

3 AMP GENERAL PURPOSE SILICON DIODES

FEATURES

- Low cost
- Low leakage
- Low forward voltage drop
- High current capacity
- Easily cleaned with freon, alcohol, chlorothene and similar solvents
- **RoHS COMPLIANT**

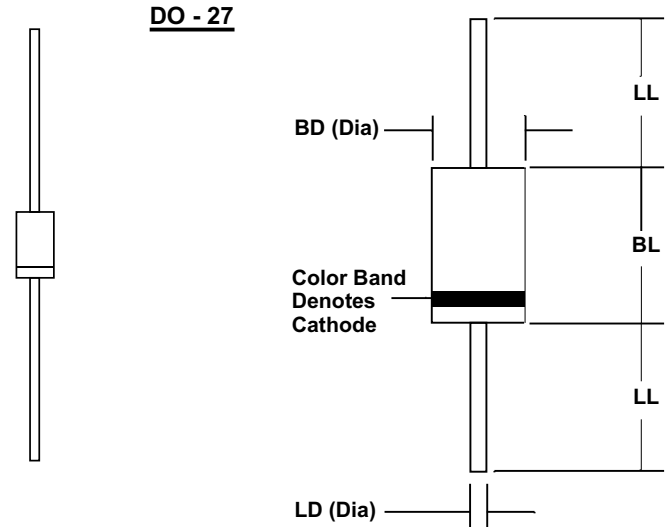
MECHANICAL DATA

- Case: JEDEC DO-27 molded epoxy (UL Flammability Rating 94V-0)
- Terminals: Plated axial leads
- Soldering: Per MIL-STD 202 Method 208 guaranteed
- Polarity: Color band denotes cathode
- Mounting Position: Any
- Weight: 0.02 Ounces (0.7 Grams)

MECHANICAL SPECIFICATION

ACTUAL SIZE OF
DO-27 PACKAGE

SERIES 1N5400 - 1N5408



Sym	Minimum		Maximum	
	In	mm	In	mm
BL			0.365	9.28
BD			0.205	5.2
LL	1.00	25.4		
LD	0.048	1.2	0.052	1.3

MAXIMUM RATINGS & ELECTRICAL CHARACTERISTICS

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

PARAMETER (TEST CONDITIONS)	SYMBOL	RATINGS								UNITS
		1N5400	1N5401	1N5402	1N5404	1N5406	1N5407	1N5408		
Series Number										
Maximum DC Blocking Voltage	V _{RM}	50	100	200	400	600	800	1000		VOLTS
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700		
Maximum Peak Recurrent Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000		
Average Forward Rectified Current @ T _A = 75 °C Lead length = 0.375 in. (9.5 mm)	I _O	3								AMPS
Peak Forward Surge Current (8.3 mSec single half sine wave superimposed on rated load)	I _{FSM}	200								
Maximum Forward Voltage at 3 Amps DC	V _{FM}	1								VOLTS
Maximum Full Cycle Reverse Current @ T _L = 75 °C (Note 1)	I _{RM(AV)}	30								μA
Maximum Average DC Reverse Current @ T _A = 25°C At Rated DC Blocking Voltage @ T _A = 100°C	I _{RM}	5 50								
Typical Thermal Resistance, Junction to Ambient (Note 1)	R _{θJA}	18								°C/W
Typical Junction Capacitance (Note 2)	C _J	70								pF
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +175								°C

NOTES: (1) Lead length = 0.375 in. (9.5 mm)
 (2) Measured at 1MHz & applied reverse voltage of 4 volts



