

DATA SHEET

1N4148

SWITCHING DIODES

VOLTAGE	75 Volts	POWER	500 mWatts
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DO-35	Unit: inch (mm)
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FEATURES

- Fast switching Speed.
- Electrically Identical to Standard JEDEC
- High Conductance
- Axial lead Package Ideally Suited for Automatic Insertion.

MECHANICAL DATA

- Case: Molded Glass DO-35
- Terminals: Solderable per MIL-STD-202E, Method 208
- Polarity: See Diagram Below
- Approx. Weight: 0.012 grams
- Mounting Position: Any
- Ordering information

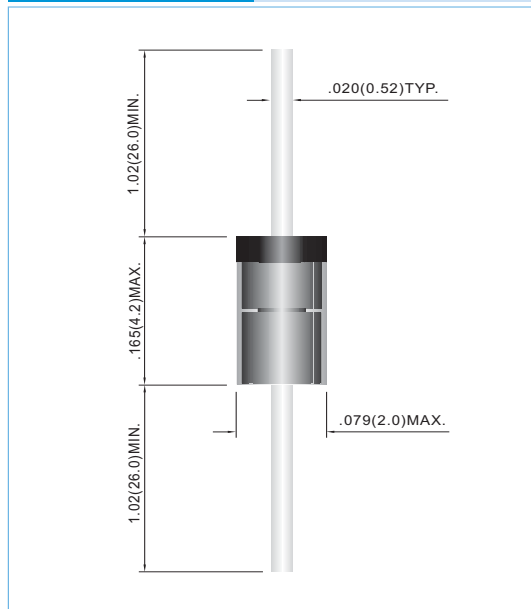
Suffix : " -35 " to order DO-35 Package

- Packing information

B - 2K per Bulk box

T/R - 10K per 13" plastic Reel

T/B - 5K per horiz. tape & Ammo box



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_J = 25°C unless otherwise noted)

PARAMETER	SYMBOL	1N4148	UNITS
Reverse Voltage	V _R	75	V
Peak Reverse Voltage	V _{RM}	100	V
RMS Voltage	V _{RMS}	50	V
Maximum Average Forward Current at T _a =25°C And f ≥ 50Hz	I _{AV}	150	mA
Surge Forward Current at t < 1s and T _J =25 °C	I _{FSM}	500	mA
Power Dissipation at Tamb= 25 °C	P _{TOT}	500	mW
Maximum Forward Voltage at I _F =10mA	V _F	1.0	V
Maximum Leakage Current at V _R =20V at V _R =75V at V _R =20V ,T _J = 150 °C	I _R	25 5 50	nA μA μA
Maximum Capacitance (Note 1)	C _J	4	pF
Maximum Reverse Recovery Time (Note 2)	T _{RR}	4	ns
Maximum Thermal Resistance	R _{θJA}	350	°C / W
Junction Temperature and Storage Temperature Range	T _J ,T _S	-65 to +175	°C

NOTE:

