

1N4148M

SMALL SIGNAL DIODE

VOLTAGE: 100V

CURRENT: 150mA

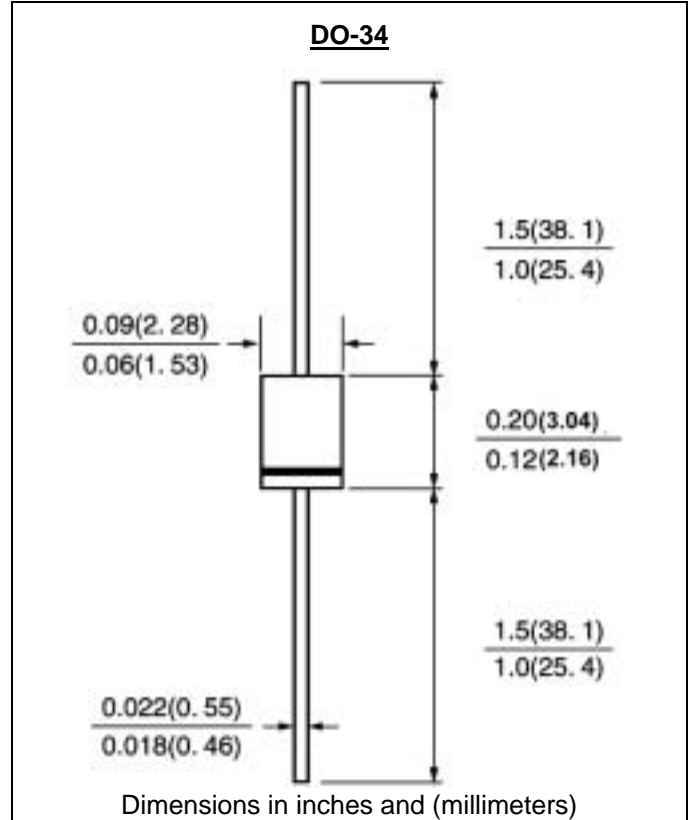


FEATURE

Silicon Single Junction Diode
Fast switching Diode

MECHANICAL DATA

Case: DO-34 Glass case
Polarity: color band denotes cathode
Mounting position: any
Weight: approx . 0.12g



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	V _{rm}	100	V
Recurrent Voltage	V _r	75	V
Average Forward Rectified Current Half-Wave Rectification With Resistive Load at T _{amp} =25°C	I _{f(av)}	150	mA
Peak Forward Surge Current T<1.0ms and T _j =25°C	I _{fsm}	450	mA
Power dissipation at T _{amp} =25°C	P _{tot}	500	mW
Typical Thermal Resistance (Note 1)	R(ja)	350	°C /W
Junction Temperature	T _j	175	°C
Storage Temperature	T _S	-65 ~ +175	°C

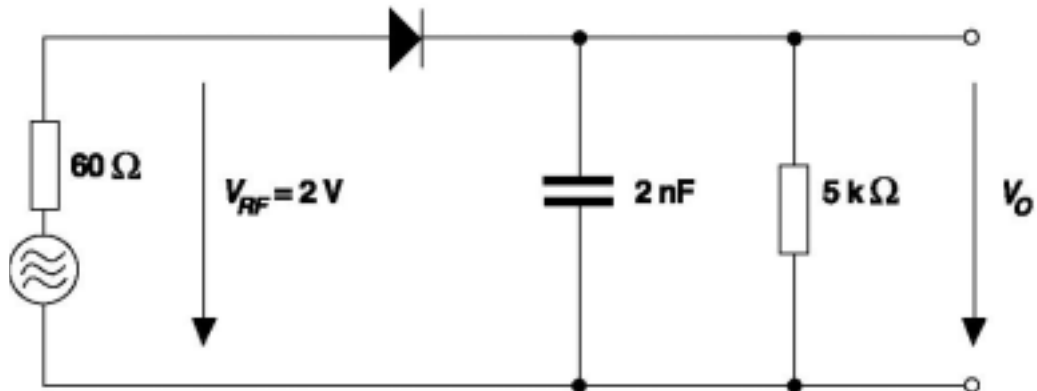
Note:

- 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			25	nA
		Vr=75V			5.0	uA
		Vr=20V, Tj=150			50	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=100			4	nS

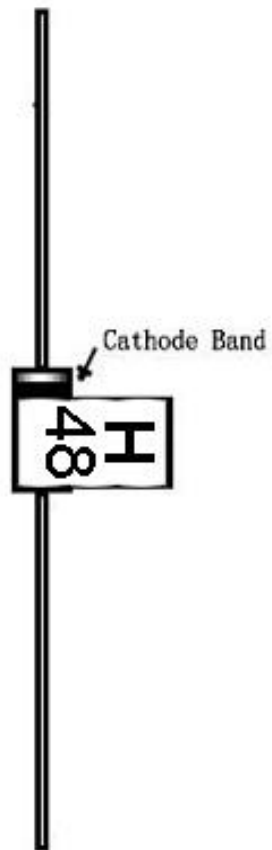
Rectification Efficiency Measurement Circuit



1

MARKING:

2



RATINGS AND CHARACTERISTIC CURVES 1N4148

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