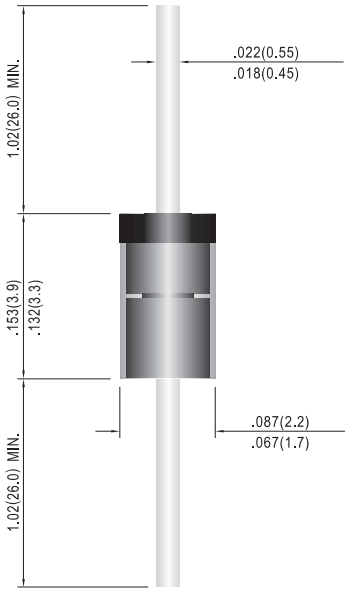
1N4148

SWITCHING DIODES

VOLTAGE 100 Volts **POWER** 500 mWatts

DO-35 Unit: inch (mm)



FEATURES

- Fast switching Speed.
- Electrically Identical to Standerd JEDEC
- High Conductance
- Axial lead Package Ideally Suited for Automatic Insertion.
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: Molded Glass DO-35
- Terminals: Solderable per MIL-STD-750, Method 2026
- 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
Peak Reverse Voltage	V_{RM}	100	V
Maximum Average Forward Current at T_A=25°C And f ≥50Hz	$I_{F(AV)}$	150	mA
Surge Forward Current at t < 1s and T_J= =25 °C	I_{FSM}	500	mA
Power Dissipation at T_A= 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 at V_F =V_R=0	C_J	4	pF
Maximum Reverse Recovery Time From I_F =-I_R =10mA to I_{RR}=-1mA ,V_R=6V R_L=100 Ω	t_{rr}	4	ns
Typical Thermal Resistance	$R_{\theta JA}$	300	°C / W
Junction Temperature and Storage Temperature Range	T_J,T_S	-65 to +150	°C

NOTE:

1. CJ at VR=0, f=1MHZ
2. From IF=10mA to IR=1mA, VR=6Volts, RL=100Ω

1N4148

RATING AND CHARACTERISTIC CURVES

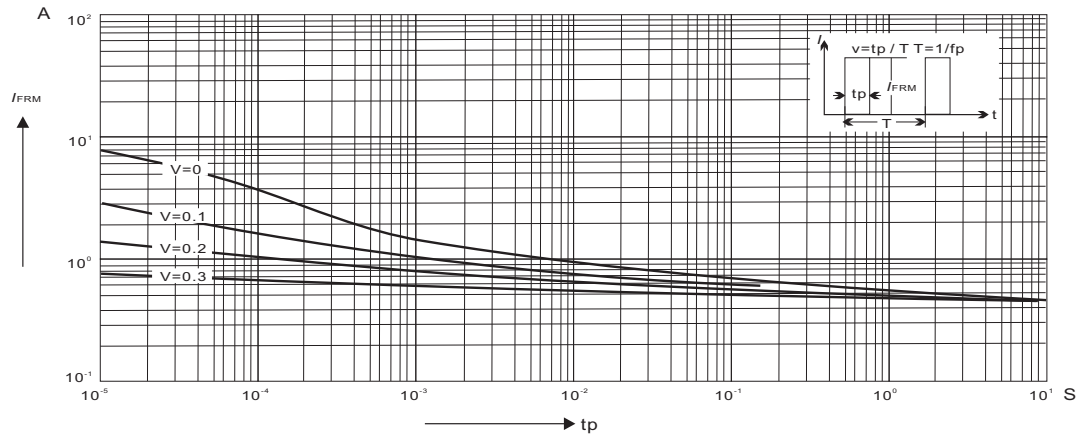


Fig.1 ADMISSIBLE REPETITIVE PEAK FORWARD CURRENT VERSUS PULSE DURATION

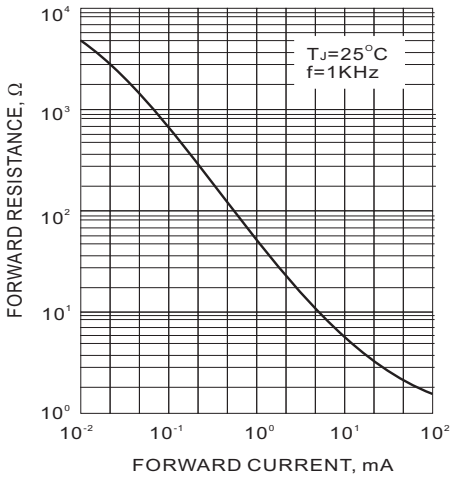


Fig.2-DYNAMIC FORWARD RESISTANCE VERSUS FORWARD CURRENT

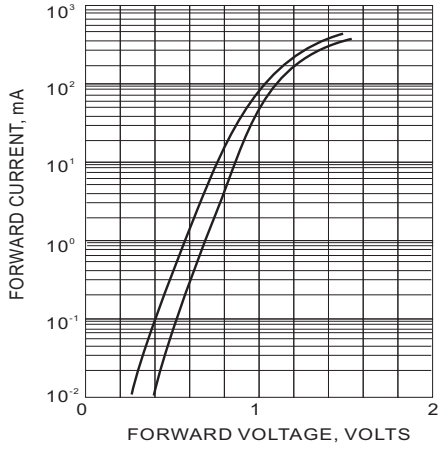


Fig.3 FORWARD CHARACTERISTICS

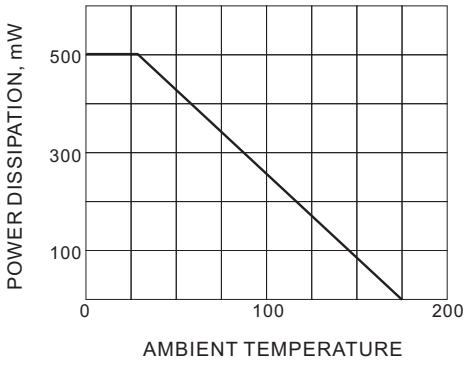


Fig.4 DERATING CURVE

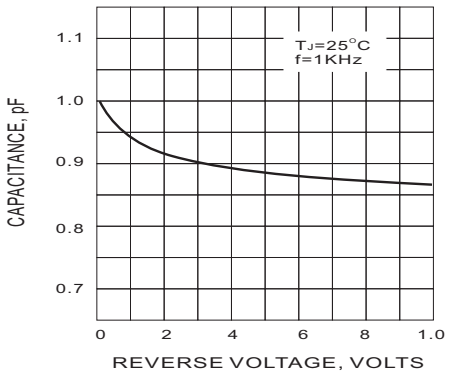


Fig.5 TYPICAL JUNCTION CAPACITANCE