

1. DATA SHEET

1N4148

SWITCHING DIODES

VOLTAGE 100 Volts **POWER** 500 mWatts

DO-35

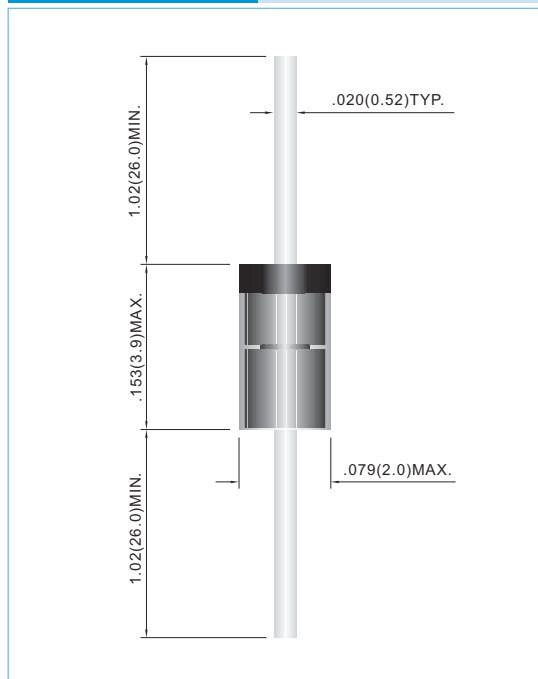
Unit: inch (mm)

FEATURES

- Fast switching Speed.
- Electrically Identical to Standard JEDEC
- High Conductance
- Axial lead Package Ideally Suited for Automatic Insertion.
- Both normal and Pb free product are available :
Normal : 80~95% Sn, 5~20% Pb
Pb free: 99% Sn above

MECHANICAL DATA

- Case: Molded Glass DO-35
- Terminals: Solderable per MIL-STD-202G, Method 208
- Polarity: See Diagram Below
- Approx. Weight: 0.13 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 _F	150	mA
Surge Forward Current at t < 1s and T _J = 25 °C	I _{FSM}	500	mA
Power Dissipation at T _{amb} = 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 _E	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

