## **General Purpose Silicon Rectifiers**



# 1N5400-G Thru. 1N5408-G

Voltage: 50 to 1000 V

**Current: 3.0 A RoHS Device** 



#### **Features**

- -Low forward voltage drop.
- -High reliability.
- -High current capability.
- -High surge current capability.

### **Mechanical data**

-Case: Molded plastic

-Epoxy: UL 94V-0 rate flame retardant

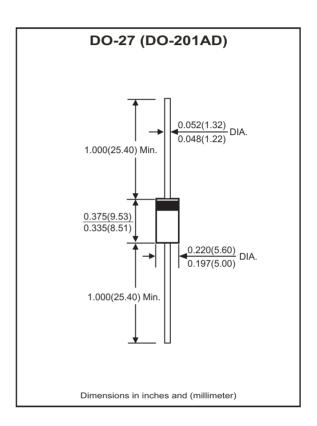
-Polarity: Color band denotes cathode end

-Lead: Axial leads, solderable per MIL-STD-202,

method 208 guaranteed

-Mounting position: Any

-Weight: 1.2 grams



### Maximum Ratings and Electrical Characteristics (at TA=25°C unless otherwise noted)

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	1N5400 -G	1N5401 -G	1N5402 -G	1N5404 -G	1N5406 -G	1N5407 -G	1N5408 -G	Unit
Maximum repetitive peak reverse voltage	Vrrm	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified current .375"(9.5mm) Lead length @Ta=75°	C I <sub>F(AV)</sub>	3.0						А	
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	200					А		
Maximum instantaneous forward voltage @3.	OA V <sub>F</sub>	1.0							V
Maximum DC reverse current at rated DC blocking voltage @TJ=25°C @TJ=100°	— IR	5.0 100					μА		
Typical thermal resistance (Note 1)	Reja	18						°C/W	
Operating temperature range	TJ	-65 to +125						°C	
Storage temperature range	Тѕтс	-65 to +150					°C		

#### NOTES

1. Thermal resistance from junction to ambient 0.375" (9.5mm) lead length.

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# **General Purpose Silicon Rectifiers**



Rating and Characteristic Curves (1N5400-G Thru. 1N5408-G)

Fig.1 - Maximum Forward Current Derating Curve

3.0

(V)

1.0

Single phase half wave 60Hz
Resistive or inductive load
0.375" (9.5mm) lead length
0 25 50 75 100 125 150

Ambient Temperature, (°C)

Fig.3 - Maximum Non-repetitive Forward Surge Curren Per Bridge Element

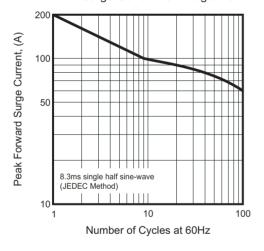
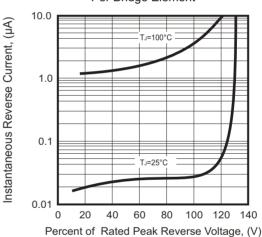


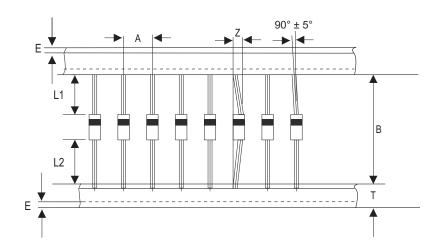
Fig.4 - Typical Reverse Characteristics Per Bridge Element

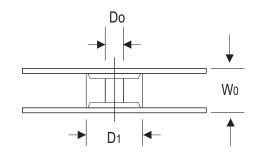


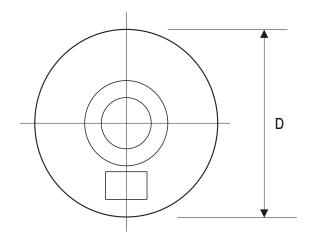
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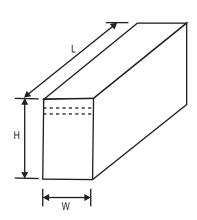


# **Taping Specification For Axial Lead Diodes**









DO 07	SYMBOL	Α	В	Z	Т	E	L1	L2
DO-27 (DO-201AD)	(mm)	10.00 ± 0.50	52.00 ± 0.50	1.20 (max)	6.00 ± 0.40	1.00 (max)	1.00 (max)	1.00 (max)
	(inch)	0.394 ± 0.020	2.047 ± 0.020	0.047 (max)	0.236 ± 0.016	0.039 (max)	0.039 (max)	0.039 (max)

DO 07	SYMBOL	D1	D <sub>0</sub>	D	W <sub>0</sub>	L	W	Н
DO-27 (DO-201AD)	(mm)	85.70 ± 0.30	16.60 ± 0.40	330.00	72.00 ± 3.00	260.00	75.00	145.00
	(inch)	3.374 ± 0.012	0.654 ± 0.016	13.000	2.835 ± 0.118	10.236	2.953	5.709



## **Marking Code**

Part Number	Marking code	Packaging
1N5400-G	1N5400	AMMO
1N5401-G	1N5401	AMMO
1N5402-G	1N5402	AMMO
1N5404-G	1N5404	AMMO
1N5406-G	1N5406	AMMO
1N5407-G	1N5407	AMMO
1N5408-G	1N5408	AMMO
1N5400T-G	1N5400	REEL
1N5401T-G	1N5401	REEL
1N5402T-G	1N5402	REEL
1N5404T-G	1N5404	REEL
1N5406T-G	1N5406	REEL
1N5407T-G	1N5407	REEL
1N5408T-G	1N5408	REEL



### XX = Product type marking code

#### Note

1) Suffix code after part number to specify packaging item .

Packaging	Code
AMMO PACK	NA
REEL PACK	Т

# **Standard Packaging**

	AMMO PACK				
Case Type	BOX ( pcs )	CARTON (pcs)			
DO-27 (DO-201AD)	1,200	12,000			

	REEL PACK			
Case Type	REEL ( pcs )	Reel Size (inch)		
DO-27 (DO-201AD)	1,200	13		

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### Comchip Technology:

<u>1N5401T-G</u> <u>1N5404T-G</u> <u>1N5408T-G</u> <u>1N5400-G</u> <u>1N5400-G</u> <u>1N5401-G</u> <u>1N5402-G</u> <u>1N5404-G</u> <u>1N5406-G</u> <u>1N5406-G</u> <u>1N5407-G</u> <u>1N5408-G</u> <u>1N5405-G</u> <u>1N5405-G</u> <u>1N5405-G</u> <u>1N5407-G</u>