



FAST SWITCHING DIODE

1N4148

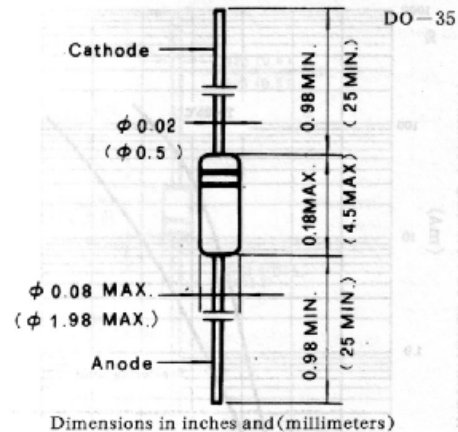
FEATURES

- Extrem fast swithing.
- Low cost.

MECHANICAL DATA

- Case; Glass sealed envelope.
- Polarity; Color band denotes cathode end.
- Lead; Plated lead, solderable per MIL—STD—202E method 208C
- Mounting postition; Any
- Weight; 0. 005 ounce, 0. 15 gram

VOLTAGE RANGE 75 Volts
CURRENT 150 Milliampers



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load derate current by 20%.

	SYMBOLS	1N4148	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	Volts
Maximum DC Blocking Voltage	V_{DC}	75	Volts
Maximum Average Forward Rectified Current, 0. 375" (9. 5mm)Lead length at $T_A=25^{\circ}C$	$I_{(AV)}$	150	mAmps
Peak Forward Surge Current 8. 3ms single half sine — wave superimposed on rated load (JEDEC Method)	I_{FSM}	500	mAmps
Maximum Instantaneous Forward Voltage Drop at 10 mA	V_F	1. 0	Volts
Maximum DC Reverse Current at rated DC blocking voltage	I_R	5. 0 50	μA
Maximum Reverse Recovery Time(Note 1)	t_{rr}	4. 0	nS
Typical Junction Capacitance (Note 2)	C_J	4. 0	pF
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +200	$^{\circ}C$

NOTES:

1. Test condition ; $I_F=10mA, I_R=1mA, V_R=6V, R_L=100\Omega$.

2. Measured at 1. 0MHz and applied reverse voltage of 4. 0volts.

3. Thermal Resistance from Junction to Ambient at $25^{\circ}C$ is 100 $^{\circ}C/W$.

RATINGS AND CHARACTERISTIC CURVES IN4148

FIG.1-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

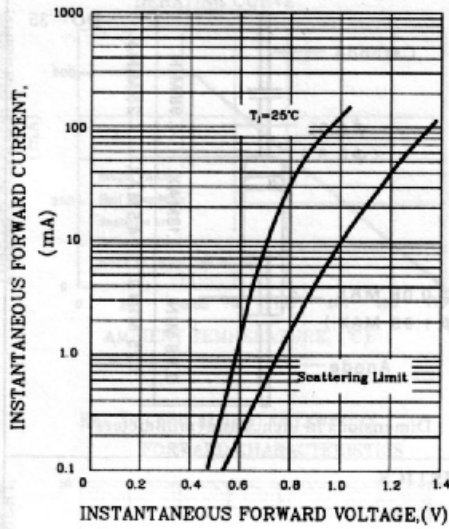


FIG.2-TYPICAL REVERSE CHARACTERISTICS

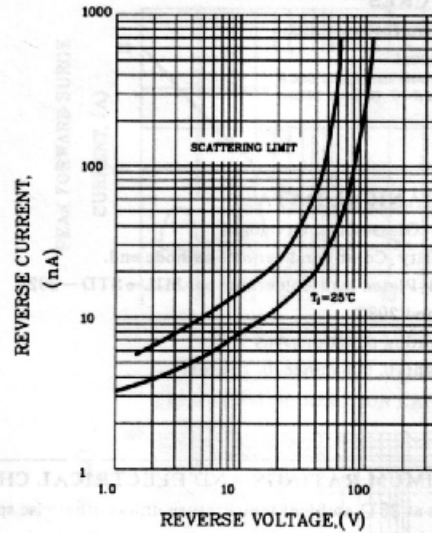


FIG.3-TYPICAL FORWARD VOLTAGE VS JUNCTION TEMPERATURE

