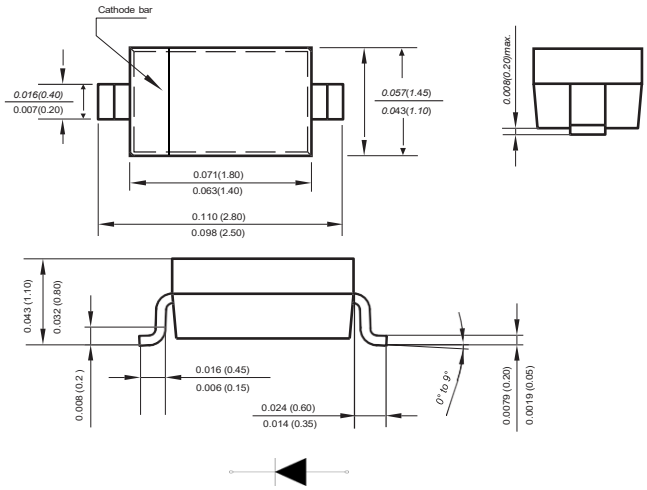
FAST SWITCHING DIODES

Features

- Fast switching speed
- Surface mount package ideally suited for automatic insertion
- For general purpose switching applications
- High conductance

SOD-323



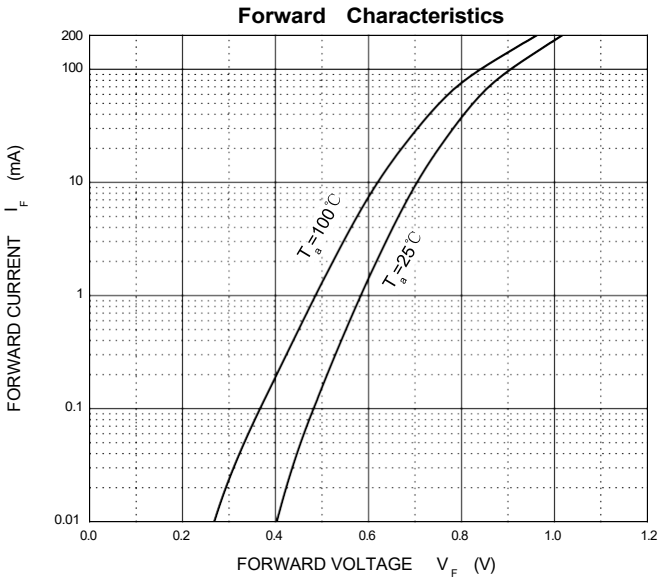
Dimensions in inches and (millimeters)

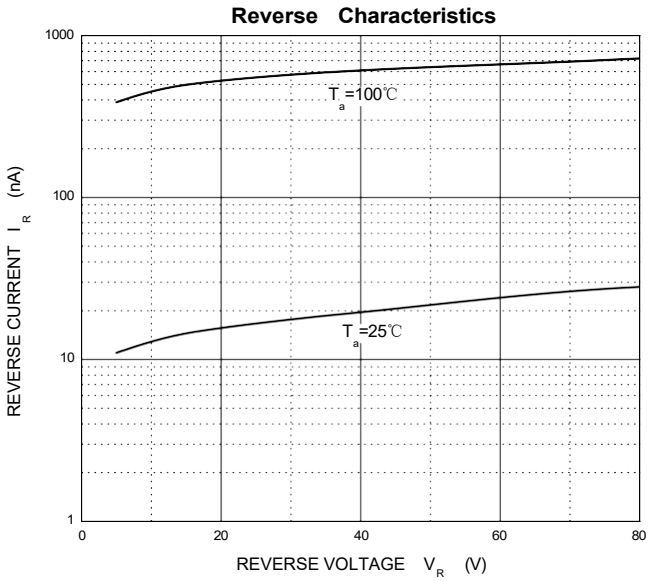
PARAMETER	SYMBOLS	1N4148WS	UNITS
Maximum repetitive peak reverse voltage Maximum RMS voltage Reverse Breakdown voltage at I_R=1 μA	V_{RRM} V_{RMS} $V_{(BR)R}$	100 75 75	V
Forward continuous current	I_{FM}	300	mA
Average rectified output current	I_O	150	mA
Peak forward current at 1s at 1ms at 1us	I_{FSM}	0.5 1 4.0	A
Power dissipation	Pd	400	mW
Thermal resistance junction to ambient	$R_{\Theta JA}$	250	°C/W
Junction temperature	T_j	-55 to +150	°C
Storage temperature	T_{STG}	-55 to +150	°C

