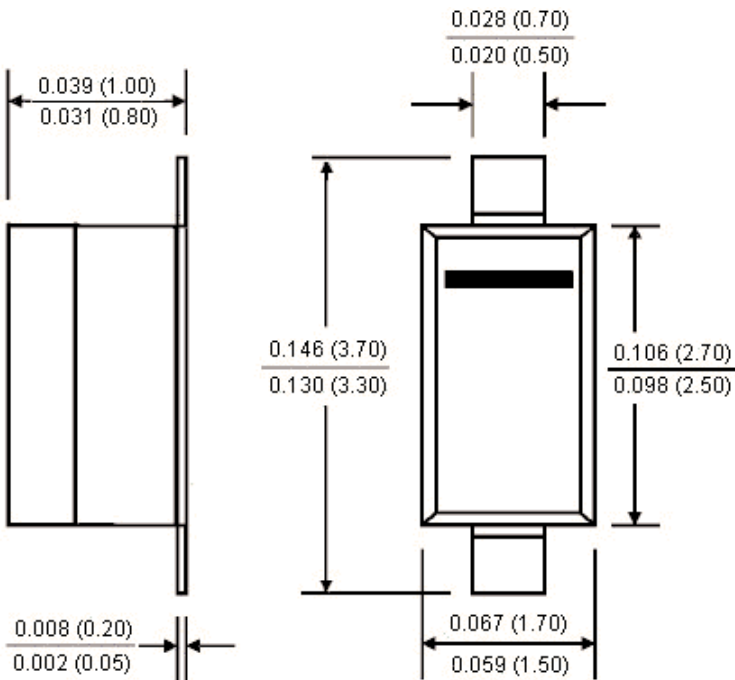


Features:

- Fast switching device ($T_{RR} < 4.0\text{nS}$).
- General purpose diodes.
- Flat lead SOD-123 small outline plastic package.
- Surface device type mounting.
- Moisture sensitivity level 1.
- Clip bonding construction, good thermal capability.
- Pb free version and RoHS compliant.
- Matte tin (Sn) lead finish with nickel (Ni) underplate.
- Band indicates cathode.



SOD-123F



Dimensions : Inches (Millimetres)

Maximum Ratings at Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Maximum Ratings

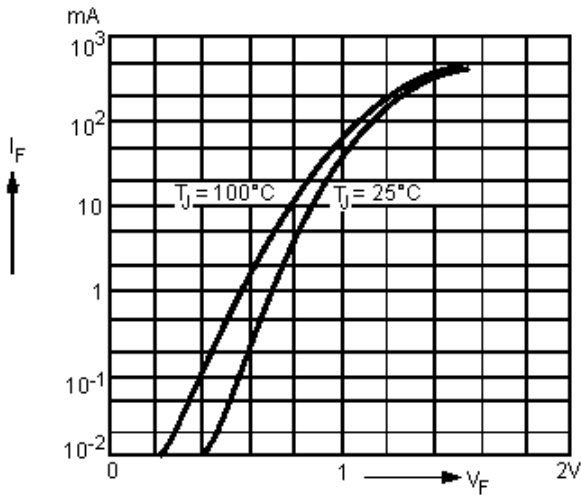
Type Number	Symbol	Value	Units
Power Dissipation	P_d	400	mW
Non-Repetitive Peak Reverse Voltage	V_{RSM}	100	V
Repetitive Peak Reverse Voltage	V_{RRM}	75	
Repetitive Peak Forward Current	I_{FRM}	300	mA
Continuous Forward Current	I_o	150	
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to + 150	°C

Electrical Characteristics

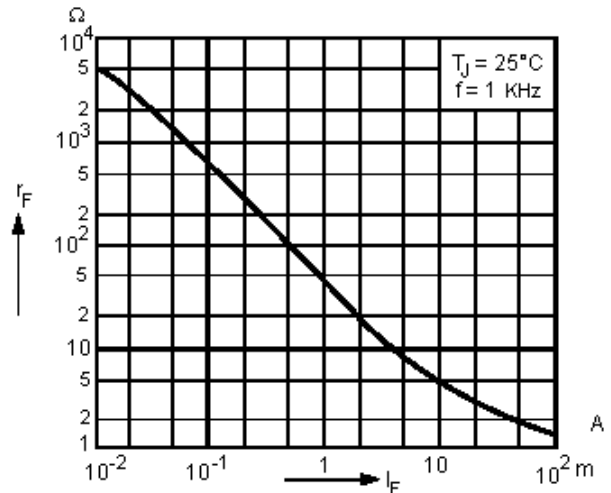
Type Number	Symbol	Minimum	Maximum	Units
Breakdown Voltage $I_R = 100\mu\text{A}$ $I_R = 5\mu\text{A}$	B_V	100 75	-	V
Forward Voltage 1N4148W $I_F = 10\text{mA}$	V_F	-	1.0	
Reverse Leakage Current $V_R = 20\text{V}$ $V_R = 75\text{V}$	I_R	-	25 5	nA μA
Junction Capacitance $V_R = 0, f = 1.0\text{MHz}$	C_j	-	4.0	pF
Reverse Recovery Time (Note 1)	t_{rr}	-		nS

Notes : 1. Reverse Recovery Test Conditions: $I_F = 10\text{mA}$, $I_R = 60\text{mA}$, $R_L = 100\Omega$, $I_{RR} = 1\text{mA}$

