# 1N5400 THRU 1N5408



### 3.0 AMP SILICON RECTIFIERS

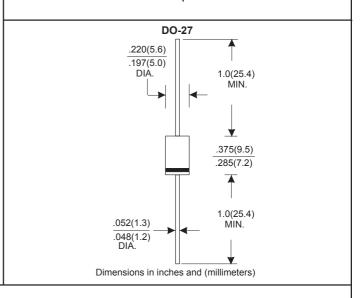
## **FEATURES**

- \* Low forward voltage drop
- \* High current capability
- \* High reliability
- \* High surge current capability

### **MECHANICAL DATA**

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: Axial leads, solderable per MIL-STD-202, method 208 guranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any \* Weight: 1.10 grams

# VOLTAGE RANGE 50 to 1000 Volts CURRENT 3.0 Amperes



# MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	1N5400	1N5401	1N5402	1N5404	1N5406	1N5407	1N5408	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current					•		•	
.375"(9.5mm) Lead Length at Ta=75°C		3.0						
Peak Forward Surge Current, 8.3 ms single half sine-wave								
superimposed on rated load (JEDEC method)		200						Α
Maximum Instantaneous Forward Voltage at 3.0A		1.0					V	
Maximum DC Reverse Current Ta=25 ℃		5.0						μА
at Rated DC Blocking Voltage Ta=100℃		50						
Typical Junction Capacitance (Note 1)		40					pF	
Typical Thermal Resistance RθJA (Note 2)		30					°C/W	
Operating and Storage Temperature Range TJ, TsTG		-65 — +150						

#### NOTES:

- 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
- 2. Thermal Resistance from Junction to Ambient .375" (9.5mm) lead length.

### RATING AND CHARACTERISTIC CURVES (1N5400 THRU 1N5408)

TIP-25°C Pulse Width 300us 1% Duty Cycle

.01
.6
.7
.8
.9
1.0
1.0
CHARACTERISTICS

50

Tip-25°C Pulse Width 300us 1% Duty Cycle

.01
.6
.7
.8
.9
1.0
1.1
1.2
1.3
FORWARD VOLTAGE, (V)

FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

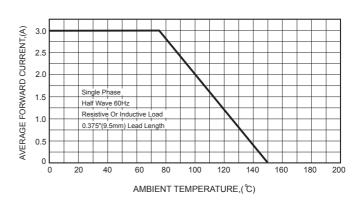
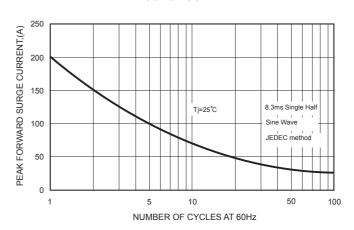
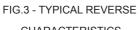
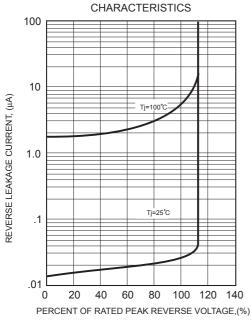


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT







### FIG.5-TYPICAL JUNCTION CAPACITANCE

