

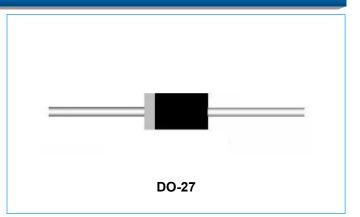


General Standard Diodes

1N5400~1N5408 3A 50 to 1000V DO-27

Features

- ◆ Low cost construction
- Low forward voltage drop
- Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed:
 260°C/10 seconds/0.375(9.5mm) lead length at 5 lbs
 (2,3kg) tension



Mechanical Data

- Case: Transfer molded plastic
- ◆ Epoxy: UL94V-0 rate flame retardant
- ◆ Polarity: Color band denotes cathode end
- Lead: Plated axial lead ,solderable per MIL-STD-202E method 208C
- ♦ Mounting position: Any
- ♦ Weight: 0.042 ounce,1.19 grams

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter		Symbol	1N5400	1N5401	1N5402	1N5404	1N5406	1N5407	1N5408	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		V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 0.5"(12.5mm) lead length at T _L = 105℃		I _(AV)	3					А		
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)		I _{FSM}	200					A		
Maximum Instantaneous Forward Voltage at 3A		V _F	1					V		
	T _A =25℃ T _A =150℃	I _R	10 500			μА				
Maximum Full Load Reverse Current,full cycle average 0.5"(12.5mm) lead length at T_L =105 $^{\circ}$ C		I _{R(AV)}	500					μΑ		
Typical Junction Capacitance (Note 1)		C₃	40					pF		
Typical Thermal Resistance (Note 2)		R _{0JA}	30					℃/W		
Operating and Storage Temperature Range		T _J ,T _{STG}	-65 ~ +175					$^{\circ}$		

NOTES:

- 1.Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
- $2. Thermal\ Resistance\ from\ Junction\ to\ Ambient\ at\ 0.5\ (12.5mm)\ lead\ length, P.C. board\ mounted\ with\ 0.8"\ X0.8"\ (20.0X20.0mm) copper\ heatsink.$



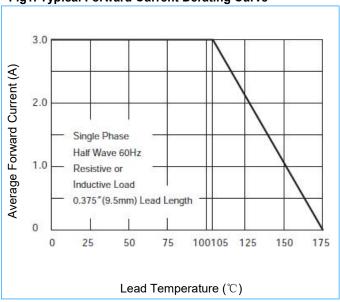


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Characteristic Curves

Fig1. Typical Forward Current Derating Curve



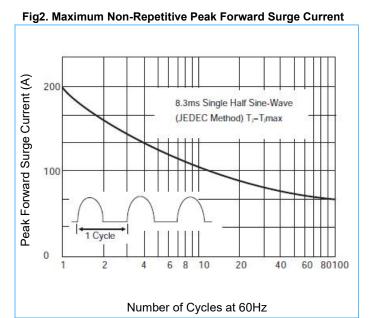


Fig3. Typical Instantaneous Forward Characteristics

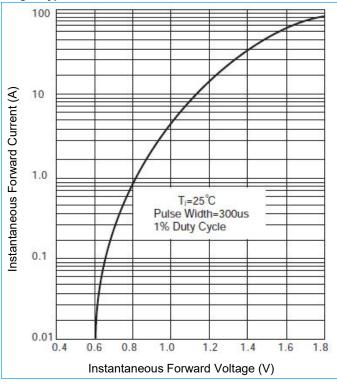
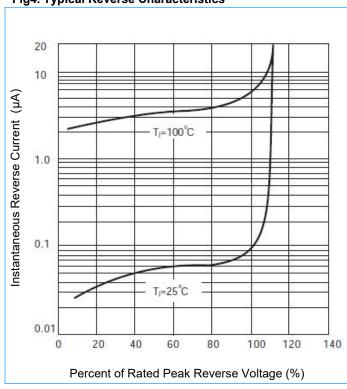


Fig4. Typical Reverse Characteristics



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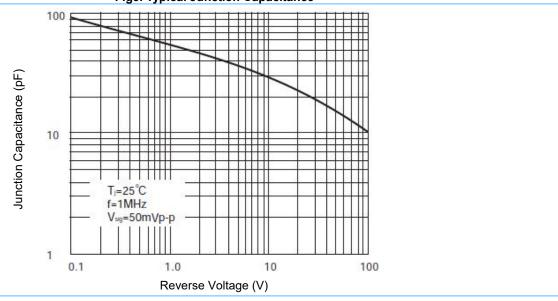


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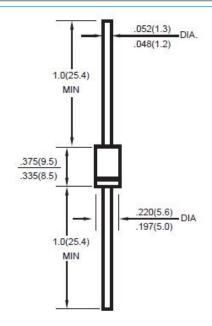
1N5400~1N5408 **3A** 50 to 1000V **DO-27**

Characteristic Curves (Continue)

Fig5. Typical Junction Capacitance 100



DO-27 Package Outline



Dimensions in inches and (millimeters)

Packaging Information

Part Number	Component Package	Quantity			
1N5400~1N5408	DO-27	1250 PCS			

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