SMALL SIGNAL SWITCHING DIODE

REVERSE VOLTAGE **-75** Volts
FORWARD CURRENT **- 0.15** Amperes

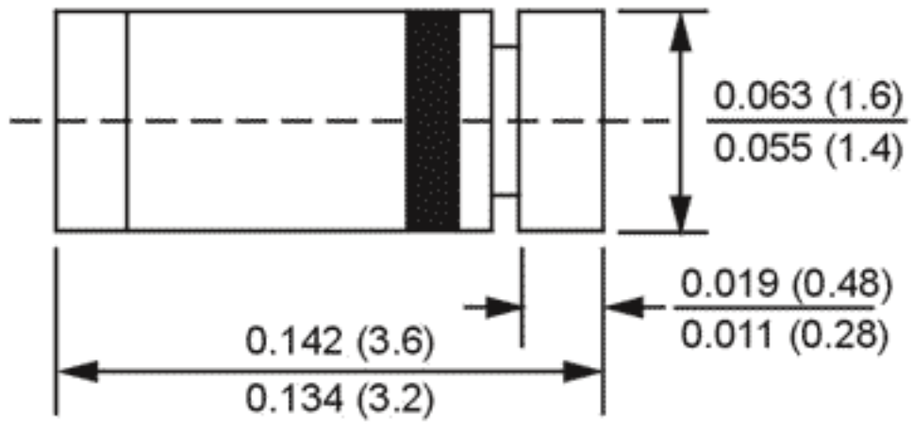
FEATURES

- Silicon epitaxial planar diode
- High speed switching diode
- 500mW power dissipation

MECHANICAL DATA

- Case: Mini-MELF glass case
- Polarity: Color band denotes cathode
- Weight: Approx. 0.05 grams

Mini - MELF



inch (mm)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

MAXIMUM RATINGS

		1N4148	UNIT
Reverse Voltage	V_R	75	V
Peak Reverse Voltage	V_{RM}	100	V
Average Forward Rectified Current Half Wave Rectification with Resist. load at T_{amb}=25°C and f≧ 50Hz	I_O	150	mA
Forward Surge Current at t<1s and Tj=25°C	I_{FSM}	500	mA
Power Dissipation at T_{amb}=25°C	P_{tot}	500 (1)	mW
Junction Temperature	T_J	175	°C
Storage Temperature Range	T_{STG}	-65 to +175	°C

NOTE: (1) Valid provided that electrodes are kept at ambient temperature.

ELECTRICAL CHARACTERISTICS

		MIN	TYP	MAX	UNIT
Forward Voltage at I_F=10mA	V_F	—	—	1	V
Leakage Current at V_R=20V at V_R=75V at V_R=20V T_j=150°C	 I_R I_R I_R	 — — —	 — — —	 25 5 50	 nA uA uA
Capacitance at V_F=V_R=0V	C_{tot}	—	—	4	pF
Voltage Rise when Switching ON tested with 50mA pulses tp=0.1us. Rise Time < 30ns. fp=5 to 100Hz	V_{fr}	—	—	2.5	V
Reverse Recovery Time from I_F=10mA V_R=6V. RL=100Ω at I_R=1mA	t_{rr}	—	—	4	ns
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	—	—	350 (1)	K/W
Rectification Efficiency at 100MHz, V_{RF}=2V	η_V	0.45	—	—	—

NOTE: (1) Valid provided that electrodes are kept at ambient temperature.