

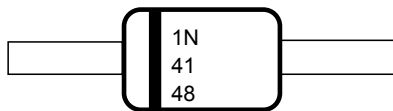
SURFACE MOUNT FAST SWITCHING DIODE	REVERSE VOLTAGE – 75 Volts FORWARD CURRENT – 0.15 Ampere
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FEATURES

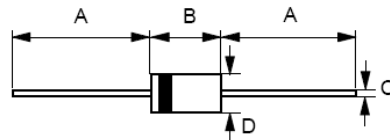
- Fast switching device ($T_{rr} < 4.0 \text{ ns}$)
- DO-35 package (JEDEC)
- Surface device type mounting
- Through-hole device type mounting
- Hermetically sealed glass
- Compression bonded construction
- All external surface are corrosion resistant and terminal are readily solder able
- RoHS compliant
- Solder hot dip Tin(Sn) terminal finish

MECHANICAL DATA

- Polarity: Color band denotes cathode
- Marking Code:



DO-35



DO-35		
DIM.	MIN.	MAX.
A	25.4	38.1
B	3.05	4.00
C	0.45	0.55
D	1.53 φ	2.00 φ
All Dimensions in millimeter		

Maximum Ratings & Thermal Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	1N4148	Units
Working Inverse Voltage	W_{IV}	75	V
Non-Repetitive Peak Forward Current	I_{FM}	450	mA
Peak Forward Surge Current (Pulse Width = 1.0 μs)	I_{FSM}	2	A
Average Rectified Output Current	I_o	150	mA
Power Dissipation	P_D	500	mW
Operating Temperature Range	T_J	-55~+150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65~+150	$^\circ\text{C}$

Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Test Condition	Symbol	1N4148	Unit
Breakdown voltage	$I_R=100\mu\text{A}$ $I_R=5\mu\text{A}$	BV	100 75	V
Maximum Forward Voltage	$I_F = 10\text{mA}$	V_F	1000	mV
Maximum DC Reverse Current at Rated DC Blocking Voltage	$V_R = 75\text{V}$ $V_R = 20\text{V}$	I_R	5 25	μA nA
Typical Diode Capacitance	$V_R = 0\text{V}, f=1\text{MHz}$	C_D	4	pF
Reverse Recovery time	$I_F=10\text{mA}, V_R=6\text{V}$ $R_L=100\Omega$ $I_{rr}=1\text{mA}$	trr	4	ns

Figure 1. Power Dissipation vs Ambient Temperature
 Valid provided leads at a distance of 0.8mm from case are kept at ambient temperature

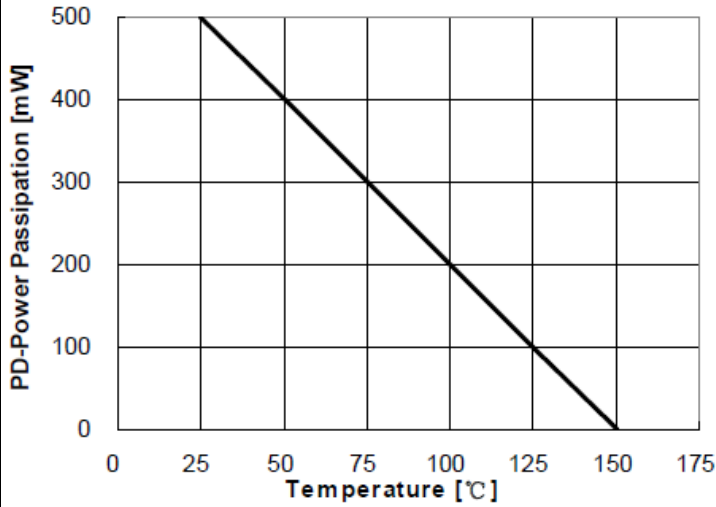


Figure 2. Total Capacitance

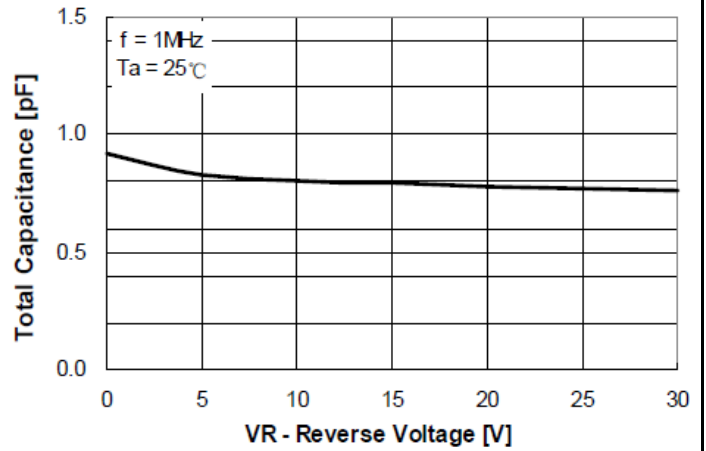


Figure 3. Reverse Voltage vs Reverse Current
 BV - 1.0uA to 100uA

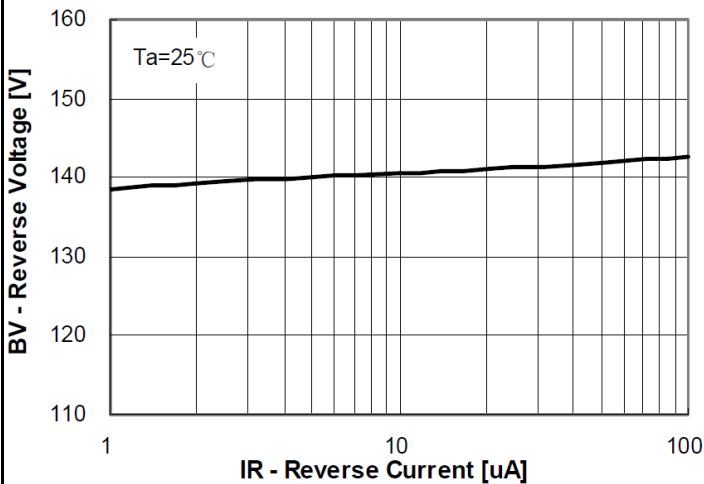


Figure 4. Reverse Current vs Reverse Voltage
 IR - 10V to 100V

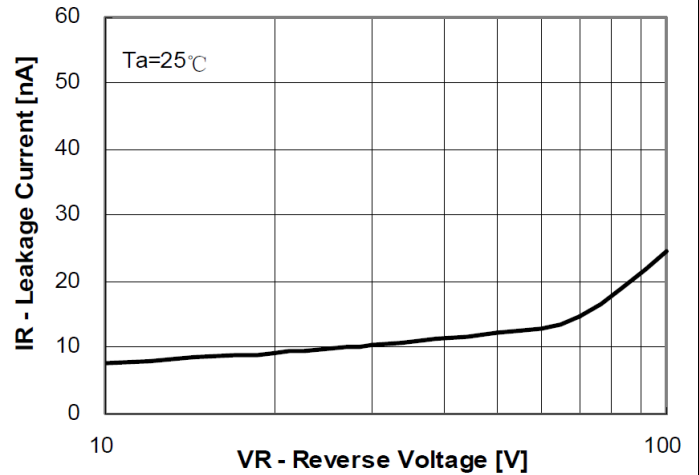


Figure 5. Forward Voltage vs Forward Current
 VF - 0.001mA to 800mA

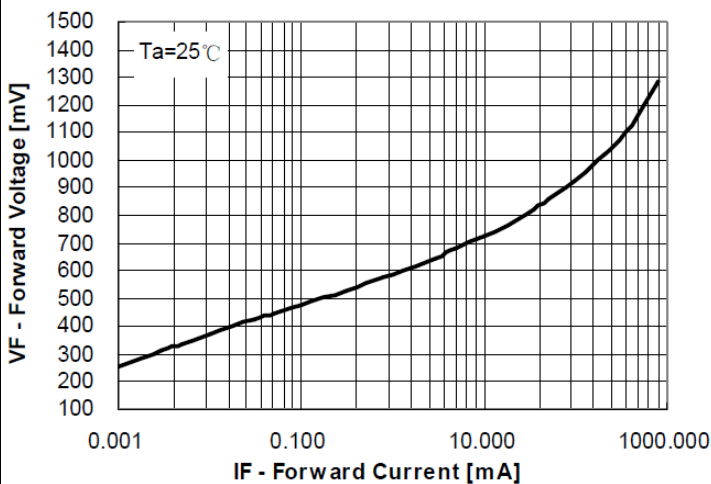
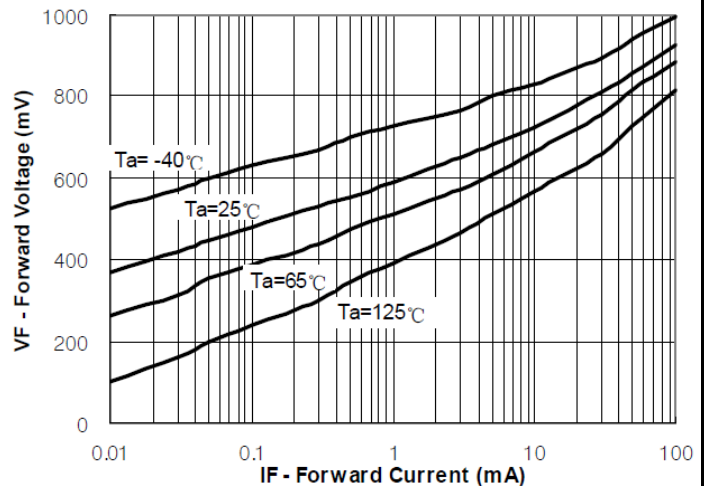


Figure 6. Forward Voltage vs Ambient Temperature
 VF - 0.01mA to 100mA (-40 to +125 Deg C)



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