

1N4448

FEATURES

- Silicon Epitaxial Planar Diode
- Fast switching diode
- This diode is also available in other case styles including: the SOD-123 case with the type designation 1N4448W, the MiniMELF case with the type designation LL4448, and the SOT23 case with the type designation

MECHANICAL DATA

- Case: DO-35
- Weight: approx: 0.13gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified

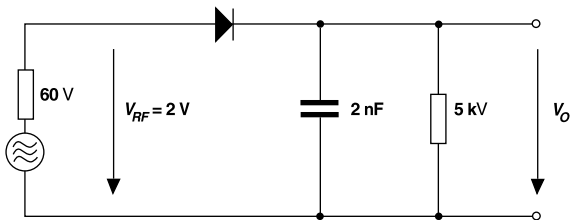
	Symbol	Value	Unit
Reverse Voltage	V_R	75	V
Peak Reverse Voltage	V_{RM}	100	V
Rectified Current (Average) Half Wave Rectification with Resist. Load at $T_{amb} = 25\text{ }^\circ\text{C}$ and $f \geq 50\text{ Hz}$	I_0	150 ¹⁾	mA
Surge Forward Current at $t < 1\text{ s}$ and $T_j = 25\text{ }^\circ\text{C}$	I_{FSM}	500	mA
Power Dissipation at $T_{amb} = 25\text{ }^\circ\text{C}$	P_{tot}	500 ¹⁾	mW
Junction Temperature	T_j	175	°C
Storage Temperature Range	T_S	-65 to +175	°C
¹⁾ Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature.			

ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified

	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage at $I_F = 5 \text{ mA}$ at $I_F = 10 \text{ mA}$	V_F V_F	0.62 –	– –	0.72 1	V V
Leakage Current at $V_R = 20 \text{ V}$ at $V_R = 75 \text{ V}$ at $V_R = 20 \text{ V}, T_j = 150 \text{ °C}$	I_R I_R I_R	– – –	– – –	25 5 50	nA μA μA
Reverse Breakdown Voltage tested with 100 μA Pulses	$V_{(BR)R}$	100	–	–	V
Capacitance at $V_F = V_R = 0 \text{ V}$	C_{tot}	–	–	4	pF
Reverse Recovery Time from $I_F = 10 \text{ mA}$ to $I_R = 1 \text{ mA}$, $V_R = 6 \text{ V}$, $R_L = 100 \text{ }\Omega$	t_{rr}	–	–	4	ns
Thermal Resistance Junction to Ambient Air	R_{thJA}	–	–	350 ¹⁾	K/W
Rectification Efficiency at $f = 100 \text{ MHz}$, $V_{RF} = 2 \text{ V}$	η_v	0.45	–	–	–

¹⁾ Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature.



Rectification Efficiency Measurement Circuit

