



T-01-15

3 AMP GENERAL PURPOSE SILICON DIODES

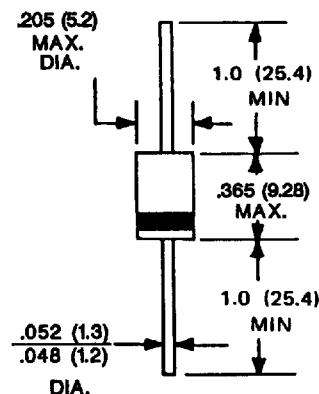
FEATURES:

- Low cost
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with Freon, Alcohol, Chlorothene & similar solvents
- The plastic material carries U/L recognition 94V-0

MECHANICAL DATA

- Case: JEDEC DO-27, molded plastic
- Terminals: Plated axial leads, solderable per MIL-STD-202, method 208
- Mounting Position: Any
- Polarity: Color band denotes cathode end
- Weight: 0.7 grams

VOLTAGE RANGE
50 to 1000 Volts
CURRENT
3 Amps

DO-27

Dimensions in inches & (millimeters)

MAXIMUM RATINGS & 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%.

MAXIMUM RATING @ T _A =25°C (unless otherwise specified)	SYMBOL								UNITS
Series Number		1N5400	1N5401	1N5402	1N5404	1N5406	1N5407	1N5408	
Maximum Recurrent 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	
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	
Maximum Average Forward Rectified Current 0.375 in. (9.5mm) Lead Length @ T _A =75°C	I _{AV}	3							Amps
Peak Forward Surge Current, 8.3ms single half sine wave superimposed on rated load (JEDEC method)	I _{FSM}	200							Amps
Maximum Instantaneous Forward Voltage at 3 Amps	V _F	1							Volts
Maximum DC Reverse Current @: T _A =25°C at Rated DC Blocking Voltage T _A =100°C	I _R	5 50							μA
Maximum Full Load Reverse Current Full Cycle Average 0.375 in. @ T _L =75°C (9.5 mm) Lead Length		30							μA
Typical Junction Capacitance (Note 1)	C _J	70							pf
Typical Thermal Resistance Rθ _{JA} (Note 2)	Rθ _{JC}	18							°C/W
Operating & Storage Temperature Range	T _J , T _{STG}	-65 to +175							°C

NOTES: (1) Measured at 1MHz & applied reverse voltage of 4V DC.

(2) Thermal resistance from junction ambient 0.375 in. (9.5mm) lead length.

G11



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Data Sheet No.: GPDP-301-B

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RATING & CHARACTERISTIC CURVES (1N5400-5408)

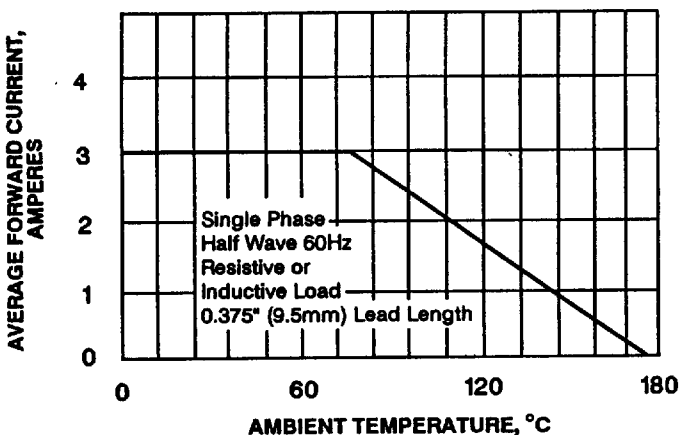


Fig. 1: Forward current derating curve.

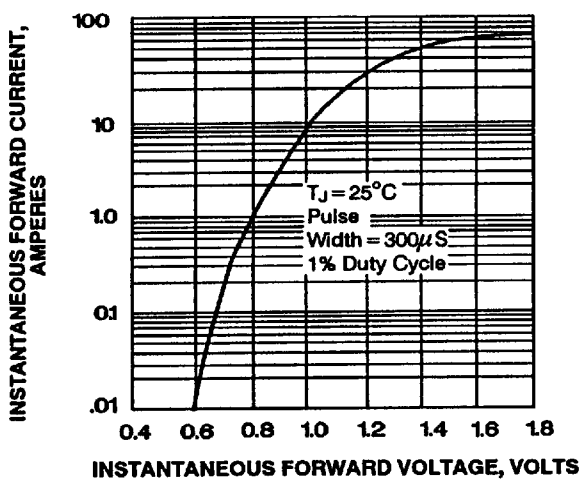


Fig. 3: Typical instantaneous forward characteristics.

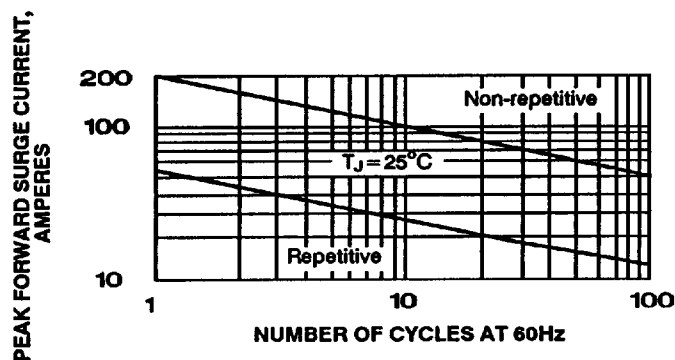


Fig. 2: Peak forward surge current.

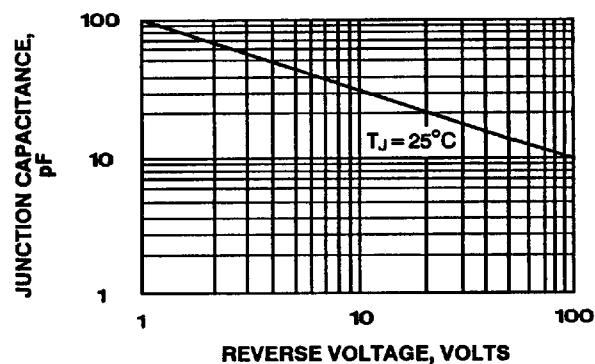


Fig. 4: Typical junction capacitance.

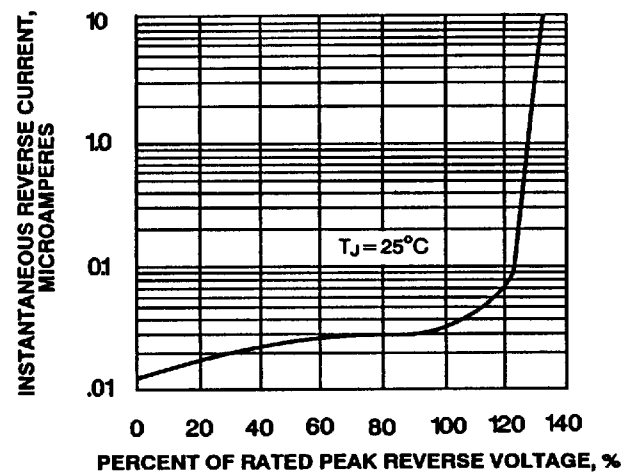


Fig. 5: Typical reverse characteristics.