

1N4148M

SMALL SIGNAL SWITCHING DIODES

DO-34(GLASS)

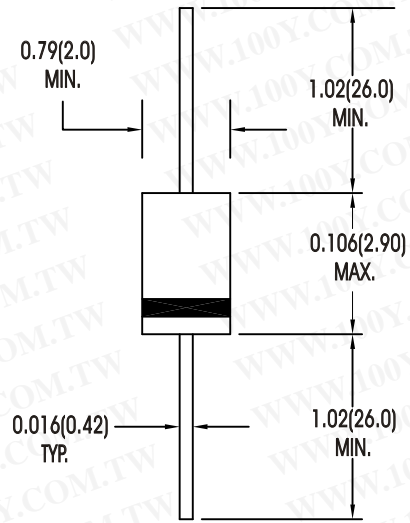
FEATURES:

- Fast switching diodes
- 0.5W power dissipation

勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-54151736
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

MECHANICAL DATA

Case: DO-34 case
 Polarity : Color band denotes cathode end
 Weight : Approx 0.13 gram



Dimensions in inches and (millimeters)

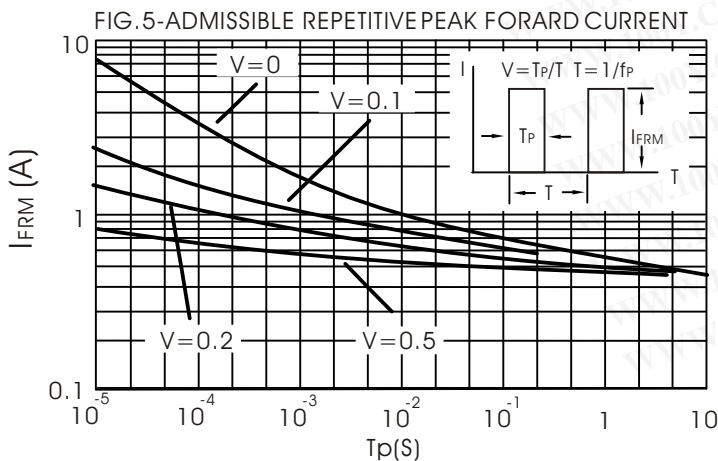
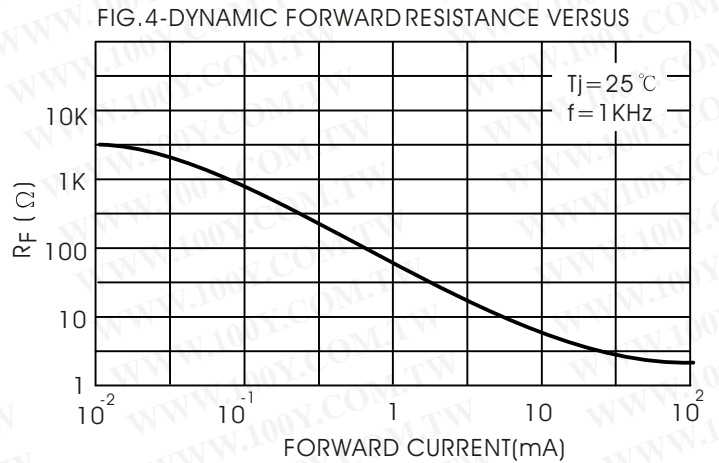
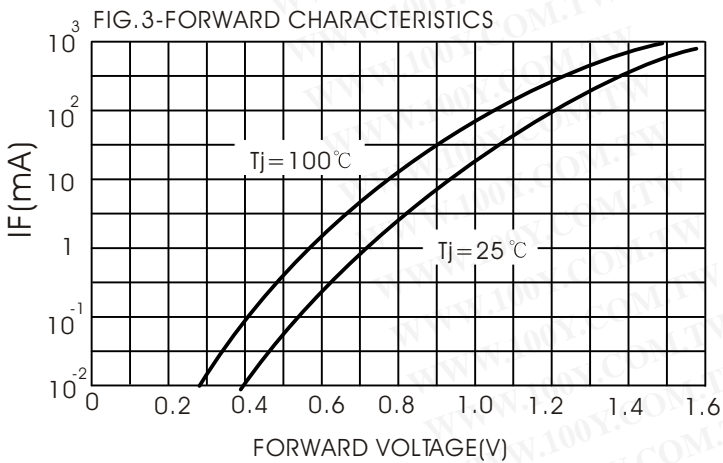
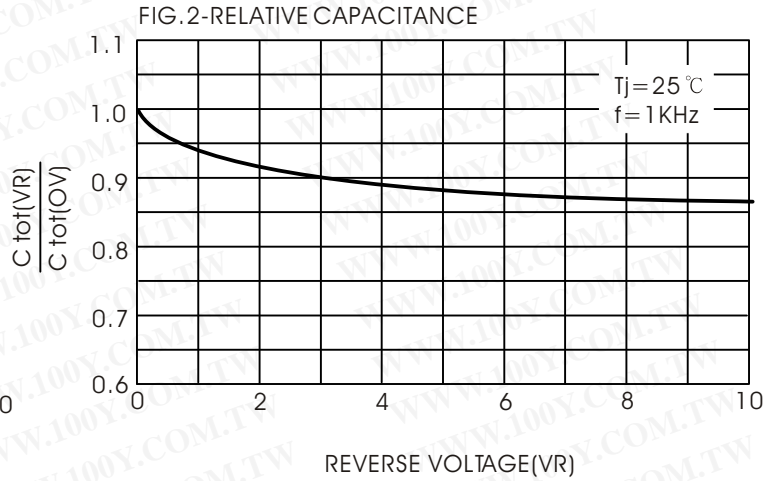
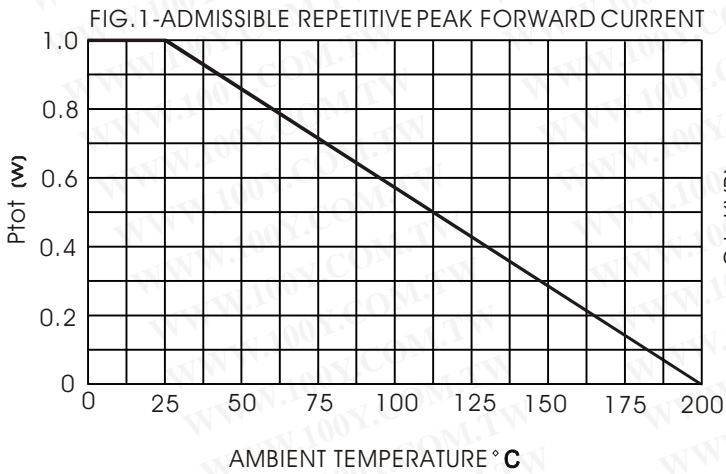
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temp. unless otherwise specified.
 Single phase, half sine wave, 60 Hz, resistive or inductive load.
 For capacitive load, derate current by 20 %.