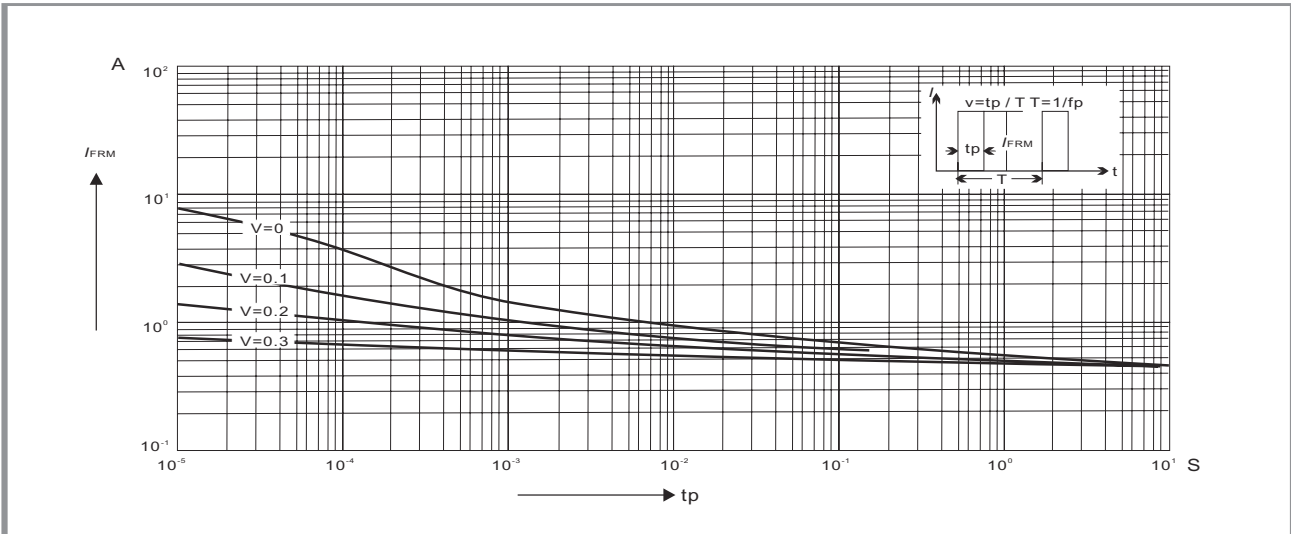


Fig.1 ADMISSIBLE REPETITIVE PEAK FORWARD CURRENT VERSUS PULSE DURATION

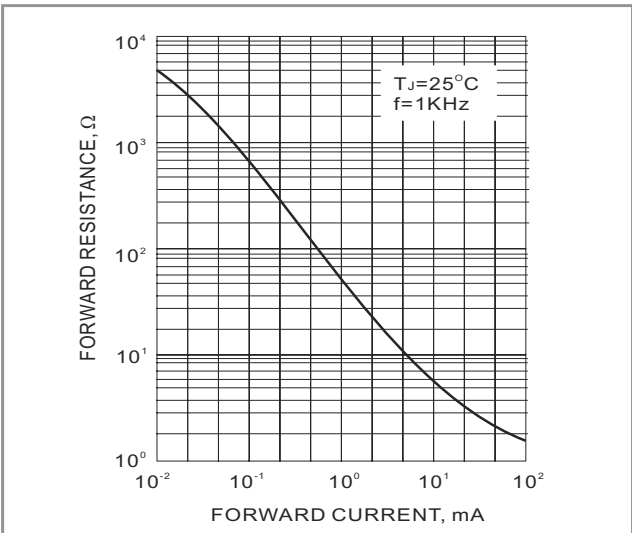


Fig.2-DYNAMIC FORWARD RESISTANCE VERSUS FORWARD CURRENT

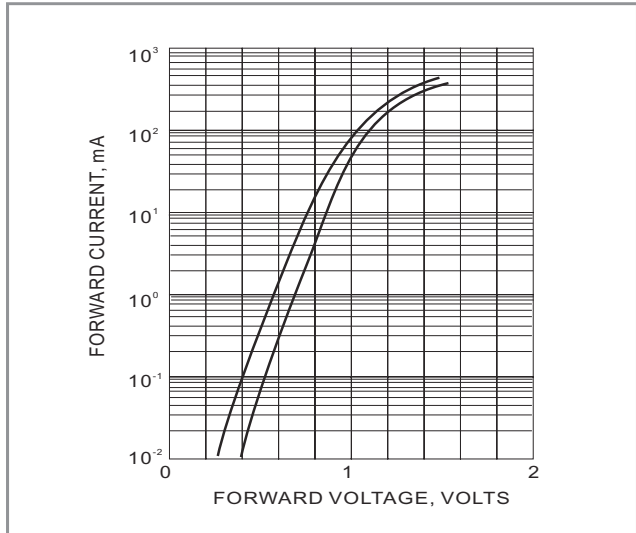


Fig.3 FORWARD CHARACTERISTICS

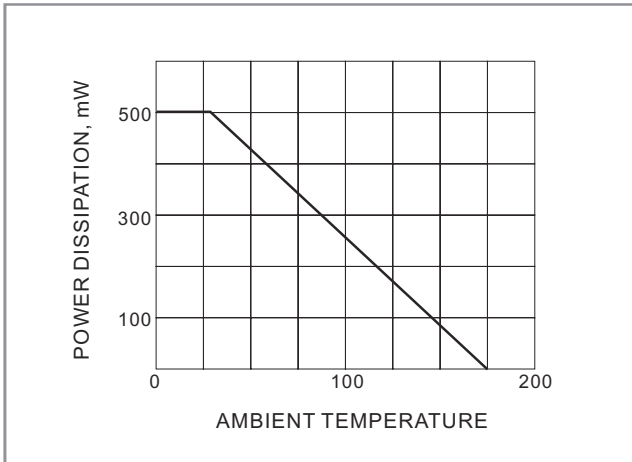


Fig.4 DERATING CURVE

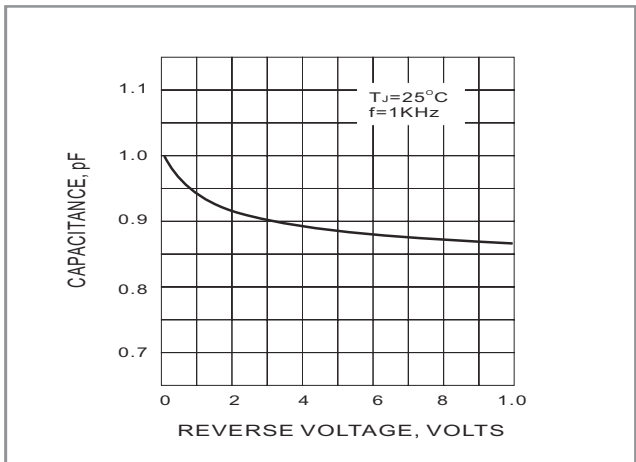


Fig.5 TYPICAL JUNCTION CAPACITANCE