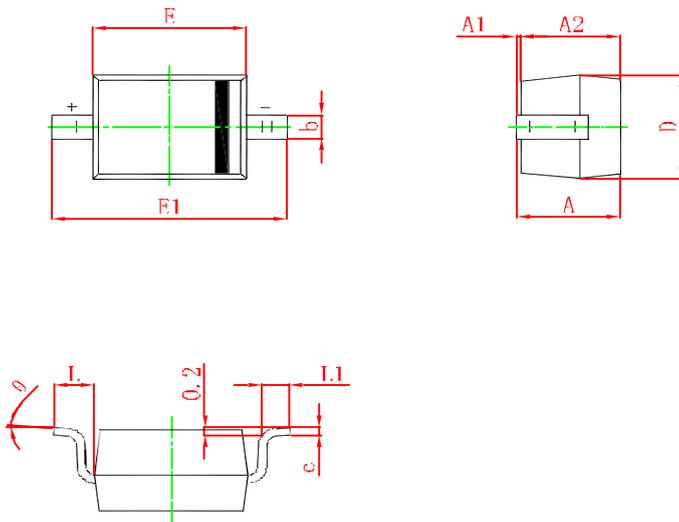
Symbol	Min	Max
A		1.000
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.350
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
L	0.475REF	
L1	0.250	0.400
θ	0⁰	8⁰

Revision History

Document Version	Date of release	Description of changes
Rev.A	2022.08.25	First issue

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