1. C_J at V_R=0, f=1MHZ

2. From I_F=10mA to I_R=1mA, V_R=6Volts, R_L=100Ω

RATING AND CHARACTERISTIC CURVES

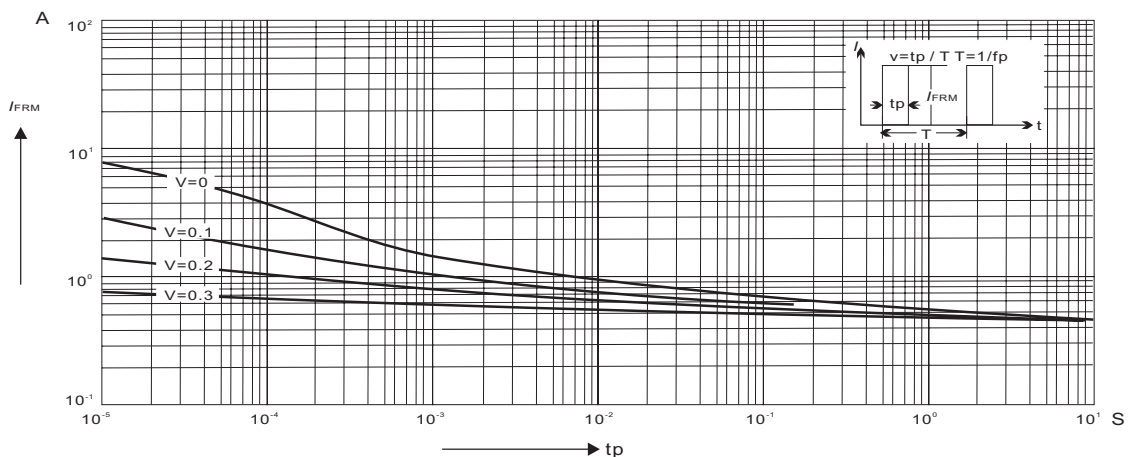


Fig.1 ADMISSIBLE REPETITIVE PEAK FORWARD CURRENT VERSUS PULSE DURATION

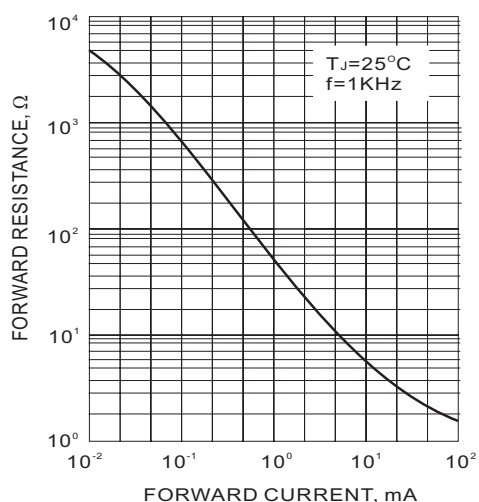


Fig.2-DYNAMIC FORWARD RESISTANCE VERSUS FORWARD CURRENT

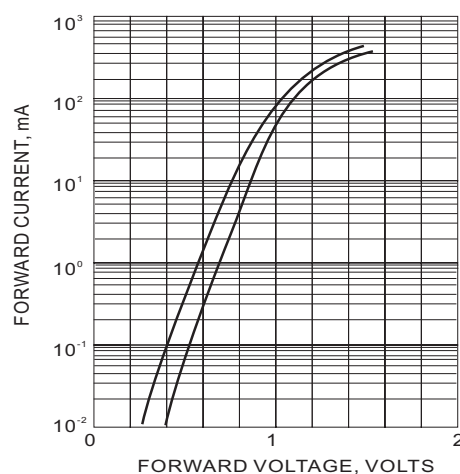


Fig.3 FORWARD CHARACTERISTICS

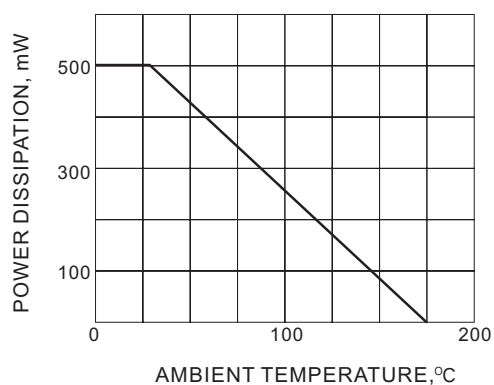


Fig.4 DERATING CURVE

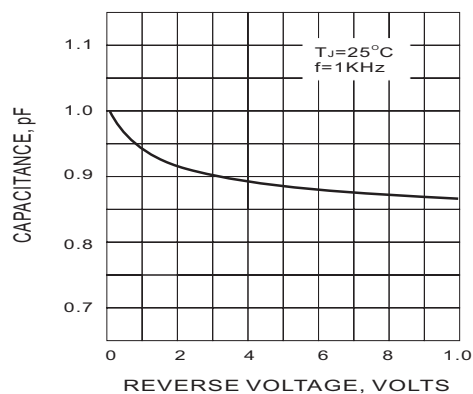


Fig.5 TYPICAL JUNCTION CAPACITANCE