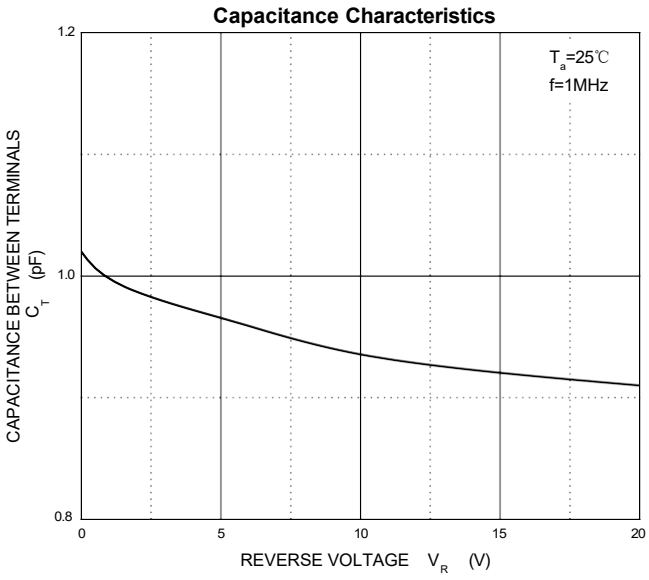
Characteristics at Ta= 25 °C

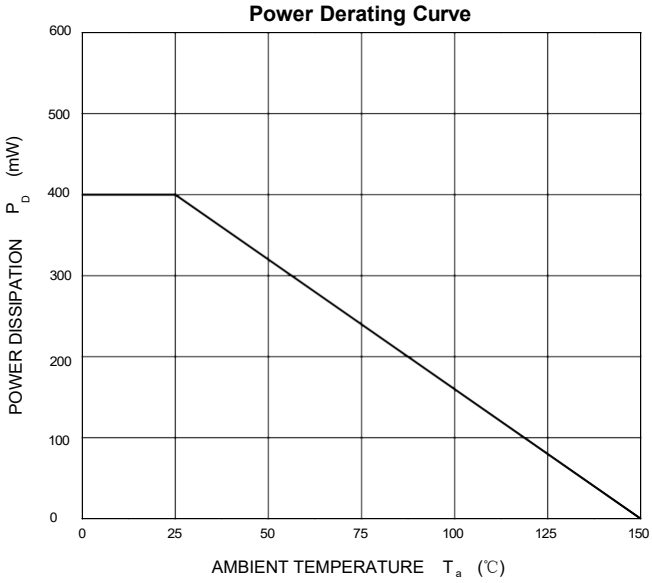
PARAMETER	SYMBOLS	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_{F1}			0.715	V	I_F=1.0mA
	V_{F2}			0.855	V	I_F=10mA
	V_{F3}			1.0	V	I_F=50mA
	V_{F4}			1.25	V	I_F=150mA
Reverse current	I_{R1}			0.025	uA	at V_R=20V T_j=25°C
	I_{R2}			1	uA	at V_R=75V T_j=25 °C
	I_{R3}			30	uA	at V_R=25V T_j=150 °C
	I_{R4}			50	uA	at V_R=75V T_j=150 °C
Capacitance between terminals	C_T			2	pF	V_R=0V,f=1.0MHz
Reverse recovery time	t_{rr}			4	ns	I_F=I_R=10mA Irr=0.1XI_R,R_L=100Ω

Typical Characterisitics









The curve above is for reference only.