



# 1N5400 THRU 1N5408

## 3.0 AMPS. Silicon Rectifiers

	<b>Voltage Range</b> 50 to 1000 Volts <b>Current</b> 3.0Amperes
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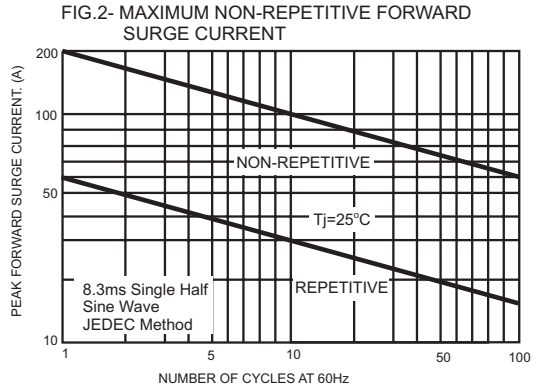
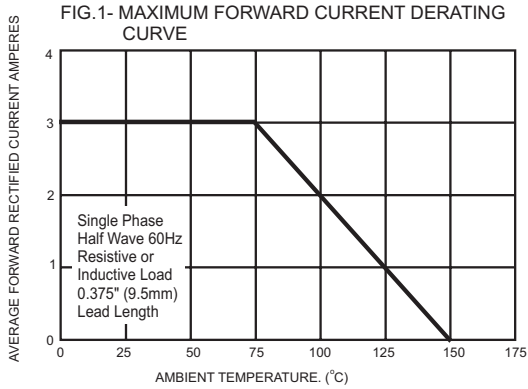
<p><b>Features</b></p> <ul style="list-style-type: none"> <li>✧ Low forward voltage drop</li> <li>✧ High current capability</li> <li>✧ High reliability</li> <li>✧ High surge current capability</li> </ul> <p><b>Mechanical Data</b></p> <ul style="list-style-type: none"> <li>✧ Cases: Molded plastic</li> <li>✧ Epoxy: UL 94V-O rate flame retardant</li> <li>✧ Lead: Axial leads, solderable per MIL-STD-202, Method 208 guaranteed</li> <li>✧ Polarity: Color band denotes cathode end</li> <li>✧ High temperature soldering guaranteed: 260°C/10 seconds/.375", (9.5mm) lead lengths at 5 lbs., (2.3kg) tension</li> <li>✧ Weight: 1.2 grams</li> </ul>	<p><b>DO-201AD</b></p> <p><b>Dimensions in inches and (millimeters)</b></p>
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**Maximum Ratings and Electrical Characteristics**  
 Rating at 25°C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60 Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%

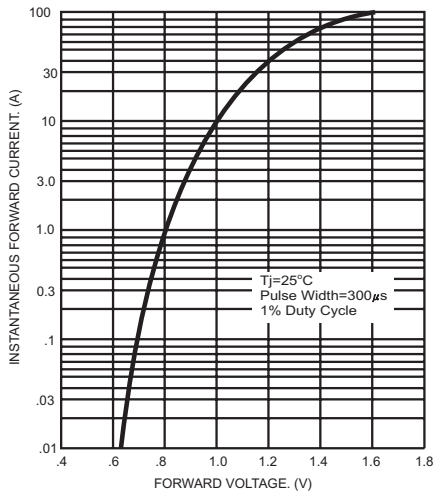
Type Number	Symbol	1N 5400	1N 5401	1N 5402	1N 5404	1N 5406	1N 5407	1N 5408	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current .375 (9.5mm) Lead Length @ $T_A = 75^\circ C$	$I_{(AV)}$	3.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	200							A
Maximum Instantaneous Forward Voltage @ 3.0A	$V_F$	1.0							V
Maximum DC Reverse Current @ $T_A=25^\circ C$ at Rated DC Blocking Voltage @ $T_A=100^\circ C$	$I_R$	5.0 100							$\mu A$ $\mu A$
Maximum Full Load Reverse Current, Full Cycle Average .375"(9.5mm) Lead Length @ $T_L=75^\circ C$	$HT_{IR}$	30							$\mu A$
Typical Junction Capacitance ( Note 1 )	$C_j$	50							pF
Typical Thermal Resistance ( Note 2 )	$R_{\theta JA}$	40							°C/W
Operating Temperature Range	$T_J$	-65 to +150							°C
Storage Temperature Range	$T_{STG}$	-65 to +150							°C

Notes: 1. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.  
 2. Mount on Cu-Pad Size 16mm x 16mm on P.C.B.

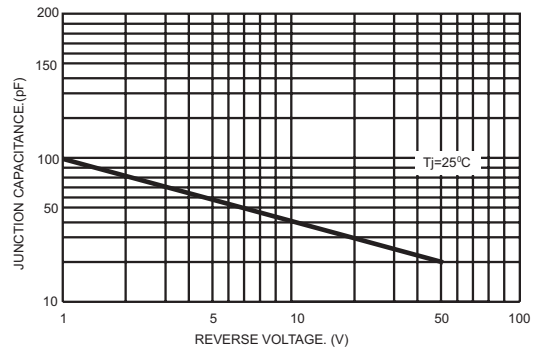
## RATINGS AND CHARACTERISTIC CURVES (1N5400 THRU 1N5408)



**FIG.3- TYPICAL FORWARD CHARACTERISTICS**



**FIG.4- TYPICAL JUNCTION CAPACITANCE**



**FIG.5- TYPICAL REVERSE CHARACTERISTICS**

