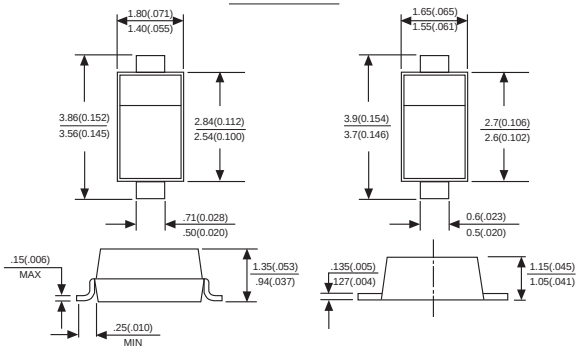
1N4448W

FAST SWITCHING DIODE

SOD-123



Dimensions in millimeters and (inches)

FEATURES

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

MECHANICAL DATA

Case: Molded plastic body
Terminals: Plated leads solderable per MIL-STD-750, Method 2026
Polarity: Polarity symbols marked on case
Marking:T5

Maximum ratings and electrical characteristics, Single diode @T_A=25℃

PARAMETER	SYMBOLS	Limits	UNITS
Peak repetitive peak reverse voltage Working peak reverse voltage DC Blocking voltage	V_{RRM} V_{RWM} V_R	75	V
RMS Reverse voltage	$V_{R(RMS)}$	53	V
Forward continuous current	I_{FM}	500	mA
Average rectified output current	Io	250	mA
Peak forward surge current @=1.0uS @=1.0s	I_{FSM}	4.0 2.0	A
Power dissipation	Pd	400	mW
Thermal resistance junction to ambient	$R_{\Theta JA}$	315	K/W
Storage temperature	T_{STG}	-65 to +150	℃
Non-Repetitive peak reverse voltage	V_{RM}	100	V

Electrical ratings @T_A=25℃

PARAMETER	SYMBOLS	Min.	Typ.	Max.	Unit	Conditions
Reverse brdakdown voltage	$V_{(BR)R}$	75			V	I_R=10uA
Forward voltage	V_{F1}	0.62		0.72	V	I_F=5mA
	V_{F2}			0.855	V	I_F=10mA
	V_{F3}			1.0	V	I_F=100mA
	V_{F4}			1.25	V	I_F=150mA
Reverse current	I_{R1}			2.5	uA	V_R=75V
	I_{R2}			25	nA	V_R=20V
Capacitance between terminals	C_T			4	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

RATINGS AND CHARACTERISTIC CURVES 1N4448W

FIG. 1- POWER DERATING CURVE

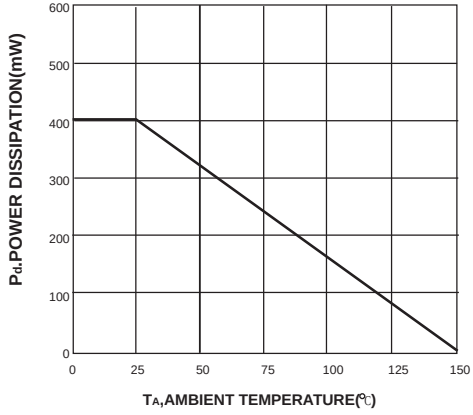


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

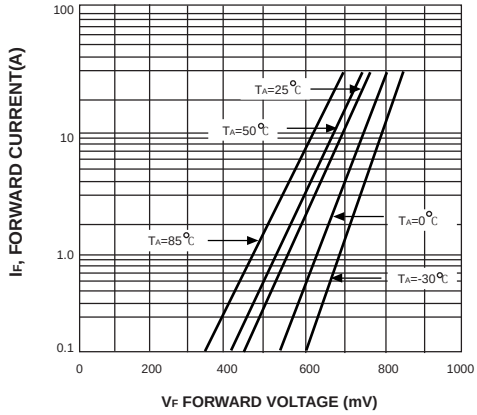


FIG. 3- TYPICAL REVERSE CHARACTERISTICS

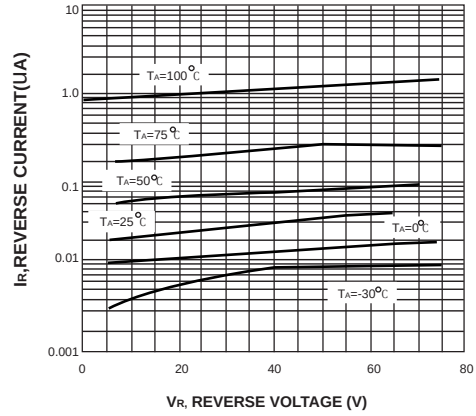


FIG. 4- REVERSE RECOVERY TIME
VS FORWARD CURRENT

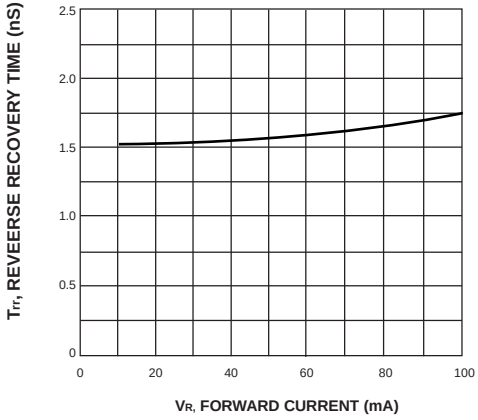


FIG. 5- TOTAL CAPACITANCE
VS REVERSE VOLTAGE