

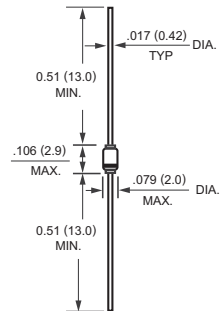
**FAST SWITCHING DIODE**

**FEATURES**

- \* Fast Switching Device( $T_{RR}<4.0nS$ )
- \* DO-34 Package (JEDEC)
- \* Through-Hole Device Type Mounting
- \* Hermetically Sealed Glass
- \* Compression Bonded Construction
- \* All external surfaces are corrosion resistant and leads are readily solderable



**DO-34**



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25 °C ambient temperature unless otherwise specified.

**MAXIMUM RATINGS** ( @ TA = 25°C unless otherwise noted )

RATINGS	SYMBOL	1N4148M	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	100	Volts
Maximum RMS Voltage	$V_{RMS}$	70	Volts
Maximum DC Blocking Voltage	$V_{DC}$	100	Volts
Maximum Average Forward Rectified Current	$I_O$	150	mAmps
Non-Repetitive Peak Forward Surge Current	$I_{FSM}$	0.5	Amps
Typical Current Squared Time	$I^2T$	.001	A <sup>2</sup> S
Typical Reverse Recovery Time( $I_F=I_R=30mA, I_{rr}=0.1I_R, R_L=100 \Omega$ )	$T_{rr}$	4	nS
Typical Junction Capacitance( $V_R=0V, f=1MHz$ )	$C_J$	4	pF
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	350	°C/W
Maximum Power Dissipation	$P_D$	500	mW
Operating and Storage Temperature Range	$T_J, T_{STG}$	-65 to +175	°C

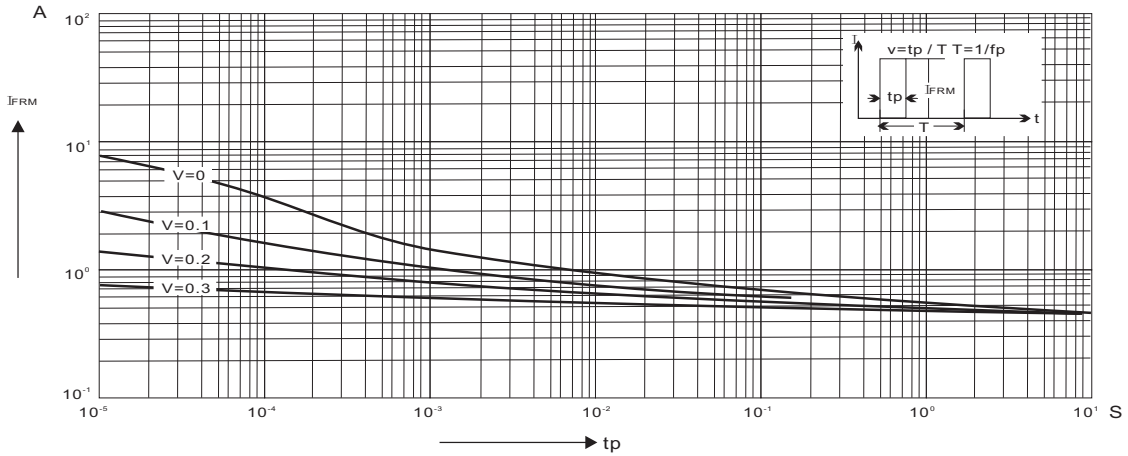
**ELECTRICAL CHARACTERISTICS** (@TA=25 °C unless otherwise noted)

CHARACTERISTICS	SYMBOL	1N4148M	UNITS
Maximum Instantaneous Forward Voltage @ $I_F=10mA$	$V_F$	1.0	Volts
Maximum Instantaneous Reverse Current @ $V_R=20V$ @ $V_R=75V$	$I_R$	25 5	nAmps uAmps

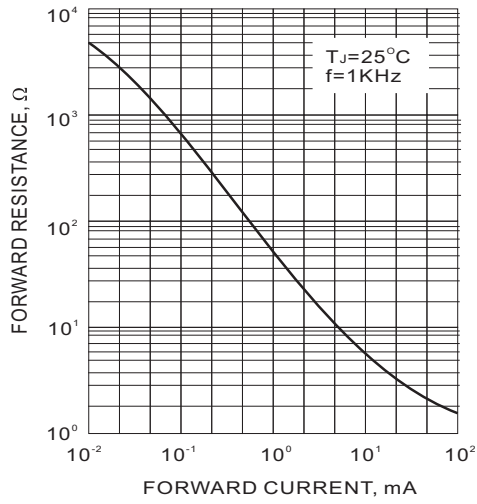
NOTES : 1. Thermal Resistance :Mounted on PCB.