Characteristic	Symbol	1N4148M	Units
Maximum peak reverse voltage	V_{RM}	100	Volts
Reverse voltage	V_R	75	Volts
Maximum average forward rectified current half Wave rectification with resistive load at $T_{amb}=25^\circ\text{C}$ and $f \geq 50\text{Hz}$	$I_{O(AV)}$	150 ¹⁾	mA
Peak forward surge current < 1S and $T_j=25^\circ\text{C}$	I_{FSM}	500 ¹⁾	mA
Power dissipation at $T_{amb}=25^\circ\text{C}$	P_{tot}	500	mW
Maximum forward voltage $I_F=10\text{mA}$	V_F	1.0	Volts
Maximum leakage current At $V_R=20\text{V}/25^\circ\text{C}$ $V_R=75\text{V}/25^\circ\text{C}$ $V_R=20\text{V}/150^\circ\text{C}$	I_R	0.025 5 50	μA μA μA
Minimum reverse breakdown voltage tested with 100 μs pulses	$V_{(BR)R}$	100	Volts
Capacitance at $V_F=V_R=0$	C_{TOT}	4	Pf
Voltage rise when switching on tested with 50mA forward pulses $T_p=0.1\mu\text{s}$. Rise time < 30ns. $F_p=5\sim 100\text{KHz}$	V_{FR}	2.5	Volts
Reverse recovery time from $I_F=-I_R=10\text{mA}$ to $I_{RR}=-1\text{mA}$, $V_R=6\text{V}$ $R_L=100\Omega$	T_{RR}	4	ns
Maximum thermal resistance from junction to ambient	R_{th-JA}	350 ¹⁾	K/mW
Minimum Rectification efficiency at $f=100\text{MHz}$, $v_{rf}=2\text{V}$	η_V	0.45	
Junction temperature	T_J	200	$^\circ\text{C}$
Storage temperature range	T_{stg}	-65 to +200	$^\circ\text{C}$

1): Valid provided that leads at a distance of 8mm from case are kept at ambient temperature (DO-34)

RATINGS AND CHARACTERISTIC CURVES 1N4148M



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