

1N4148

FAST SWITCHING DIODES

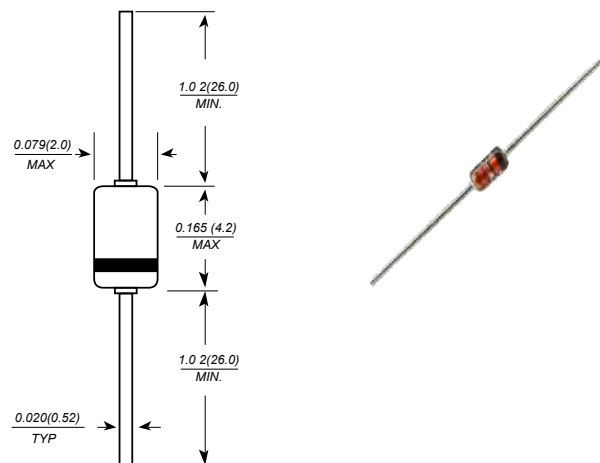
DO-35(GLASS)

Features

- Fast Switching Speed
- General Purpose Rectification
- Silicon Epitaxial Planar Construction

Mechanical Data

- Case: DO-35
- Leads: Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Marking: Type Number
- Weight: 0.13 grams (approx.)



Dimensions in millimeters

Maximum Ratings @T_A=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 Blocking Voltage	V _{RRM} V _{RWM} V _R	75	V
RMS Reverse Voltage	V _{R(RMS)}	53	V
Forward Continuous Current (Note 1)	I _{FM}	300	mA
Rectified Current (Average), Half Wave Rectification with Resistive Load and f ≥ 50MHz (Note 1)	I _O	150	mA
Non-Repetitive Peak Forward Surge Current @ t = 1.0s @ t = 1.0μs	I _{FSM}	1.0 2.0	A
Power Dissipation (Note 1) Derate Above 25°C	P _d	500 1.68	mW mW/°C
Thermal Resistance, Junction to Ambient Air (Note 1)	R _{θJA}	300	K/W
Operating and Storage Temperature Range	T _j , T _{STG}	-65 to +175	°C

Electrical Characteristics @T_A=25°C unless otherwise specified

Characteristic	Symbol	Min	Max	Unit	Test Condition
Maximum Forward Voltage	V _{FM}	—	1.0	V	I _F = 10mA
Maximum Peak Reverse Current	I _{RM}	—	5.0 50 30 25	μA μA μA nA	V _R = 75V V _R = 70V, T _j = 150°C V _R = 20V, T _j = 150°C V _R = 20V
Capacitance	C _j	—	4.0	pF	V _R = 0, f = 1.0MHz
Reverse Recovery Time	t _{rr}	—	4.0	ns	I _F = 10mA to I _R = 1.0mA V = 6.0V, R = 100Ω

Note: 1. Diode on Ceramic Substrate 10mm x 8mm x 0.7mm.