1N4148

SMALL SIGNAL DIODE

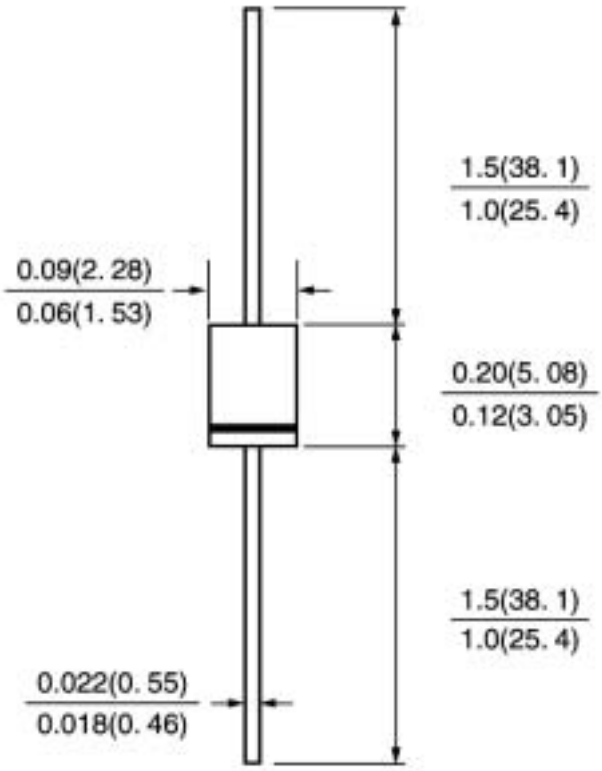
VOLTAGE: 100V **CURRENT: 150mA**

FEATURE

Silicon Single Junction Diode
Fast switching Diode

MECHANICAL DATA

Case: DO-35 Glass case
Polarity: color band denotes cathode
Mounting position: any
Weight: approx . 0.13g



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

Parameter	Symbol	Limit	Units
Recurrent Peak Reverse Voltage	Vrm	100	V
Recurrent Voltage	Vr	75	V
Average Forward Rectified Current Half-Wave Rectification With Resistive Load at Tamp=25°C	If(av)	150	mA
Peak Forward Surge Current T<1.0ms and Tj=25°C	Ifsm	500	mA
Power dissipation at tamp=25°C	Ptot	500	mW
Typical Thermal Resistance (Note 1)	R(ja)	350	°C /W
Junction Temperature	Tj	175	°C
Storage Temperature	TS	-65 ~ +175	°C

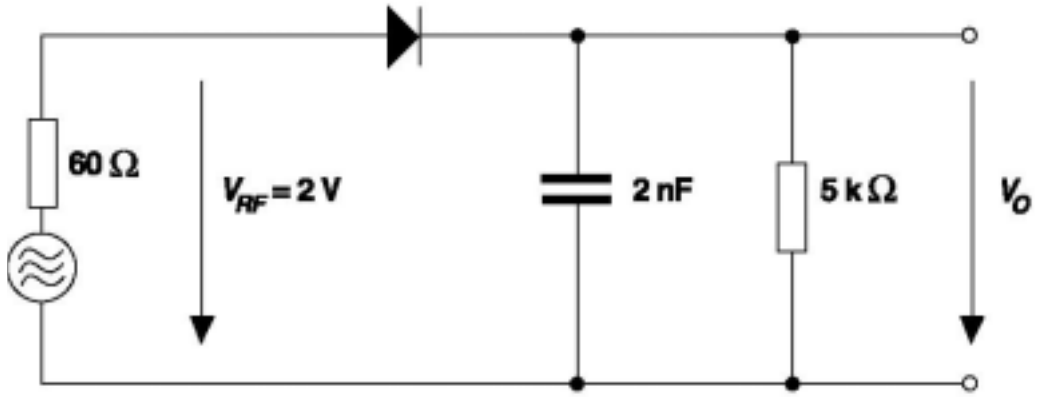
Note:

1. Valid provide that leads at a distance of 8mm from case are kept at ambient temperature

Electrical Characteristics(TJ = 25 ℃ unless otherwise noted)

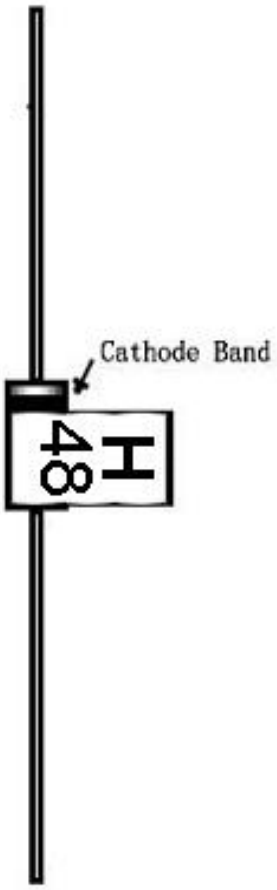
parameter	symbol	Test Condition	min	typ	max	unit
Reverse Breakdown Voltage	Vbr	Ir=100uA	100			V
Forward Voltage	Vf	If=10mA			1.0V	V
Leakage Current	Ir	Vr=20V Vr=75V Vr=20V,Tj=150℃			25 5.0 50	nA uA uA
Capacitance	Ctot	Vf=Vr=0V			4	pF
Voltage Rise when Switching ON (tested with 50mA Pulses)	Vfr	Tp=0.1uS,Rise Time<30nS Fp=5 to100KHZ			2.5	nS
Reverse Recovery Time	Trr	If=10mA,Ir=1 mA Vr=6v,Rl=100Ω			4	nS