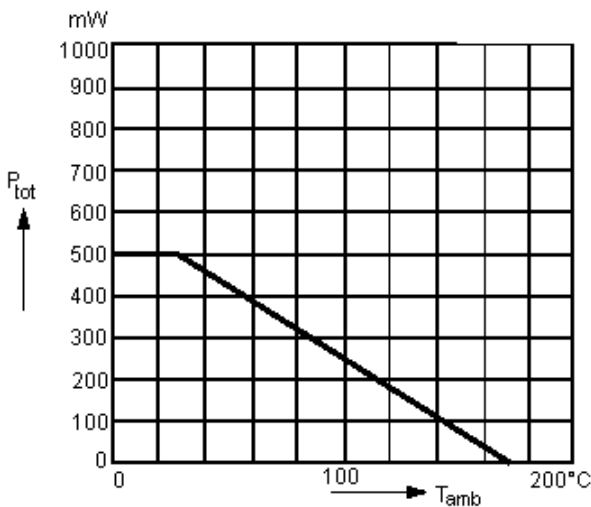
Ratings and Characteristic Curves (1N4148W)



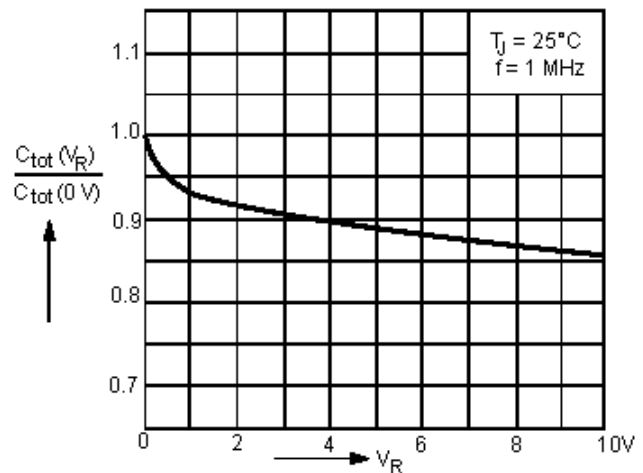
Forward Characteristics



Dynamic Forward Resistance vs. Forward Current

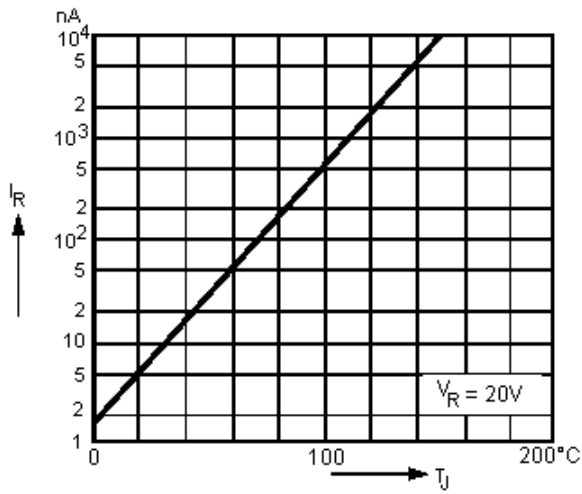


Admissible Power Dissipation vs. Ambient Temperature

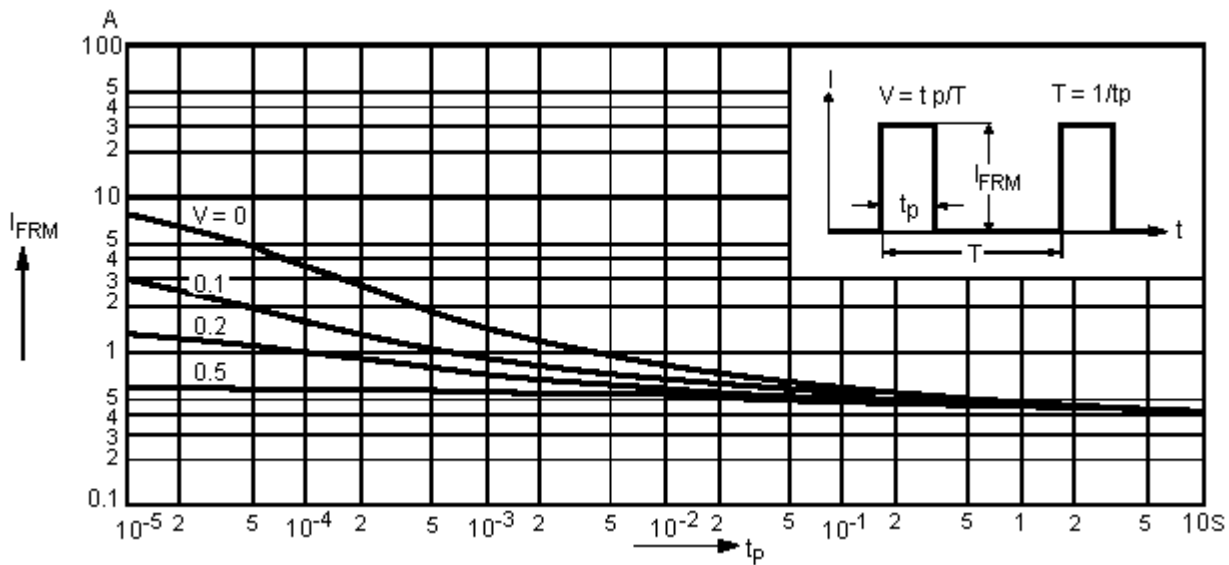


Reverse Capacitance vs. Reverse Voltage

Ratings and Characteristic Curves (1N4148W)



Leakage Current vs. Junction Temperature



Admissible Repetitive Peak Forward Current vs. Pulse Duration

Part Number Table

Description	Part Number
Diode, High Speed, SOD-123F	1N4148W

Notes:

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