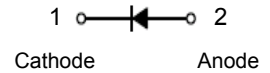
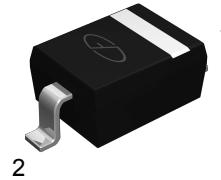


Features

- Fast switching speed
- Very small surface mount package
- For general purpose switching applications
- High conductance



SOD-323

Schematic Diagram

Absolute Maximum Ratings (T_A=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V _R	75	V
Working Peak Reverse Voltage			
DC Reverse Voltage			
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Average Rectified Output Current	I _O	150	mA
Repetitive Peak Forward Current	I _{FRM}	300	mA
Non-Repetitive Peak Forward Surge Current, @t=1.0us	I _{FSM}	2.0	A
Non-Repetitive Peak Forward Surge Current, @t=1.0s		1	
Power Dissipation	P _D	200	mW
Thermal Resistance, Junction-to-Ambient	R _{θJA}	625	°C/W
Operating Junction Temperature Range	T _J	-55 To +150	°C
Storage Temperature Range	T _{STG}	-55 To +150	°C

Electrical Characteristics (T_A=25°C unless otherwise noted)

Parameter	Symbol	Conditions	Min.	Max.	Unit
Reverse Breakdown Voltage	V _{(BR)R}	I _R =5.0μA	75	-	V
		I _R =100μA	100	-	
Forward Voltage	V _F	I _F =1mA	-	0.72	V
		I _F =10mA	-	0.86	
		I _F =50mA	-	1	
		I _F =150mA	-	1.25	
Reverse Current	I _R	V _R =75V	-	1	μA
		V _R =20V	-	25	nA
Junction Capacitance	C _J	V _R =0, f=1MHz	-	2	pF
Reverse Recovery Time	t _{rr}	I _F =I _R =10mA, R _L =100Ω, I _{RR} =0.1×I _R	-	4	ns

Typical Electrical Characteristic Curves

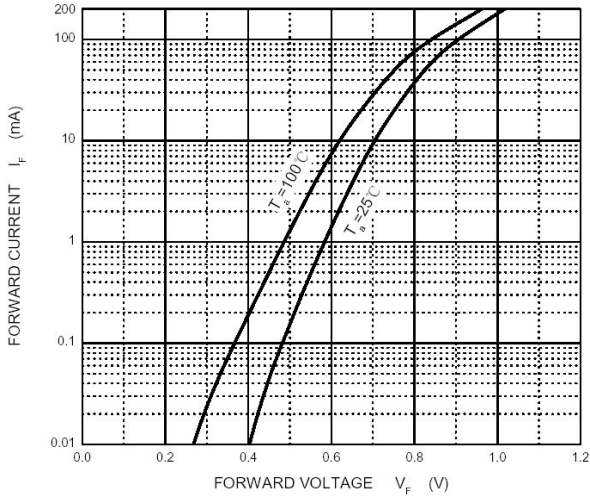


Figure 1. Forward Characteristics

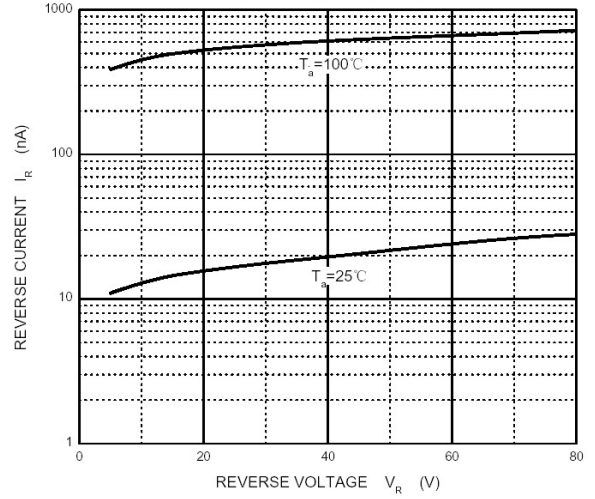


Figure 2. Reverse Characteristics

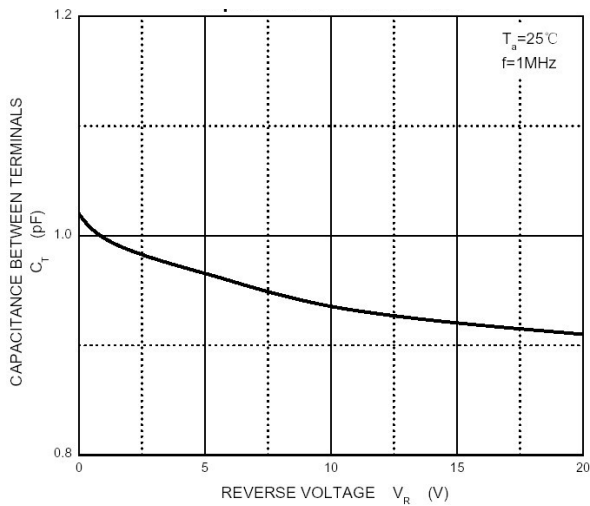


Figure 3. Capacitance Characteristics

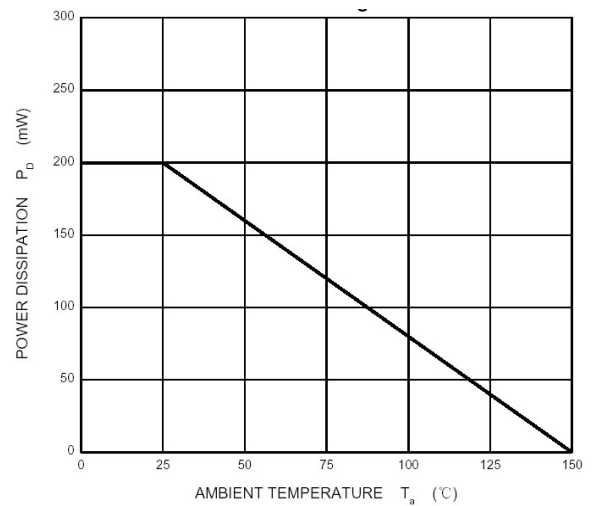
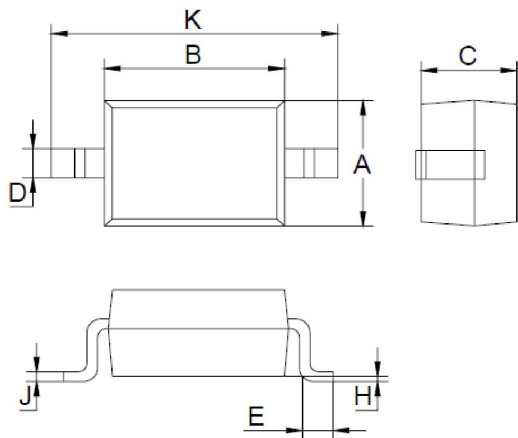


Figure 4. Power Derating Curve

Package Outline Dimensions (SOD-323)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.200	1.400	0.047	0.055
B	1.600	1.800	0.063	0.071
C	0.800	0.900	0.031	0.035
D	0.250	0.350	0.010	0.014
E	0.250	0.400	0.010	0.016
H	0.000	0.100	0.000	0.004
J	0.100 TYP		0.004 TYP	
K	2.500	2.700	0.098	0.106

Order Information

Device	Package	Marking	Carrier	Quantity
1N4148WS	SOD-323	T4	Tape & Reel	3,000pcs / Reel