WEITRON

MMBL4448H
1N4448WS

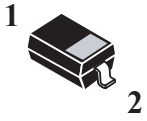
Surface Mount Switching Diode

Lead(Pb)-Free

SWITCHING DIODE
250m AMPERES
100 VOLTS

Features:

* Fast Switching Speed
* Surface Mount Package Ideally Suited for Automatic Insertion
* For General Purpose Switching Applications
* High Conductance



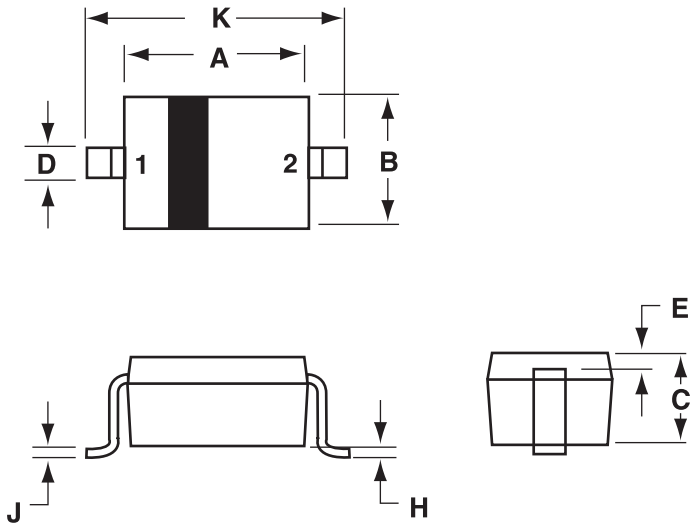
SOD-323

Mechanical Data:

* Case: SOD-323, Molded Plastic
* Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
* Polarity: Cathode Band
* Weight: 0.004 grams (approx)

SOD-323 Outline Dimensions

Unit:mm



Dim	MILLMETERS	
	Min	Max
A	1.60	1.80
B	1.15	1.35
C	0.80	1.00
D	0.25	0.40
E	0.15REF	
H	0.00	0.10
J	0.089	0.377
K	2.30	2.70

PIN 1. CATHODE
2. ANODE

Maximum Ratings (TA=25°C Unless Otherwise note)

Rating	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Vlotage	V_{RRM} V_{RWM} V_R	75	V
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current	I_{FM}	500	mA
Average Recfified Output Current	Io	250	mA
Non-Repetitive Peak Forward Surge Current @ t=1.0μs @ t=1.0s	I_{FSM}	 4.0 2.0	A
Total Device Dissipation	P_D	200	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	315	K/W
Junction and Storage Temperature	T_J	+150	°C
Storage Temperature	T_{stg}	-65 to +150	°C

Electrical Characteristics (TA=25°C Unless Otherwise note)

Characterictics	Symbol	Min	Max	Unit
Off Characteristics				
Reverse Voltage Leakage Current I_R=10μA	$V_{(BR)R}$	75	-	V
Forward Voltage I_F=5mA I_F=10mA I_F=100mA I_F=150mA	V_F	0.62 - - -	0.72 0.855 1.00 1.25	V
Reverse Voltage Leakage Current V_R=75V V_R=20V	I_R	-	 2.5 25	 μA nA
Diode Capacitance V_R=0, f=1.0MHz	C_T	-	4.0	pF
Revarse Recover Time I_F=I_R=10mA, I_{rr}=0.1 x I_R, R_L=100Ω	t_{rr}	-	4.0	ns

