



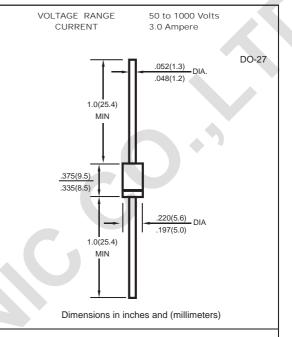
GENERAL PURPOSE SILICON RECTIFIER

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, 60Hz, resistive or inductive load.

For capacitive load derate current by 20%.

	SYMBOLS	IN 5400	IN 5401	IN 5402	IN 5404	IN 5406	IN 5407	IN 5408	UNITS
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current 0.5" (12.5mm) lead length at T∟=105°C	I _(AV)	3.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	Іғѕм	200							Amps
Maximum Instantaneous Forward Voltage at 3.0A	VF	1.0							Volts
Maximum DC Reverse Current T _A =25°C		10							
at rated DC blocking voltage T _A =150°C	- I _R	500							-μ A mps
Maximum Full Load Reverse Current,full cycle average 0.5" (12.5mm) lead length at T _L =105°C	I _{R(AV)}	500							μ A mps
Typical Junction Capacitance(NOTE1)	C _J	40						pF	
Typical Thermal Resistance(NOTE2)	Rөла	30							°C/W
Operating and Storage Temperature Range	Т _J ,Т _{STG}	-65 to +175							°C

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" (20.0 X 20.0 mm) copper heatsink.





1N5400-5408

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

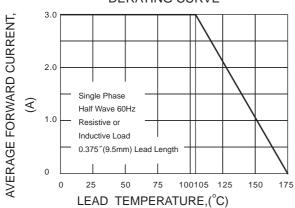


FIG.3-TYPICAL INSTANTANEOUS

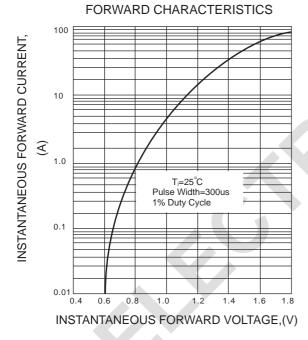


FIG.5-TYPICAL JUNCTION CAPACITANCE

100

10

T_{j=25°C}

f=1MHz

V_{sq}=50mVp-p

1

0.1

1.0

10

REVRESE VOLTAGE,(V)

FIG.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT

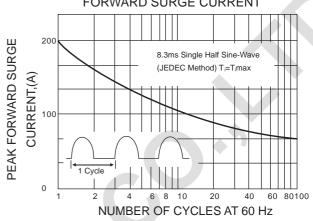
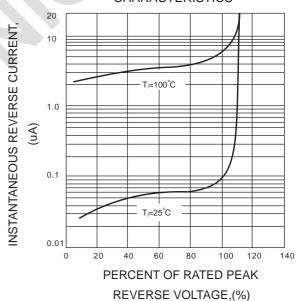


FIG.4-TYPICAL REVERSE CHARACTERISTICS



JUNCTION CAPACITANCE, (PF)