3 AMP GENERAL PURPOSE SILICON DIODES

RATING & CHARACTERISTIC CURVES FOR SERIES 1N5400 - 1N5408

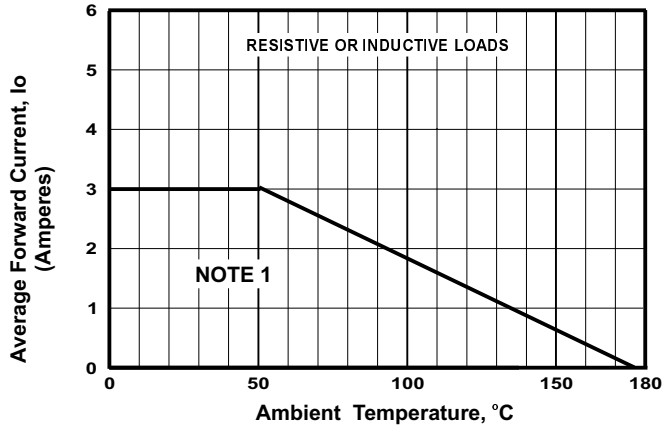


FIGURE 1. FORWARD CURRENT DERATING CURVE

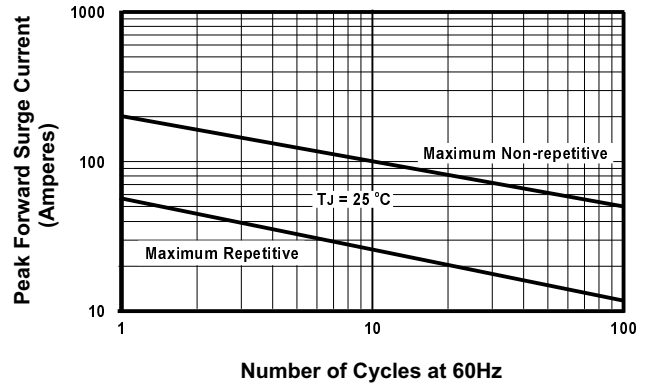


FIGURE 2. FORWARD SURGE CURRENT

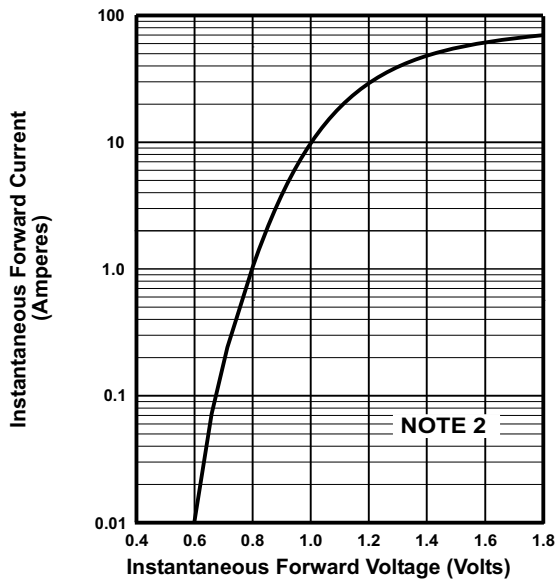


FIGURE 3. TYPICAL FORWARD CHARACTERISTICS

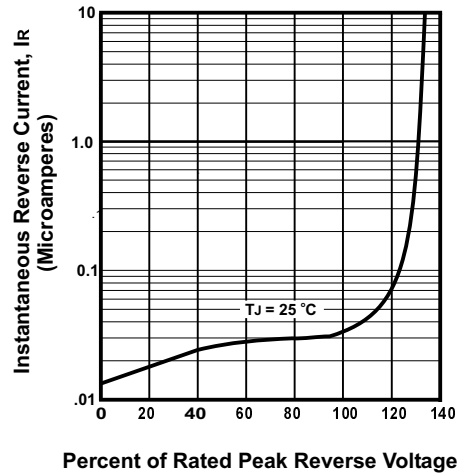


FIGURE 4. TYPICAL REVERSE CHARACTERISTICS

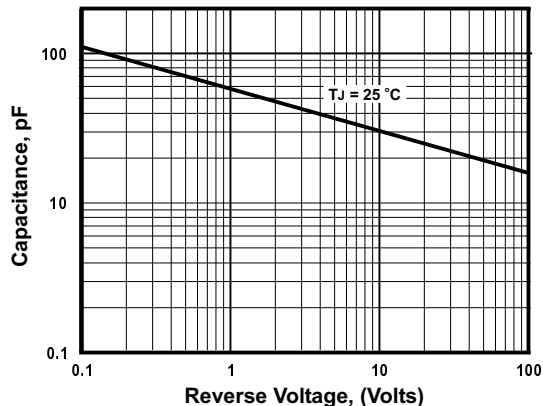


FIGURE 5. TYPICAL JUNCTION CAPACITANCE

NOTES

- (1) Single Phase, Half Wave, 60 Hz; Lead Length = 0.375" (9.5mm)
- (2) T_J = 25 °C, Pulse Width = 300 μSec, 1.0% Duty Cycle