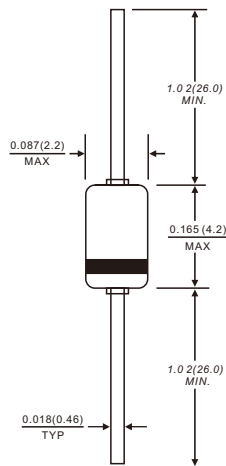


**1N4148****SMALL SIGNAL SWITCHING DIODE****DO-35(GLASS)**

Dimensions in inches and (millimeters)

**FEATURES**

- Silicon epitaxial planar diode
- Switching diodes
- 500mw power dissipation
- High temperature soldering guaranteed  
250 °C/10 seconds, 0.375" (9.5mm) lead length,  
5 lbs. (2.3kg) tension

**MECHANICAL DATA**

**Case:** DO-35 glass sealed envelope.

**Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026

**Polarity:** Color band denotes cathode end

**Mounting Position:** Any

**Weight:** 0.005 ounce, 0.14 grams(DO-35)

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25 °C ambient temperature unless otherwise specialized.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

	SYMBOLS	1N4148	UNITS
Maximum repetitive peak reverse voltage	VRRM	100	VOLTS
Maximum RMS voltage	VRMS	75	VOLTS
Maximum average forward rectified current 0.375" (9.5mm) lead length at TA=25 °C	I(AV)	150	mAmps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	500	mAmps
Maximum instantaneous forward voltage at 10mA	VF	1.0	Volts
Maximum DC reverse current TA=25°C VR=75V at rated DC blocking voltage TA=100°C VR=20V	IR	5.0	mA
Maximum reverse recovery time (NOTE 1)	trr	4.0	ns
Typical junction capacitance (NOTE 2)	CJ	4.0	pF
Operating junction and storage temperature range	TJ, TSTG	-60 to +200	°C

NOTES:1. Test condition: IF=10mA, IR=10mA, I<sub>rr</sub>=1mA, VR=6V, RL=100Ω.

NOTES:2. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts

1. Test condition: IF=10mA, IR=10mA, I<sub>rr</sub>=1mA, VR=6V, RL=100W.

2. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts



## RATINGS AND CHARACTERISTIC CURVES 1N4148

FIG. 1-ADMISSIBLE POWER DISSIPATION VERSUS AMBIENT TEMPERATURE

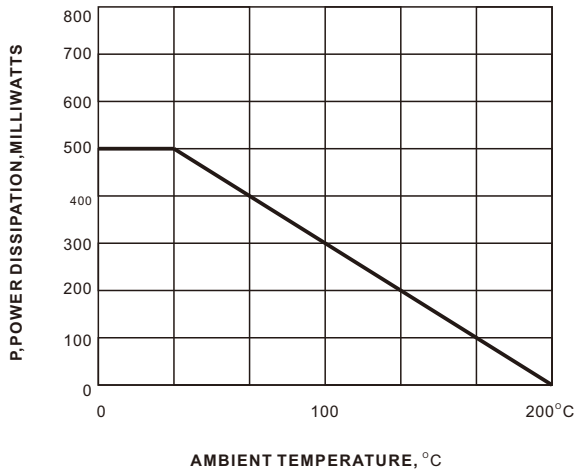


FIG. 2-REVERSE CURRENT VERSUS CONTINUOUS REVERSE VOLTAGE (TYPICAL VALUES)

