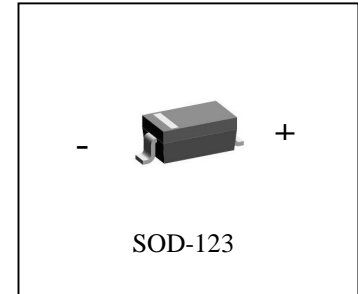


FAST SWITCHING DIODES
1N4448W
FEATURES

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

MARKING: T5

MAXIMUM RATINGS (TA=25°C unless otherwise noted)

Parameter	Symbol	Value	Units
Non-Repetitive Peak reverse voltage	V_{RM}	100	V
Peak Repetitive Peak reverse voltage	V_{RRM}	75	V
Working Peak Reverse Voltage	V_{RWM}	75	V
DC Blocking	V_R	75	V
RMS Reverse Voltage	$R_{(RMS)}$	53	V
Forward Continuous Current	I_{FM}	500	mA
Average Rectified Output Current	I_O	250	mA
Peak forward surge current @=1.0μs	I_{FSM}	40	A
Peak forward surge current @=1.0s	I_{FSM}	1.5	A
Power Dissipation	P_d	500	mW
Thermal	$R_{\theta JA}$	250	°C/W
Junction temperature	T_j	150	°C
Storage temperature	T_{STG}	-65~+150	°C

ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse Breakdown Voltage	$V_{(BR)R}$	75			V	$I_R=10\mu A$
Forward voltage	V_{F1}	0.62		0.715	V	$I_F=5mA$
Forward voltage	V_{F2}			0.855	V	$I_F=10mA$
Forward voltage	V_{F3}			1.0	V	$I_F=100mA$
Forward voltage	V_{F4}			1.25	V	$I_F=150mA$
Reverse current	I_{R1}			1	μA	$V_R=75V$
Reverse current	I_{R2}			25	nA	$V_R=20V$
Capacitance between terminals	C_T			2	pF	$V_R=0V, f=1MHz$
Reverse Recovery Time	t_{rr}			4	ns	$I_F=I_R=10mA$ $I_{rr}=0.1I_R, R_L=100\Omega$

1N4448W Typical Characteristics

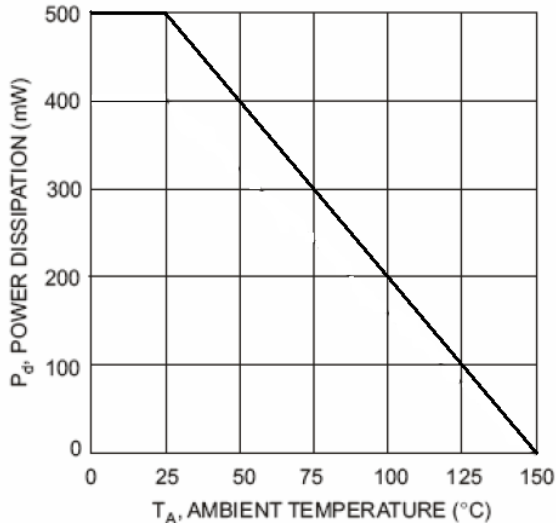


Fig. 1 Power Derating Curve

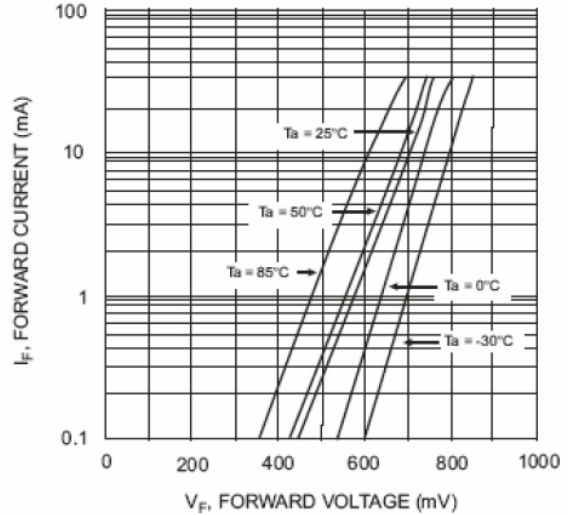


Fig. 2 Typical Forward Characteristics

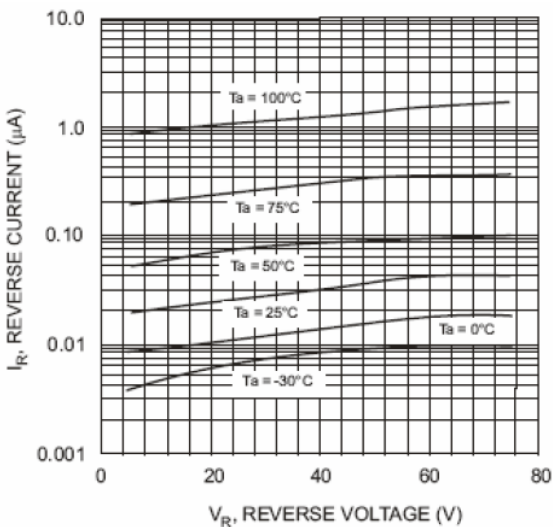


Fig. 3 Typical Reverse Characteristics

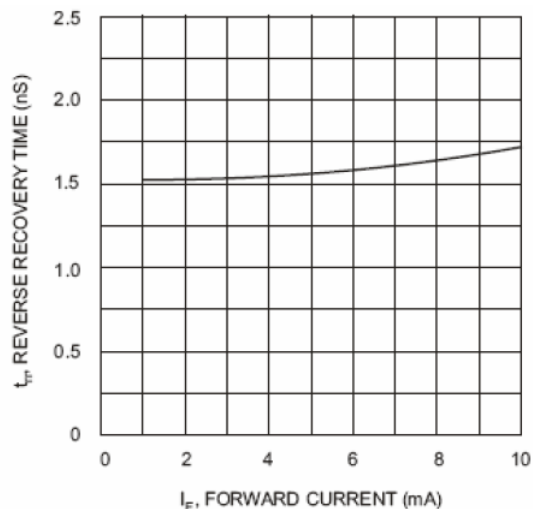


Fig. 4 Reverse Recovery Time vs. Forward Current

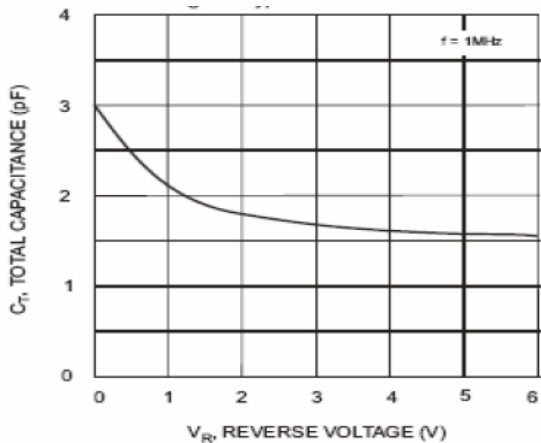


Fig. 5 Total Capacitance vs. Reverse Voltage