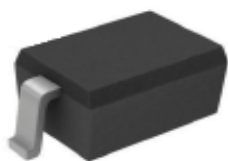


SOD-323



Marking: SM

Features

High Current Capability
Low Forward Voltage Drop
Halogen free and RoHS compliant

Mechanical Data

SOD-323 Small Outline Plastic Package
Polarity: Color band denotes cathode end
EpoxyUL: 94V-0
Mounting Position: Any

Maximum Ratings & Thermal Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified.)

Parameters	Symbol	Limit	Unit
Maximum repetitive peak reverse voltage	VRRM	60	V
Maximum average forward rectified current	IFM	1	A
Peak forward surge current 8.3 ms single half sine-wave	IFSM	10	A
Typical thermal resistance	RθJA	500	°C/W
Power Dissipation	PD	250	mW
Junction temperature	Tj	125	°C
Storage temperature range	TSTG	-55-+150	°C

Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified).

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Unit
V _F	Forward voltage	I _F =1mA	—	—	0.7	V
I _R	Reverse voltage leakage current	V _R =60V	—	—	0.1	mA
C _j	Diode capacitance	V _R =4V, f=1MHZ	—	—	120	pF

Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
SOD-323	Tape/Reel, 7" reel	3000	EIA-481-1

Ratings and Characteristic Curves

Figure 1: Forward Characteristics

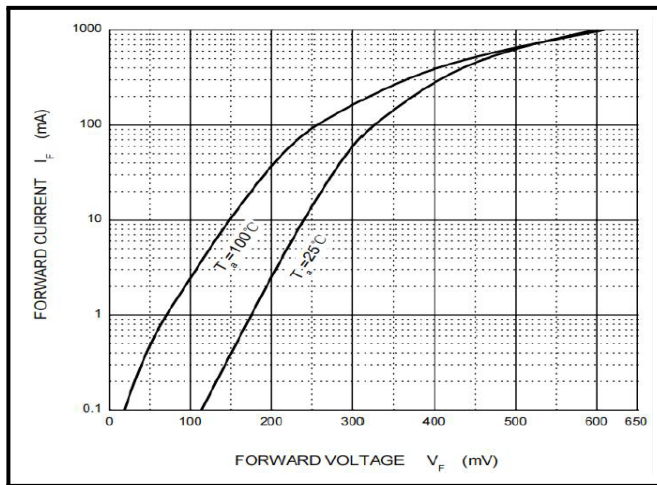


Figure 2: Reverse Characteristics

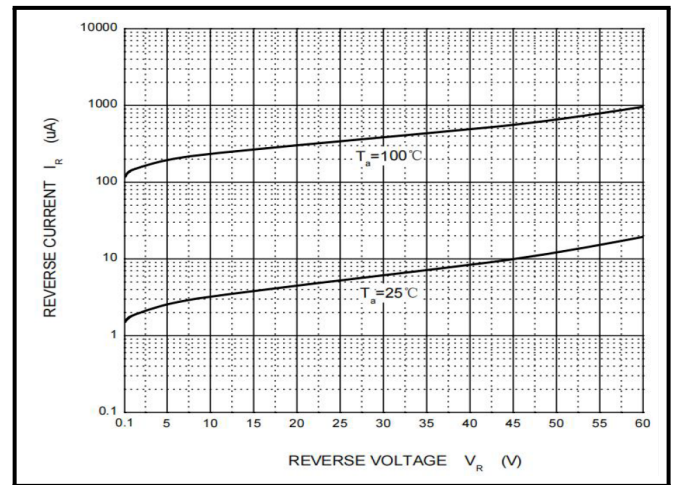


Figure 3: Capacitance Characteristics

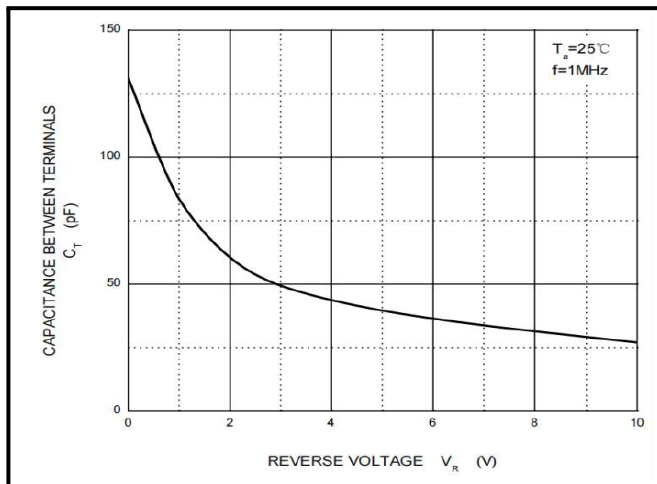
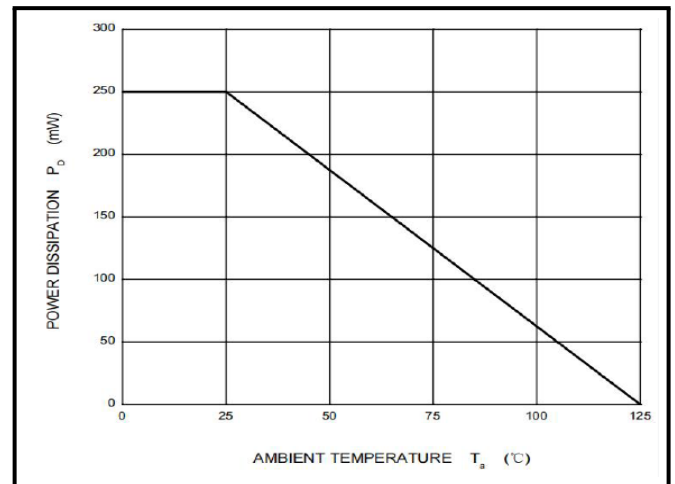
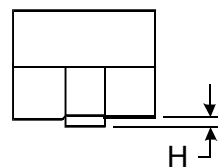
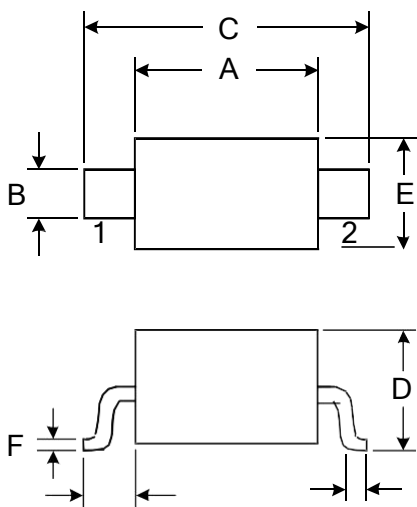


Figure 4: Power Derating Curve



Package Outline Dimensions: SOD-323



DIMENSIONS				
SYMBOL	MILLIMETER		INCHES	
	MIN	MAX	MIN	MAX
A	1.600	1.800	0.063	0.071
B	0.250	0.350	0.010	0.014
C	2.500	2.700	0.098	0.106
D		1.000		0.039
E	1.200	1.400	0.047	0.055
F	0.080	0.150	0.003	0.006
L	0.500 REF		0.020REF	
L1	0.250	0.400	0.010	0.016
H	0.000	0.100	0.000	0.004