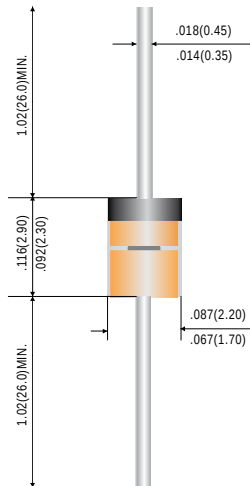


SMALL SIGNAL SWITCHING DIODE



DO-34

Dimensions in inches and (millimeters)

Ordering Information	
Part Number	Remark
1N4148M	Normal
1N4148M-H	Green Compound

FEATURES

- Fast switching Speed.
- Electrically Identical to Standard JEDEC
- High Conductance
- Axial lead Package Ideally Suited for Automatic Insertion.
- Both normal and Pb free product are available :
Normal : 80~95% Sn, 5~20% Pb
Pb free: 98.5% Sn above

MECHANICAL DATA

- Case: Molded Glass DO-34
- Terminals: Solderable per MIL-STD-202E, Method 208
- Polarity: See Diagram Below
- Approx. Weight: 0.09 grams
- Mounting Position: Any

Electrical Characteristics (Ta=25°C)			
Ratings	SYMBOL	Value	Unit
Reverse Voltage	V_R	67	V
Peak Reverse Voltage	V_{RM}	90	V
RM S Voltage	V_{RMS}	45	V
Maximum Average Forward Current at Ta=25°C and f> 50Hz	I_{AV}	130	mA
Surge Forward Current at t< 1s and Tj=25°C	I_{FSM}	500	mA
Power Dissipation at Tamb= 25°C	P_{TOT}	500	mW
Maximum Forward Voltage at IF =10mA	V_F	1	V
Maximum Leakage Current at VR =20V at VR =75V at VR =20V ,TJ= 150°C	I_R	25 5 50	nA μA μA
Maximum Capacitance (Note 1)	C_J	4	pF
Maximum Reverse Recovery Time (Note 2)	T_{rr}	4	ns
Maximum Thermal Resistance	$R_{θJA}$	350	°C /W
Junction Temperature and Storage Temperature Range	T_J, T_S	-55 ~ 150	°C

NOTE:

1. CJ at VR=0, f=1MHZ
2. From IF=10mA to IR=1mA, VR=6Volts, RL=100Ω

SMALL SIGNAL SWITCHING DIODE

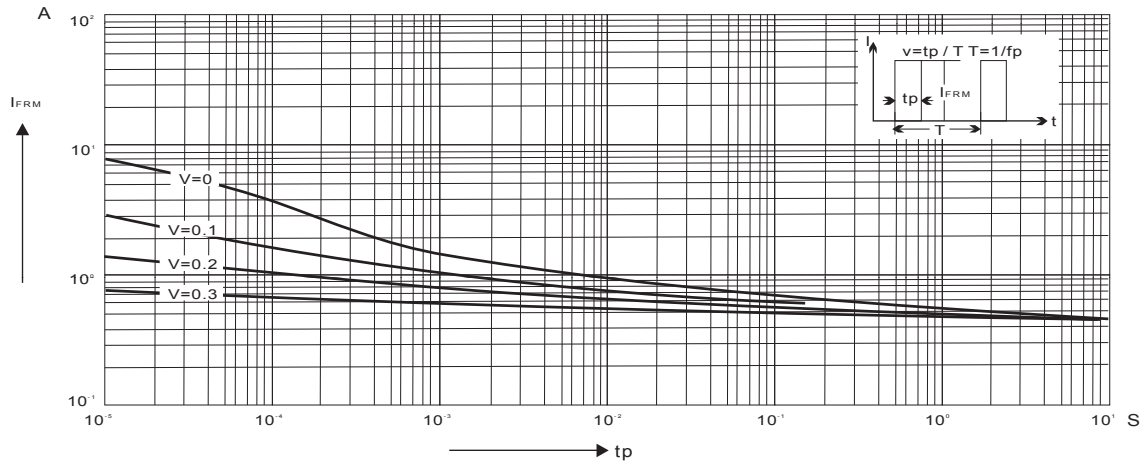


Fig.1 ADMISSIBLE REPETITIVE PEAK FORWARD CURRENT VERSUS PULSED DURATION

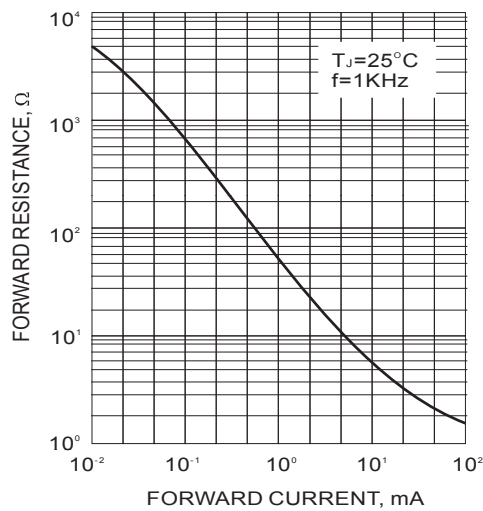


Fig.2 DYNAMIC FORWARD RESISTANCE VERSUS FORWARD CURRENT

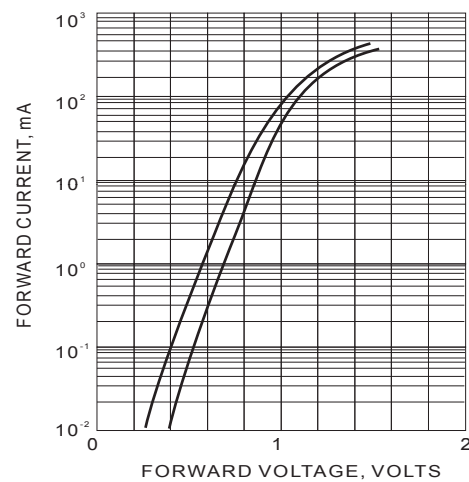


Fig.3 FORWARD CHARACTERISTICS

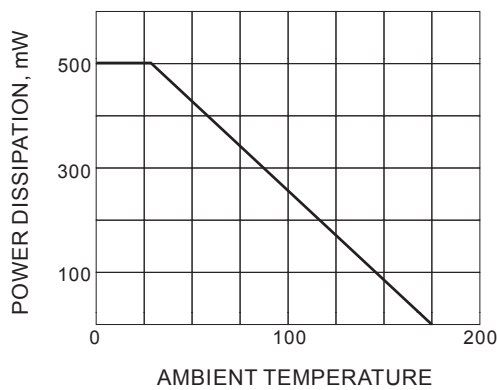


Fig.4 DERATING CURVE

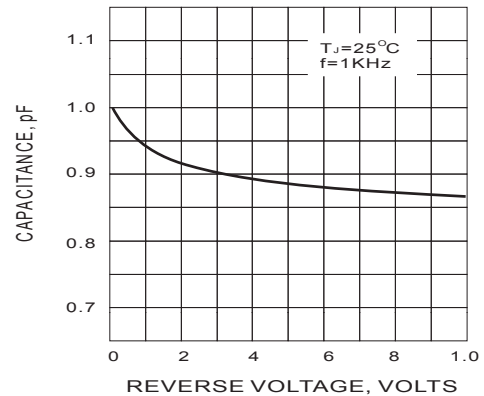


Fig.5 TYPICAL JUNCTION CAPACITANCE