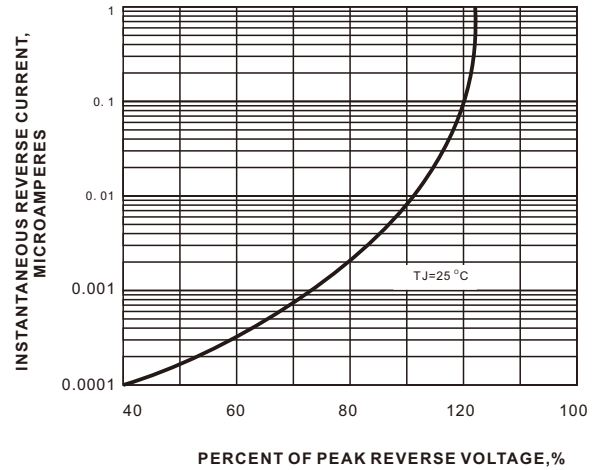


FIG. 3-FORWARD CHARACTERISTICS

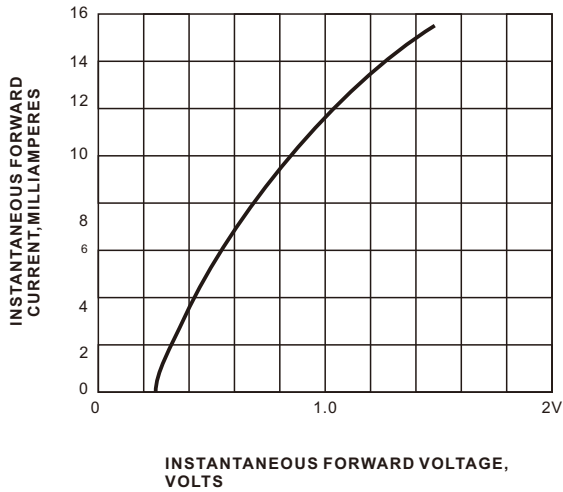


FIG. 4-RELATIVE CAPACTANCE VERSUS REVERSE VOLTAGE

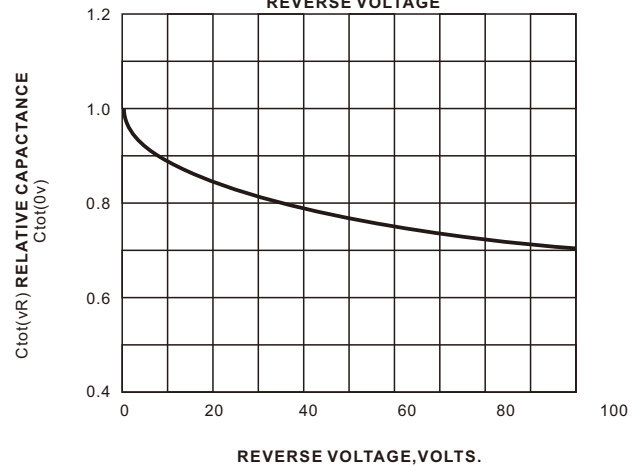
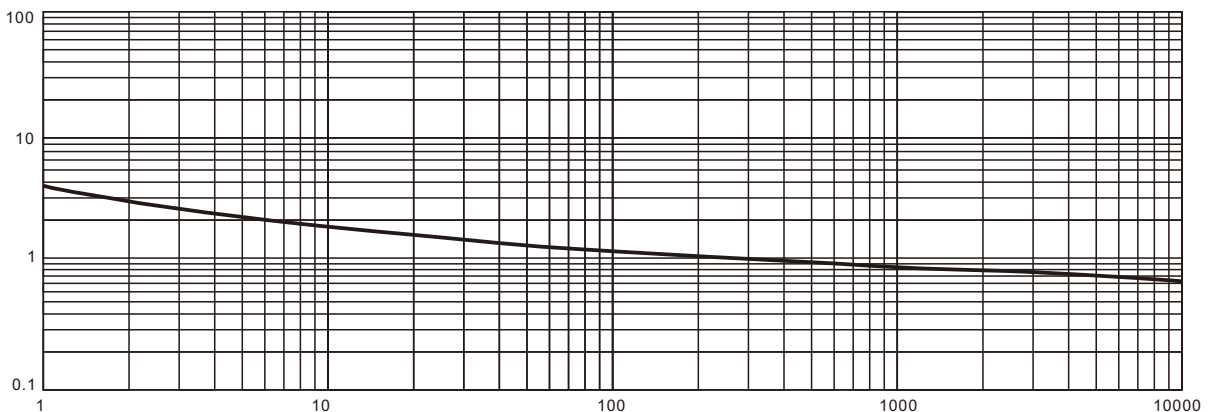


FIG. 5-MAXIMUM PERMISSIBLE NON-REPETITIVE PEAK FORWARD CURRENT AS A FUNCTION OF PULSE DURATION



Based on square wave currents. T<sub>J</sub>=25° prior to surge.