Device Marking

Item	Marking	Eqivalent Circuitdiagram
1N4448WS , MMBL4448H	T5	

Typical Characteristics

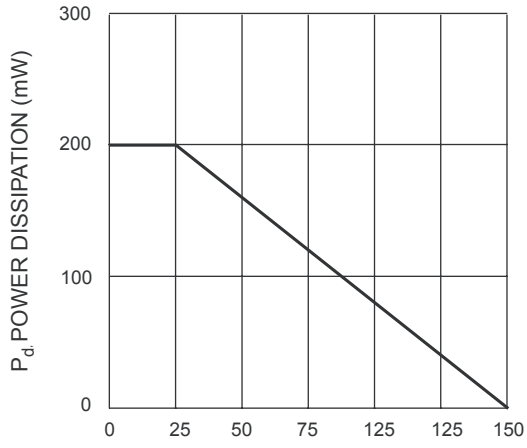


Fig. 1 Forward Current Derating Curve

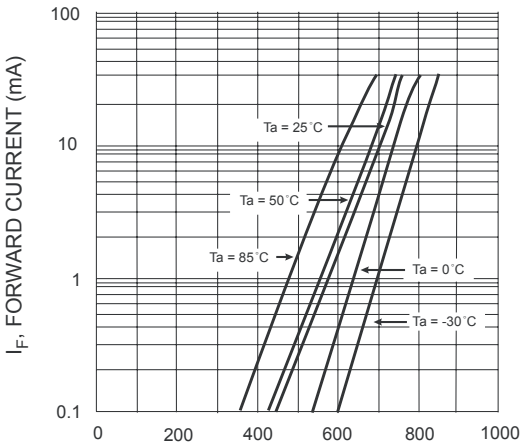


Fig. 2 Typical Forward Characteristics

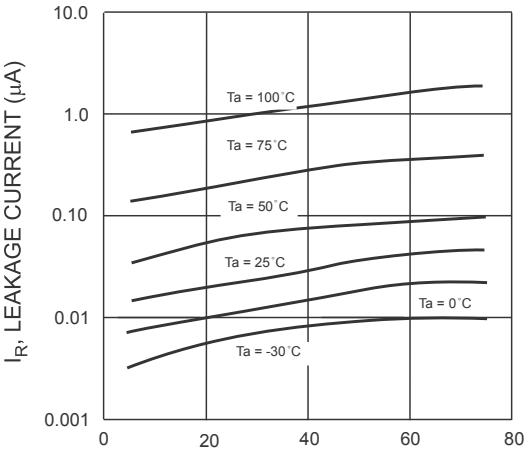


Fig. 3 Typical Reverse Characteristics

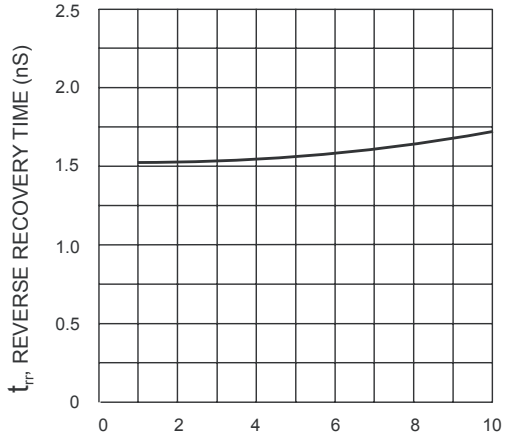


Fig. 4 Reverse Recovery Time vs. Forward Current

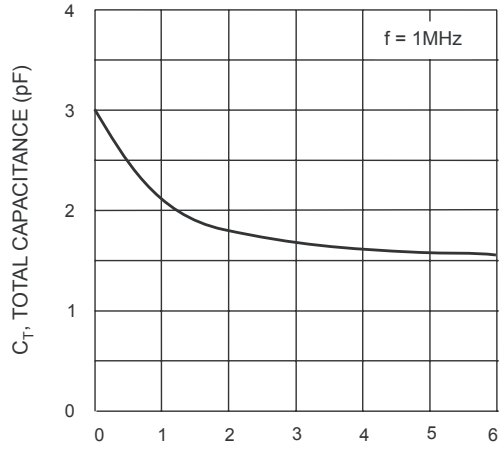


Fig. 5 Total Capacitance vs. Reverse Voltage