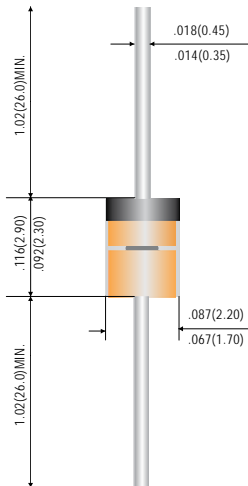




# 1N4148M



## 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 =10 mA	$V_F$	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	$R_{\theta JA}$	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



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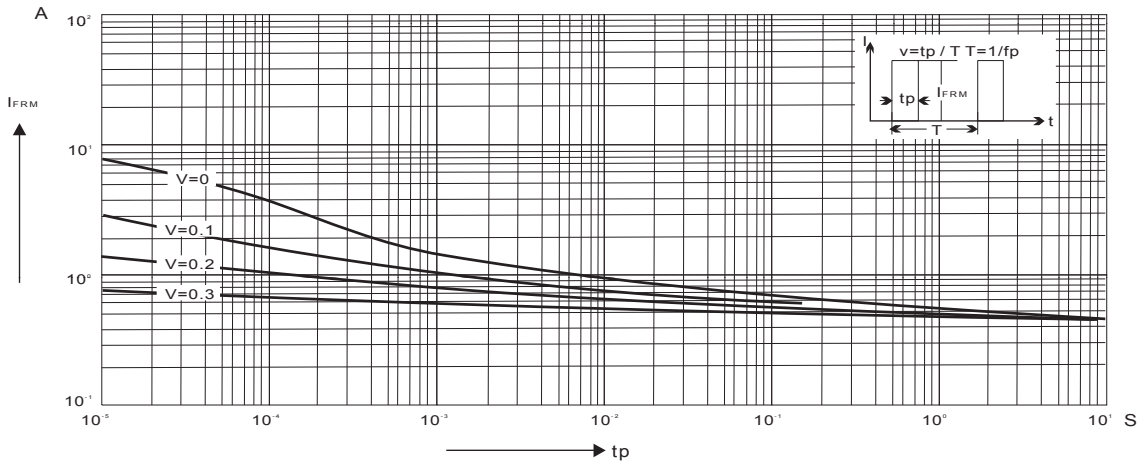


Fig.1 ADMISSIBLE REPETITIVE PEAK FORWARD CURRENT VERSUS PULSED DURATION

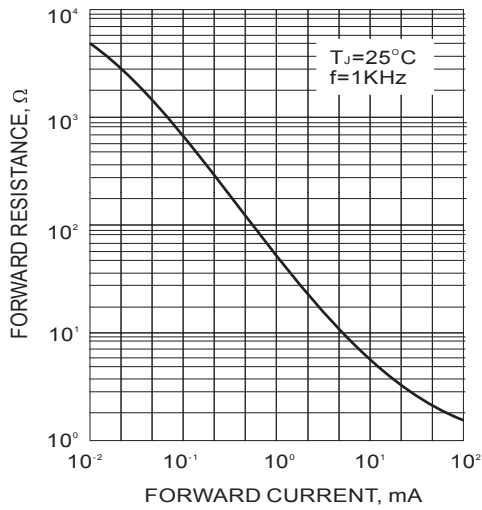


Fig.2 DYNAMIC FORWARD RESISTANCE VERSUS FORWARD CURRENT

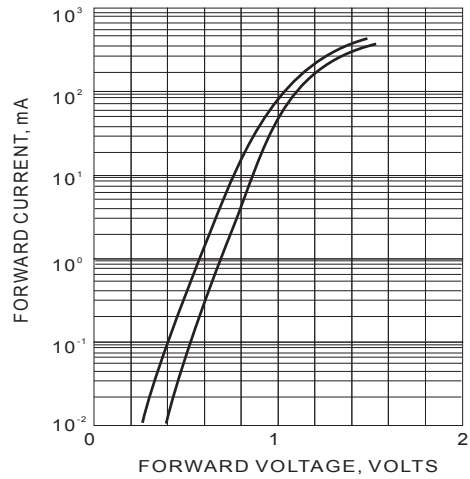


Fig.3 FORWARD CHARACTERISTICS

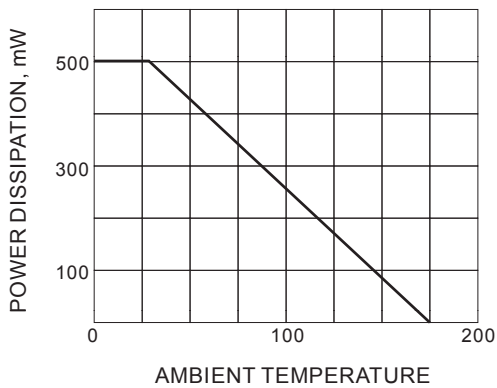


Fig.4 DERATING CURVE

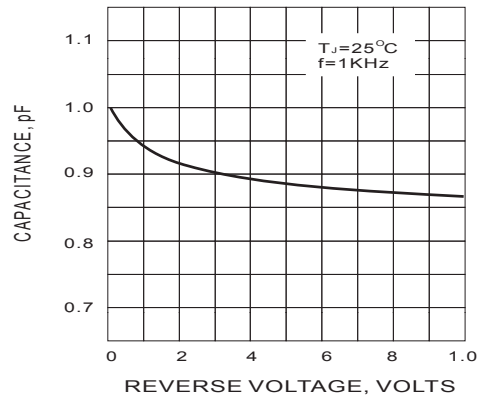


Fig.5 TYPICAL JUNCTION CAPACITANCE