

# Switching Diode

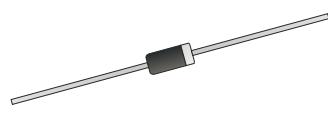
**Comchip**  
SMD Diode Specialist

## 1N4148-G

**Voltage: 100V**

**Current: 0.15A**

**RoHS Device**

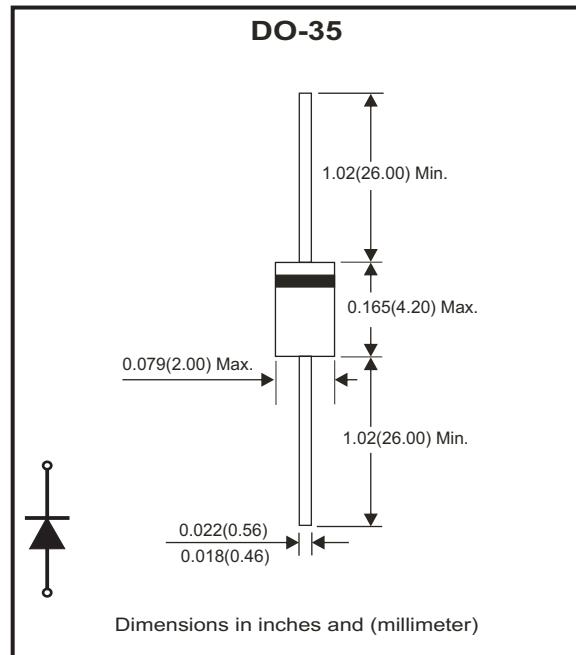


### Features

- 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: 0.13 grams(approx.).



### 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=1uS )	$I_{FSN}$	2.0		A
Typical resistance junction to ambient air (Note 1)	$R_{OJA}$	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, $T_J = 150^\circ C$	$I_R$			25 5 50	nA uA uA
Reverse recovery time( Note 2)	$T_{rr}$			4	ns

NOTES: (1) Thermal Resistance Junction to Ambient Air.

(2) Reverse Recovery Test Conditions:  $I_F=10mA, V_R=6V, I_{rr}=0.1 \times I_R, R_L=100\Omega$ .

Company reserves the right to improve product design , functions and reliability without notice.

REV:B

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## RATING AND CHARACTERISTIC CURVES (1N4148-G)