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REV: A

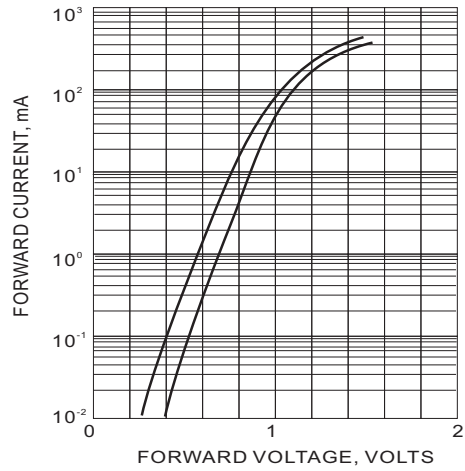
# RATING AND CHARACTERISTICS CURVES (1N4148M)



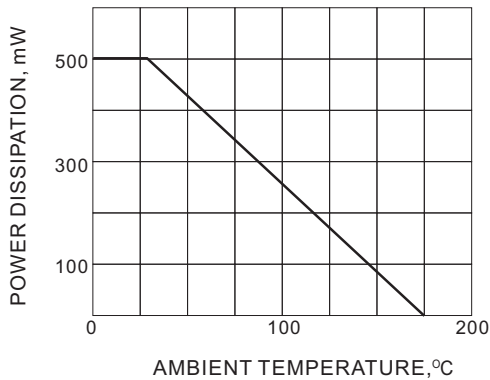
**Fig.1 ADMISSIBLE REPETITIVE PEAK FORWARD CURRENT VERSUS PULSE DURATION**



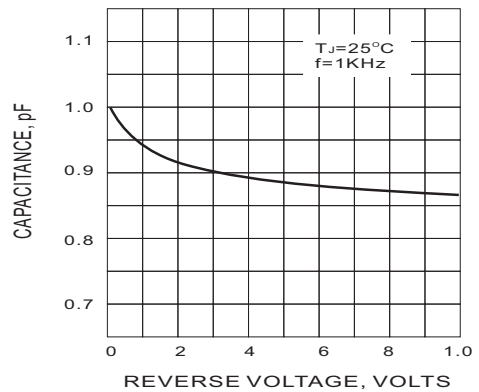
**Fig.2-DYNAMIC FORWARD RESISTANCE VERSUS FORWARD CURRENT**



**Fig.3 FORWARD CHARACTERISTICS**



**Fig.4 DERATING CURVE**

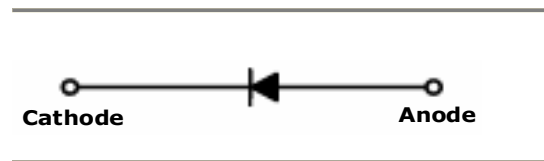


**Fig.5 TYPICAL JUNCTION CAPACITANCE**



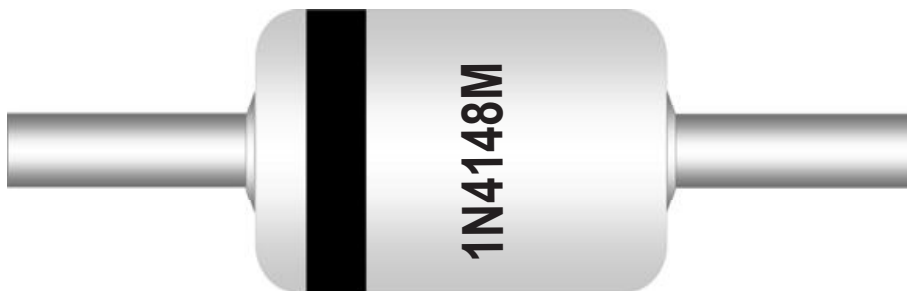
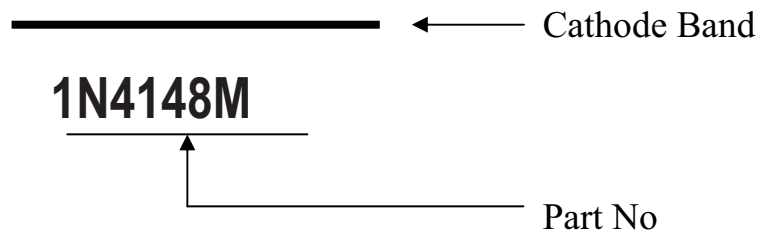
## Attachment information about 1N4148M

### 1. Internal Circuit



ELECTRICAL SYMBOL

### 2. Marking on the body



## PACKAGING OF DIODE

### REEL PACK

PACKAGE	PACKING CODE	REEL ( EA )	COMPONENT SPACE(mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
DO-34	-T	10,000	5.0	52	356	380*380*420	50,000	11.00

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