



Surface Mount Fast Switching Diode

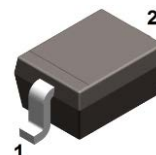
1N4448WS



FEATURES

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

1 CATHODE 2 ANODE



APPLICATIONS

- Surface mount fast switching diode

SOD-323

ORDERING INFORMATION

Type No.	Marking	Package Code
1N4448WS	T5	SOD-323

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Reverse Voltage	V_{RRM} V_{RWM} V_R	75	V
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current	I_{FM}	300	mA
Average Rectified Output Current	I_o	150	mA
Non-Repetitive Peak Forward Surge Current @t=1.0 μ s @t=1.0 s	I_{FSM}	4.0 0.5	A
Power Dissipation	P_d	200	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	625	°C/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150	°C

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Min	Max	Unit	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	75	-	V	$I_R=1.0\mu A$
Forward Voltage	V_F	0.62	0.72 0.855 1.0 1.25	V	$I_F=5mA$ $I_F=10mA$ $I_F=100mA$ $I_F=150mA$
Reverse Current	I_R	-	2.5 25	μA nA	$V_R=75V$ $V_R=20V$
Capacitance between terminals	C_T	-	4.0	pF	$V_R=0, f=1.0MHz$
Reverse Recovery Time	t_{rr}	-	4.0	ns	$I_F=I_R=10mA$, $I_{rr}=0.1\times I_R, R_L=100\Omega$

