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[1N4148-G](#)

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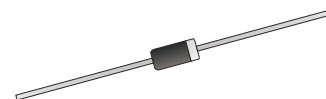
sales@integrated-circuit.com

Switching Diode



1N4148-G

Voltage: 100V
Current: 0.15A
RoHS Device

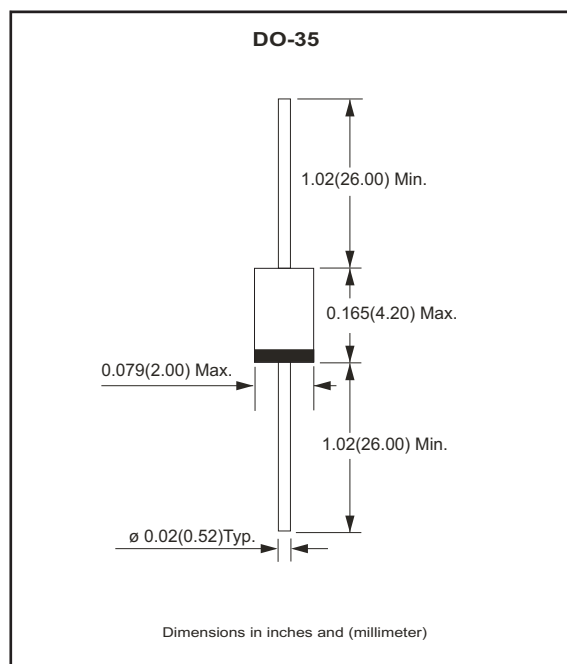


Features

- Surge overload ratings to 2 amperes peak.
- Ideal for printed circuit board.

Mechanical data

- Case: Glass, DO-35
- Lead: Axial leads, solderable per MIL-STD-202, Method 208 guaranteed.
- Terminal: Pure tin plated lead free.
- Polarity: Indicated by cathode band.
- Mounting Position: Any
- Weight: 0.13gram



Maximum Ratings and Electrical Characteristics

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

Parameter	Symbol	Value	Unit
Maximum Repetitive Peak Voltage	V _{RRM}	100	V
Maximum RMS Voltage	V _{RMS}	75	V
Forward Repetitive Peak Current	I _{FSM}	500	mA
Maximum Average Forward Current	I _{F(AV)}	150	mA
Peak Forward Surge Current tp=1µS	I _{FSN}	2.0	A
Typical Resistance Junction to Ambient Air (Note 1)	R _{θJA}	350	K/W
Operating and Storage Temperature Rang	T _J , T _{STG}	-65 to +200	°C

Parameter	Symbol	Min	Typ.	Max	Unit
Forward Voltage at I _F = 10 mA	V _F	-	-	1	V
Leakage Current at V _R = 20 V at V _R = 75 V at V _R = 20 V, T _J = 150°C	I _R	-	-	25	nA
	I _R	-	-	5	µA
	I _R	-	-	50	µA
Reverse Recovery Time(Note 2)	T _{rr}	-	-	4.	ns

NTOES: (1) Thermal Resistance Junction to Ambient Air.
 (2) Reverse Recovery Test Conditions: I_F=10mA, V_R=6V, I_{rr}=0.1 X I_R, R_L=100Ω.

Switching Diode



RATING AND CHARACTERISTIC CURVES (1N4148-G)

Fig.1 - Maximum Forward Current Derating Curve

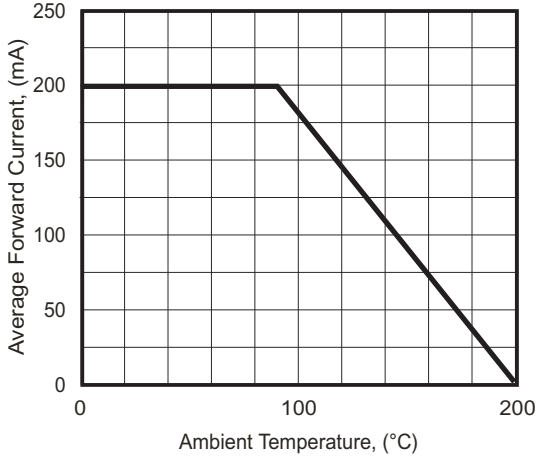


Fig.2 - Maximum Non-Repetitive Forward Surge Current Per Bridge Element

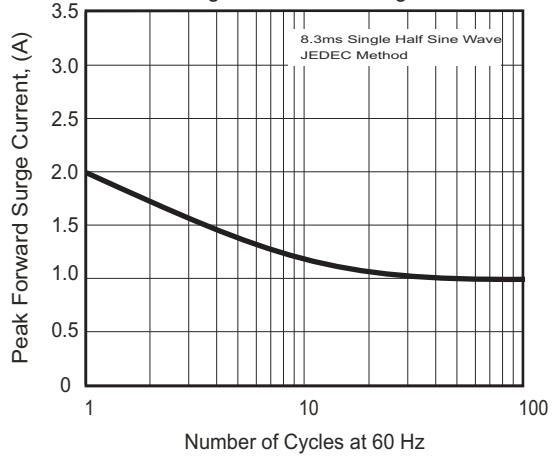


Fig.3 - Typical Instantaneous Forward Characteristics Per Bridge Element

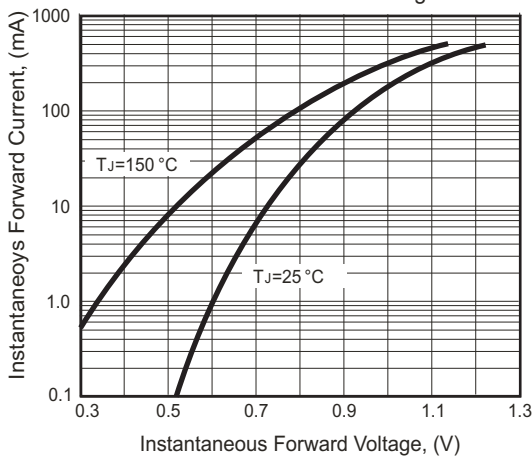


Fig.4 - Typical Reverse Characteristics Per Bridge Element

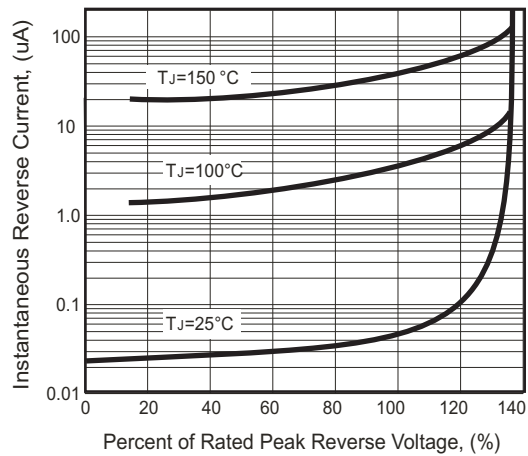
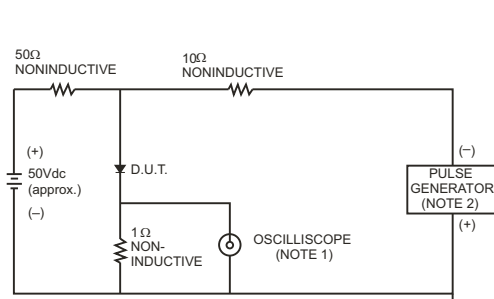
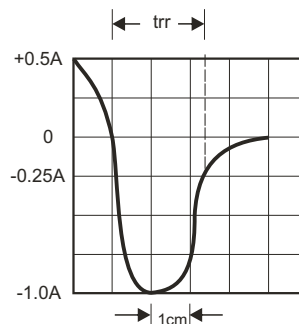


Fig.5 - Reverse Recover Time Characteristics and Test Circuit Diagram



NOTES: 1. Rise Time= 7ns max. Input Impedance= 1 megohm.22pF.
 2. Rise Time= 10ns max. Source Impedance= 50 ohms.

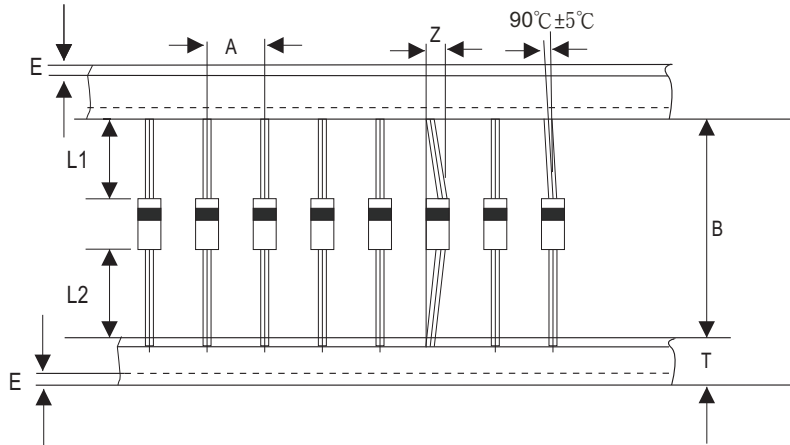


SET TIME BASE FOR
50 / 10ns / cm

Switching Diode



Taping Specification For Axial Lead Diodes



DO-35	SYMBOL	A	B	Z	T	E	L1-L2
	(mm)	5.00 ± 0.5	52.0 ± 1.5	1.2 (max)	6.0 ± 0.4	0.8 (max)	1.0 (max)
	(inch)	0.197 ± 0.020	2.047 ± 0.020	0.047 (max)	0.236 ± 0.016	0.032 (max)	0.040 (max)

Marking Code

Part Number	Marking Code
1N4148-G	1N4148



Standard Packaging

Case Type	AMMO PACK	
	BOX (pcs)	CARTON (pcs)
DO-35	5,000	100,000