

# New Jersey Semi-Conductor Products, Inc.

20 STERN AVE.  
SPRINGFIELD, NEW JERSEY 07081  
U.S.A.

TELEPHONE: (973) 376-2922  
(212) 227-6005  
FAX: (973) 376-8960

## POWER SCHOTTKY RECTIFIERS 1N6392

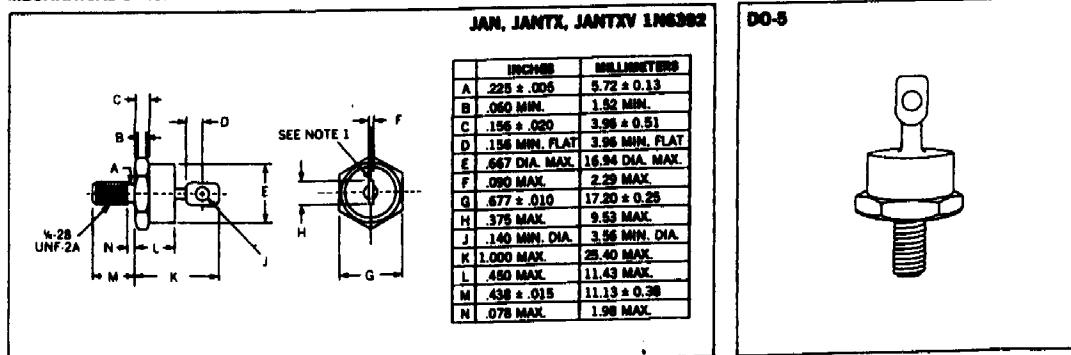
### ABSOLUTE MAXIMUM RATINGS

Working Peak Reverse Voltage, $V_{WRR}$	45V
DC Blocking Voltage, $V_B$	45V
Peak Repetitive Surge Voltage, $V_{RS} @ I_{RM}$	.54V
Peak Repetitive Forward Current (Rated $V_B$ , Square Wave, 20kHz, 50% Duty Cycle), $I_{RM}$	120A (at $T_c = 115^\circ C$ )
Average Rectified Forward Current, $I_{AV}$	60A (at $T_c = 115^\circ C$ )
Non-Repetitive Peak Surge Current (8.3ms), $I_{PS}$	1,000A
Peak Reverse Transient Current, $I_{RT}$	2A
Operating and Storage Temperature Range	-55°C to +175°C
Thermal Resistance, Junction to Case, $R_{JC}$	1.0°C/W

### ELECTRICAL CHARACTERISTICS ( $T_{CASE} = 25^\circ C$ )

Characteristic	Symbol	Limit	Units	Conditions
Maximum Instantaneous Reverse Current	$i_R$	20 60 600	mA	$V_R = V_{WRR}$ $T_c = 125^\circ C$ $T_c = 175^\circ C$ Pulse Width = 400μs Duty Cycle = 1%
Maximum Instantaneous Forward Voltage	$V_F$	0.47 0.68 0.82	V	$i_F = 10A$ , $T_c = 25^\circ C$ $i_F = 60A$ , $T_c = 25^\circ C$ $i_F = 120A$ , $T_c = 125^\circ C$ Pulse Width = 300μs Duty Cycle = 1%
Maximum Capacitance	$C_T$	3000	pF	$V_R = 5.0V$

### MECHANICAL SPECIFICATIONS



#### NOTES:

1. Cathode is stud.

2. All metal surfaces tin plated.

3. Maximum unlubricated stud torque: 30 inch pounds (35 kg. cm).

4. Angular orientation of terminal is undefined.

N  
J  
S

NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However, NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

Quality Semi-Conductors