General Purpose Silicon Rectifiers



1N5400-G Thru. 1N5408-G

Voltage: 50 to 1000 V

Current: 3.0 A RoHS Device

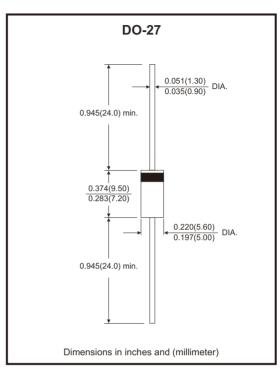


Features

- Open junction chip.
- Low reverse leakage.
- High forward surge current capability.
- High temperature soldering guaranteed 250°C/10 seconds at terminals.

Mechanical data

- Epoxy: UL 94V-0 rate flame retardant.
- Case: DO-27, molded plastic.
- Terminals: Solder plated, solderable per
 - MIL-STD-750, method 2026.
- Polarity: Color band denotes cathode.
- Mounting position: Any.



Circuit Diagram



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	s	Symbol	1N5400 -G	1N5401 -G	1N5402 -G	1N5404 -G	1N5406 -G	1N5407 -G	1N5408 -G	Unit
Maximum repetitive peak reverse voltage		V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage		V _{RMS}	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 at TL=100°C		I _{F(AV)}	3.0						А	
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load		Ігѕм	150					А		
Maximum instantaneous forward voltage at 3.0A		VF	1.10						V	
Maximum DC reverse current at rated DC blocking voltage @Ta=125°C @Ta=125°C		I _R	10.0 500					μА		
Typical junction capacitance (Note 1)		Сл	50						pF	
Typical thermal resistance		Reja	45						°C/W	
Operating junction and storage temperature range		Тյ, Тѕтѕ	-55 to +150						°C	

Notes: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

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

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

Fig.1 - Derating Curve Output Rectified Current

3.0

2.0

0 20 40 60 80 100 120 140 160

Lead Temperature, (°C)

Fig.2 - Max. Non-Repetitive Peak
Forward Surge Current Per Leg

210

(Y)
180
120
90
120
90
10
Number of Cycles

Fig.3 - Typical Forward Voltage Characteristics

10

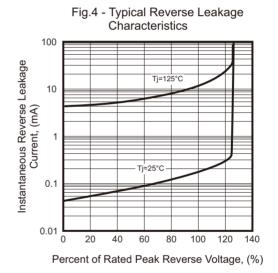
(V)

10

11

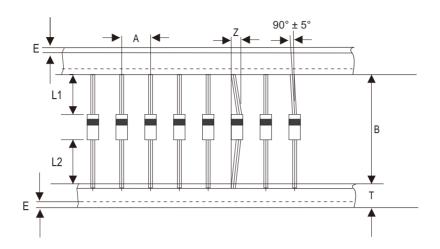
11

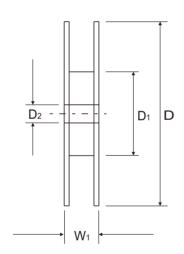
125°C
Pulse width=300µs
1% duty cycle
1% dut

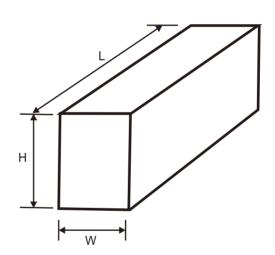




Taping Specification For Axial Lead Diodes







	SYMBOL	Α	В	Z	Т	E	L1-L2
DO-27	(mm)	10.00 ± 0.50	52.40 + 1.50 - 0.40	1.20 (max)	6.00 ± 0.40	0.80 (max)	1.00 (max)
	(inch)	0.394 ± 0.020	2.063 + 0.059 - 0.016	0.047 (max)	0.236 ± 0.016	0.031 (max)	0.039 (max)

	SYMBOL	L	W	Н	D	D1	D2	W 1
DO-27	(mm)	255.00 ± 5.00	75.00 ± 5.00	150.00 ± 5.00	330	85.70 ± 0.30	16.60 ± 0.40	79.00 ± 1.00
	(inch)	10.039 ± 0.197	2.953 ± 0.197	5.906 ± 0.197	12.992	3.374 ± 0.012	0.654 ± 0.016	3.110 ± 0.039

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Marking Code

Part Number	Marking code	Packaging
1N5400-G	1N5400	
1N5401-G	1N5401	
1N5402-G	1N5402	
1N5404-G	1N5404	AMMO
1N5406-G	1N5406	
1N5407-G	1N5407	
1N5408-G	1N5408	
1N5400T-G	1N5400	
1N5401T-G	1N5401	
1N5402T-G	1N5402	
1N5404T-G	1N5404	REEL
1N5406T-G	1N5406	
1N5407T-G	1N5407	
1N5408T-G	1N5408	
1N5400B-G	1N5400	
1N5401B-G	1N5401	
1N5402B-G	1N5402	
1N5404B-G	1N5404	BULK
1N5406B-G	1N5406	
1N5407B-G	1N5407	
1N5408B-G	1N5408	



XX = Product type marking code

Note:

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

Packaging	Code
AMMO PACK	NA
REEL PACK	Т
BULK PACK	В

Standard Packaging

	AMMO PACK
Case Type	BOX (pcs)
DO-27	1,200

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

	BULK PACK
Case Type	BOX (pcs)
DO-27	200

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