1N4148 / 1N4448

SMALL SIGNAL SWITCHING DIODE

FEATURES

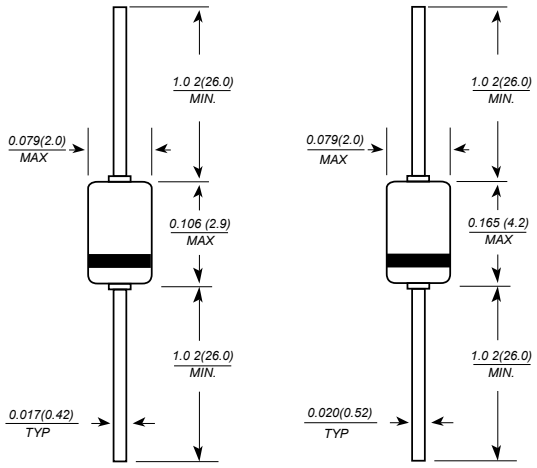
- Silicon epitaxial planar diode
- Switching diodes
- 500mw power dissipation
- High temperature soldering guaranteed
  250℃/10 seconds,0.375″(9.5mm) lead length,
  5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: DO-34\DO-35 glass sealed envelope.
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight:0.003 ounce, 0.09 grams(DO-34)
0.005 ounce, 0.14 grams(DO-35)

RoHS Compliant

DO-34(GLASS) **DO-35(GLASS)**



Dimensions in inches and (millimeters)

Maximum Ratings (T_A=25°C Unless otherwise noted)

Characteristic	Symbol	1N4148 / 1N4448	Unit
Non-Repetitive Peak Voltage	V_{RM}	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{PWM} V_{RWM} V_R	75	V
Average Rectified Output Current (1)	I_O	150	mA
Non-Repetitive Peak Forward Surge Current @t=1.0us	I_{FSM}	2.0	A
Power Dissipation	P_d	500	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	300	K/W
Operating and Strorage Temperature Range	T_J,T_{STG}	-65 to +175	°C

Electrical Characteristics (T_A=25°C Unless otherwise noted)

Characteristic	Symbol	Min	Max	Unit
Reverse Breakdown Voltage I_R= 100ua	$V_{(BR)R}$	100	-	V
Forward Voltage 1N4148 I_F=10 mA 1N4448 I_F=5 mA I_F=100 mA	V_F	0.62	1.0 0.72 1.0	V
Leakage Current V_R=20V V_R=75V V_R =75V, Tj=150°C	I_R	- - -	25 5 50	μA
Junction Capacitance	Cj	-	4	PF
Reverse Recovery Time I_F=10 mA, I_R=1mA, V_R=6V, R_L=100Ω	T_{RR}	-	4	nS

Note: 1.Valid Provided that device Terminals are Kept at Ambient Temperature.

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RATINGS AND CHARACTERISTIC CURVES

FIG. 1-ADMISSIBLE POWER DISSIPATION VERSUS AMBIENT TEMPERATURE

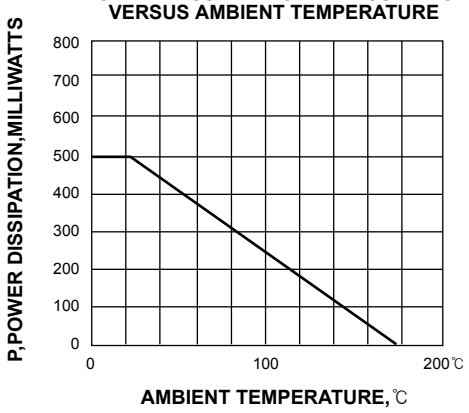

FIG. 2-REVERSE CURRENT VERSUS CONTINUOUS REVERSE VOLTAGE (TYPICAL VALUES)

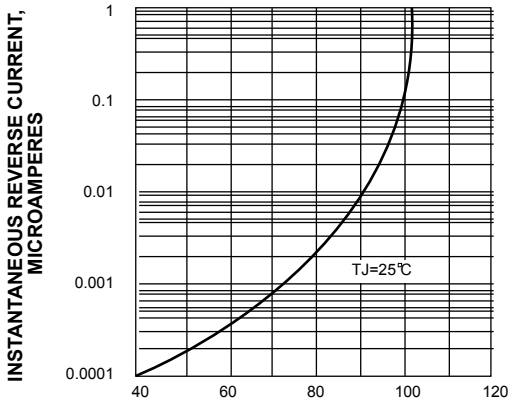

FIG. 3-FORWARD CHARACTERISTICS

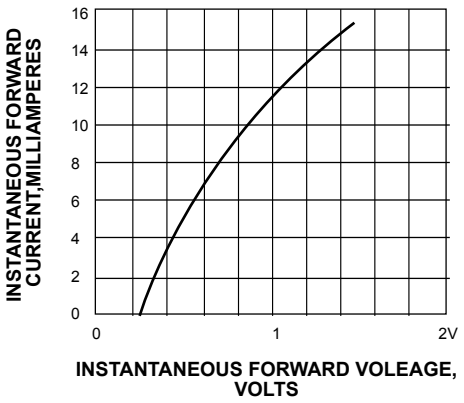

FIG. 4-RELATIVE CAPACTANCE VERSUS REVERSE VOLTAGE

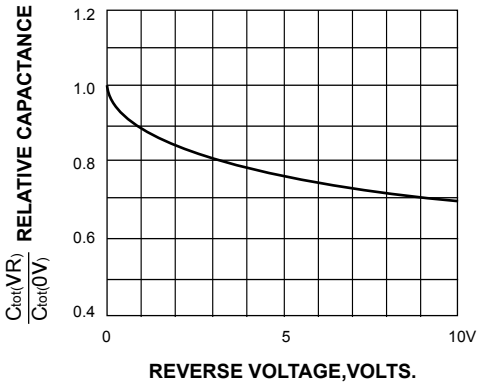

FIG. 5-ADMISSIBLE REPETITIVE PEAK FORWARD CURRENT VERSUS PULSE DURATION