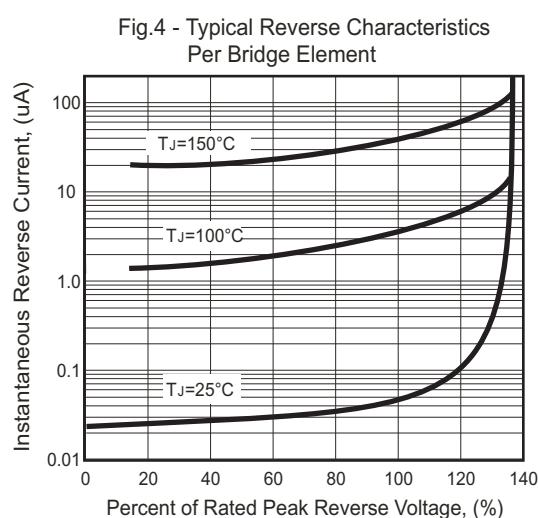
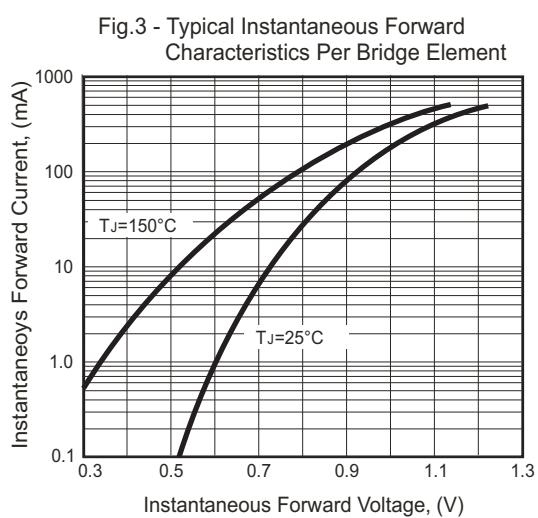
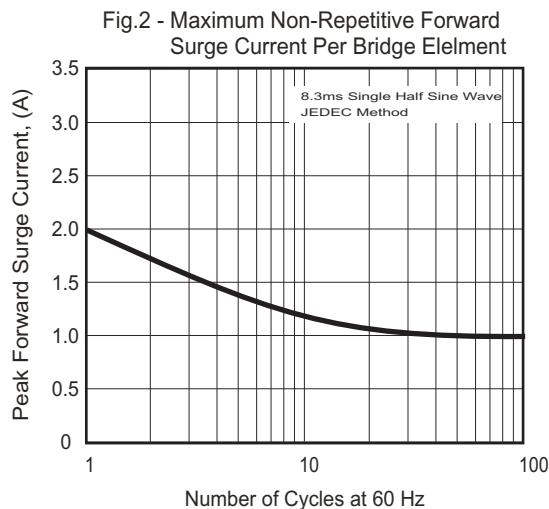
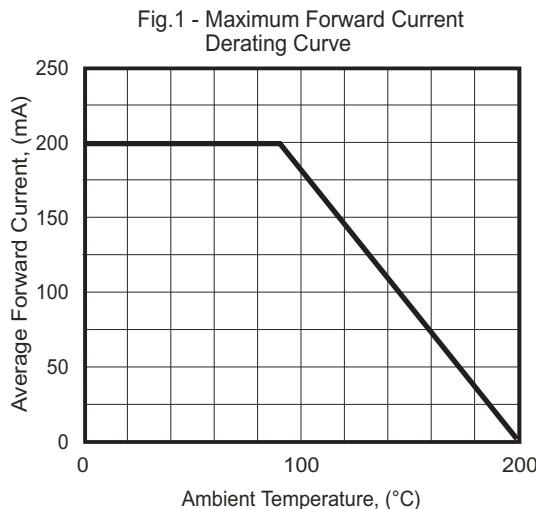
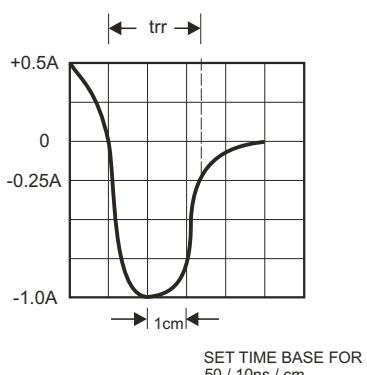
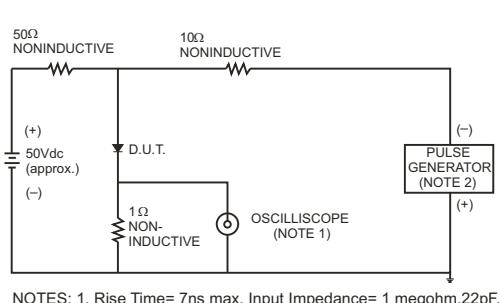
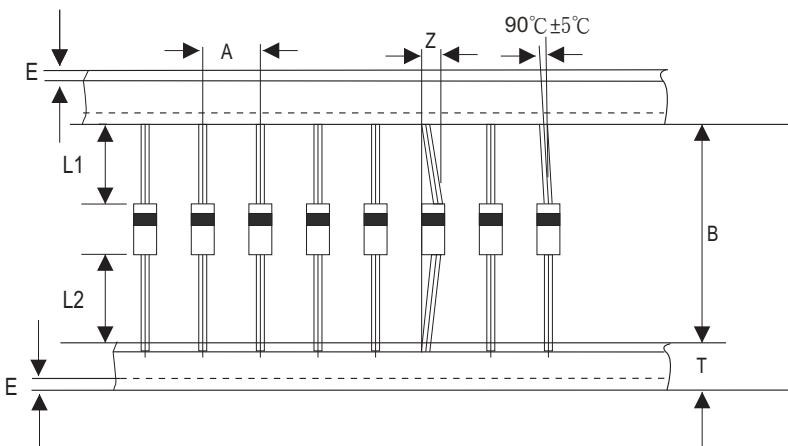


Fig.5 - Reverse Recover Time Characteristics and Test Circuit Diagram



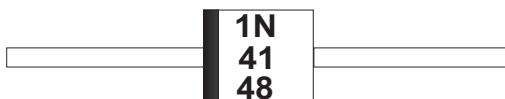
## Taping Specification For Axial Lead Diodes



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