Rectification Efficiency Measurement Circuit



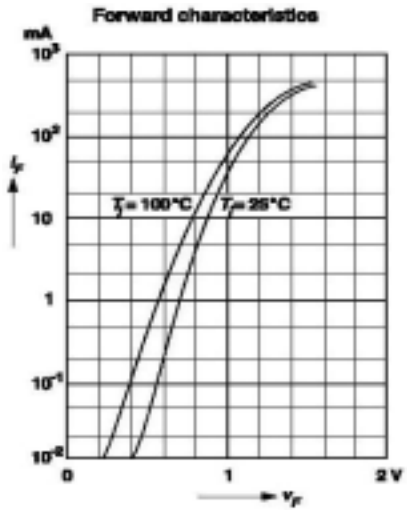
1

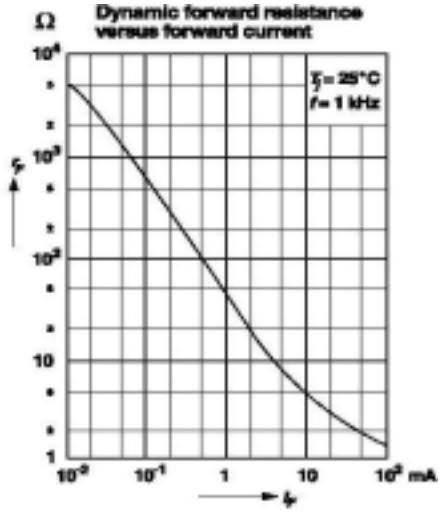
MARKING:

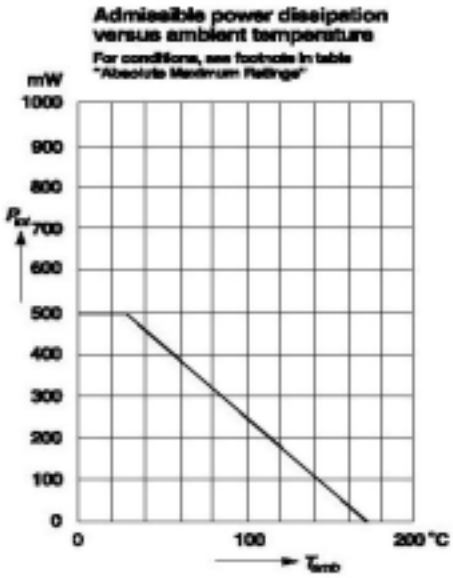


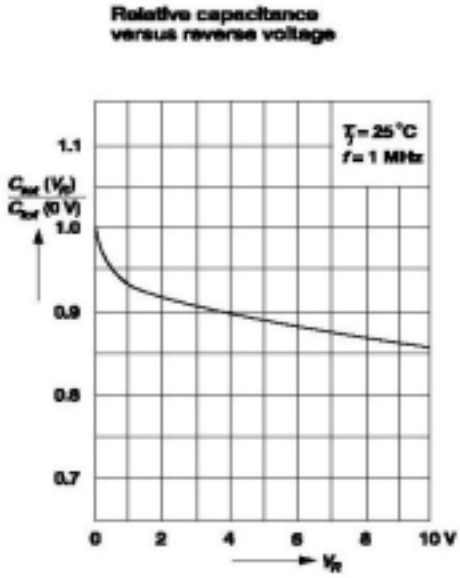
[2] Rev.A4, 1-Jul-03

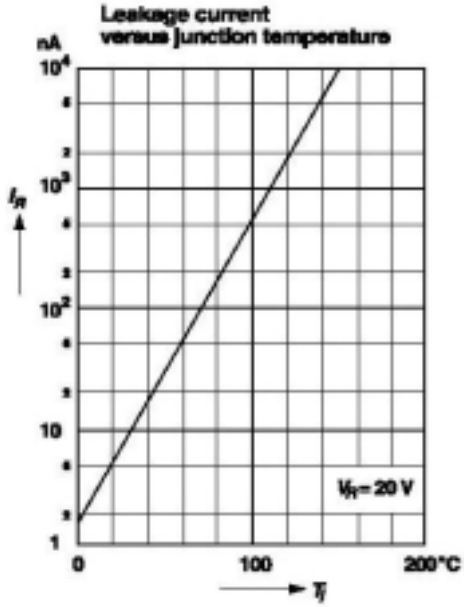
RATINGS AND CHARACTERISTIC CURVES 1N4148

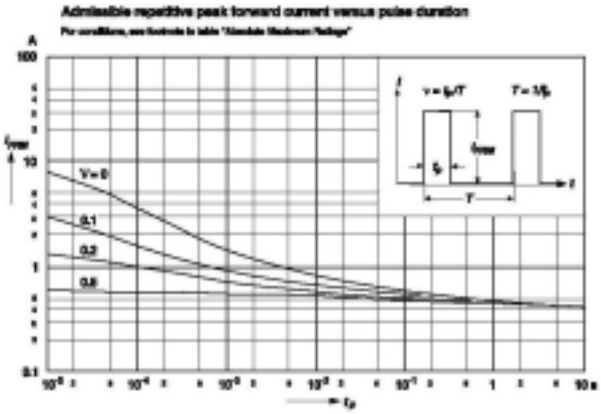












[3] Rev.A4, 1-Jul-03