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

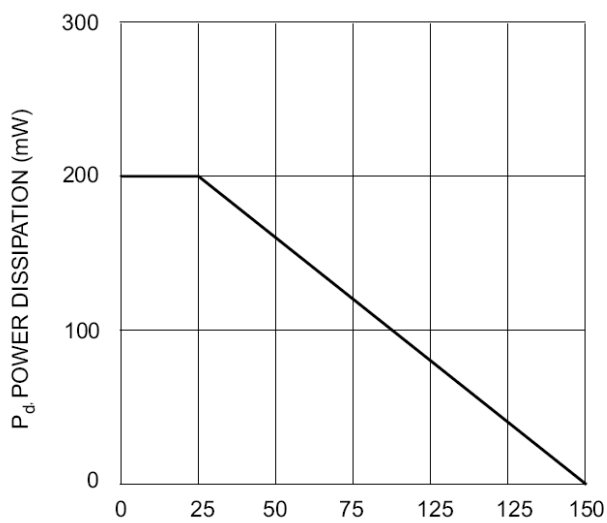


Fig. 1 Forward Current Derating Curve

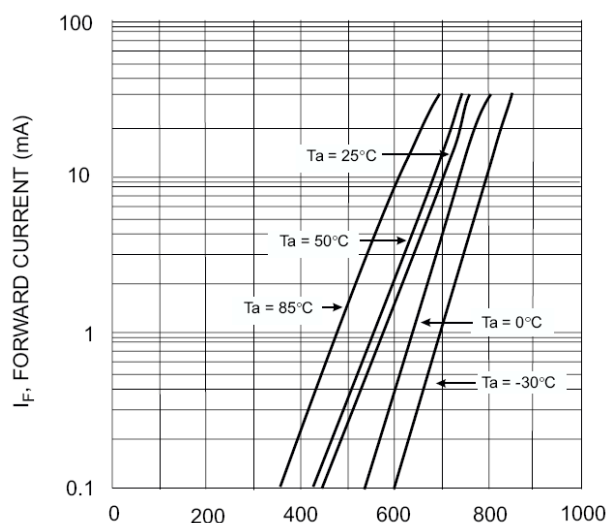


Fig. 2 Typical Forward Characteristics

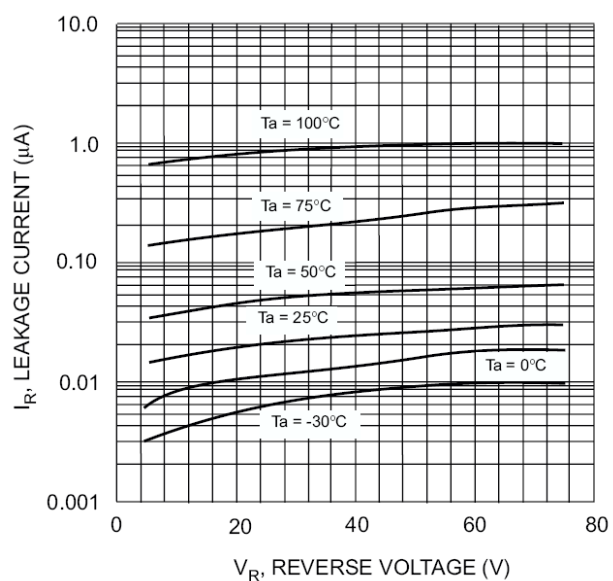


Fig. 3 Typical Reverse Characteristics

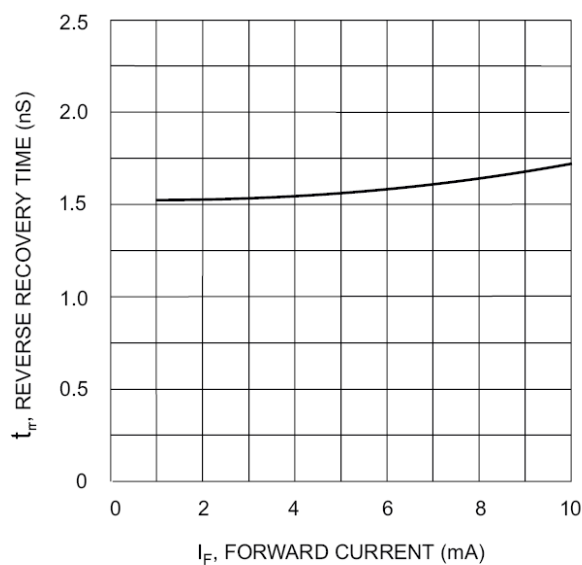


Fig. 4 Reverse Recovery Time vs. Forward Current

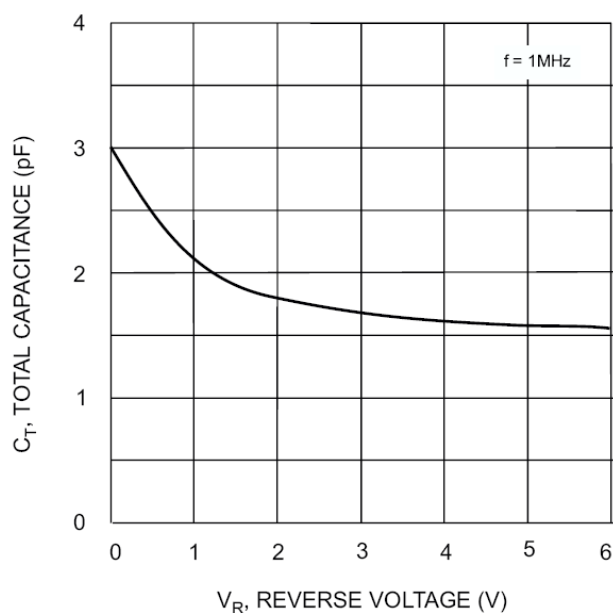
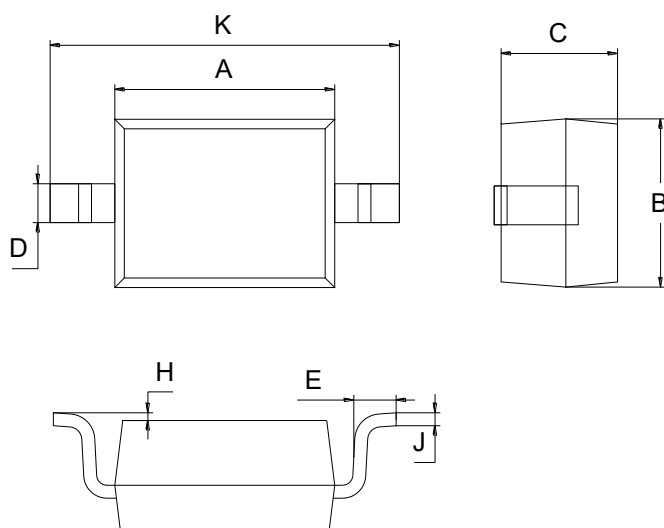


Fig. 5 Total Capacitance vs. Reverse Voltage

PACKAGE OUTLINE

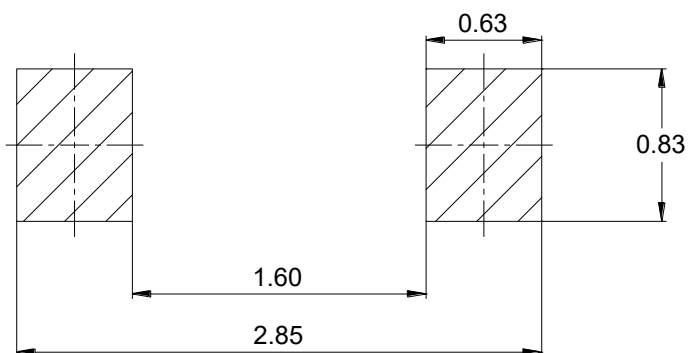
Plastic surface mounted package

SOD-323



SOD-323		
Dim	Min	Max
A	1.60	1.80
B	1.20	1.40
C	0.80	0.90
D	0.25	0.35
E	0.22	0.42
H	0.02	0.10
J	0.05	0.15
K	2.55	2.75
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit: mm

PACKAGE INFORMATION

Device	Package	Shipping
1N4448WS	SOD-323	3000 pcs / Tape & Reel