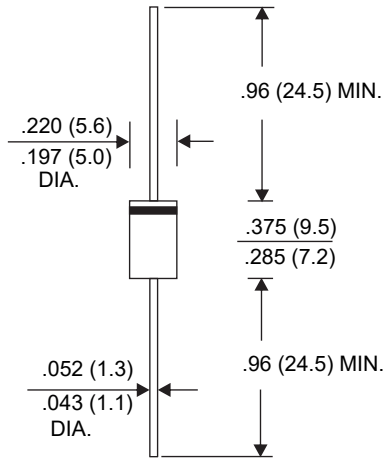
Silicon Rectifiers

1N5400 THRU 1N5408 50 to 1000 V 3.0 A

Features

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

DO-27(DO-201AD)



Dimensions in inches and (millimeters)

Mechanical Data

- Case: Molded plastic
- Epoxy: UL 94V-O rate flame retardant
- Lead: Axial leads, solder able per MIL-STD-202, Method 208 guaranteed
- Polarity: Color band denotes cathode end

Maximum Ratings and Electrical Characteristics

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

Type Number	Symbols	1N5400	1N5401	1N5402	1N5404	1N5406	1N5407	1N5408	Units
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	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at TA=25℃	$I_{(AV)}$	3.0							Amp
Peak Forward Surge Current,8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	80							Amp
Maximum Forward Voltage at 3.0A and T_A=25℃	V_F	1.0							Volts
Maximum DC reverse current at rated DC blocking voltage per Tj=25℃ / Tj=100℃	I_R	5.0 100							uAmp
Typical Junction Capacitance (Note 1)	C_J	35							pF
Typical Thermal Resistance (Note 2)	$R_{\theta}JA$	30							℃/W
Operating and Storage Temperature Range	T_J T_{stg}	-55 to +125 -55 to +150							℃

NOTES:

1. Measured at 1 MHz and Applied Reverse Voltage of 4.0 Volts D.C.
2. Thermal Resistance from Junction to Ambient .375" (9.5mm) Lead Length.

RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CHARACTERISTICS

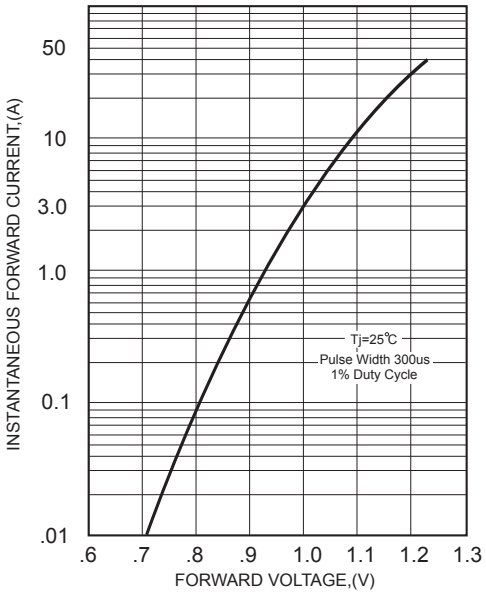


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

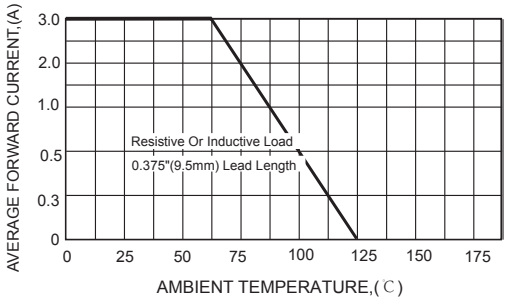


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

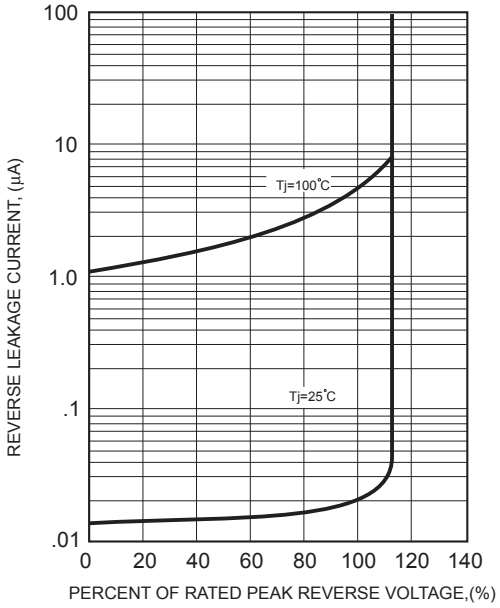


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT