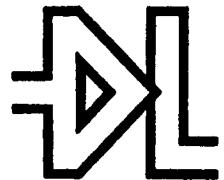


# DIODES LIMITED IN5391 TO IN5399 SERIES

FAIRACRES ESTATE, DEDWORTH ROAD,  
WINDSOR, BERKSHIRE.  
Telephone: WINDSOR 69571 Telex: 847255



SEMICONDUCTOR  
MANUFACTURERS

## 1.5 AMPERE SILICON RECTIFIERS With "LOCKED-IN" Reliability

### FEATURES

- High Conductance Leads
- Advanced Surface Passivation
- Low-Noise Operation
- Superior Rectification Efficiency
- High Temperature Solder
- Avalanche Characteristics
- "Locked-in Reliability"

### ELECTRICAL SPECIFICATIONS

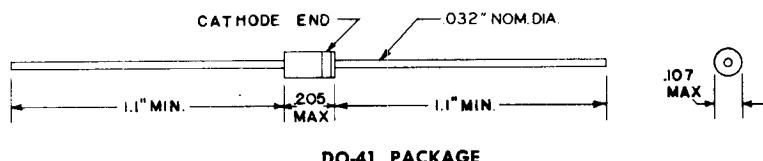
Type No.	1N5391	1N5392	1N5393	1N5395	1N5397	1N5398	1N5399
Max. Peak Inverse Volts	50	100	200	400	600	800	1000
*Max. RMS Supply Volts	35	70	140	280	420	560	700
Maximum Forward Voltage @ 1.5 Ampere, DC @ 75°C	1.1 Volts, Peak						
Maximum Reverse DC Current @ PIV @ 25°C	10 uA						
Maximum Dynamic Reverse Current @ PIV @ 75°C	30 uA, Average						

Average Rectified Forward Current @ 75°C	* 1.5 Ampere
Average Rectified Forward Current @ 100°C	* 1 Ampere
Recurrent Peak Current @ 75°C	12 Amperes
One Cycle Surge @ 75°C	50 Amperes, Peak
Storage Temperature Range	-65 to 200°C
Operating Temperature Range	-65 to 175°C

All temperatures are ambient

\*Resistive or Inductive Load

### MECHANICAL DIMENSIONS



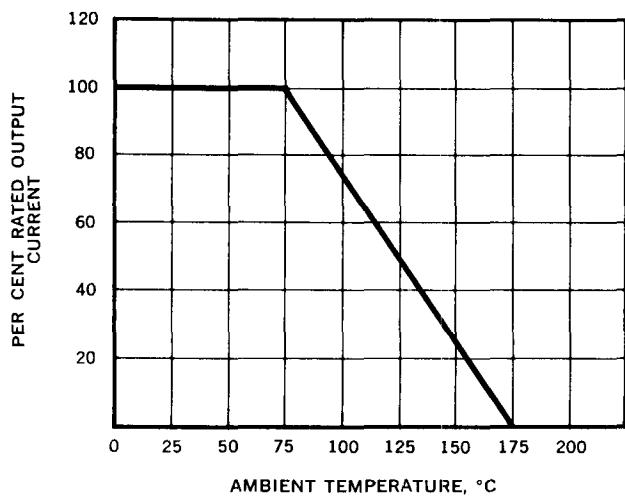
Notice: To protect the device from excess soldering temperature, hold the lead wire with the tips of long nose plier (heat sink) between the soldering point and the case.

1N5391-1N5399  
SERIES RECTIFIERS

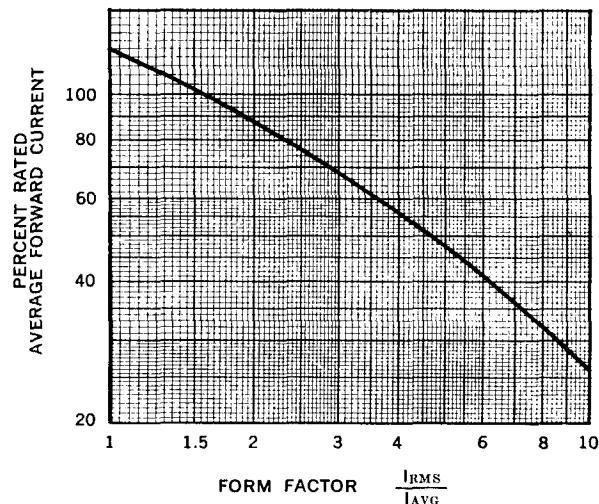
1N5391-1N5399  
SERIES RECTIFIERS  
**1.5 AMPERE**  
**50 TO 1000 VOLTS**  
**SINGLE JUNCTION**

**DERATING CURVES**

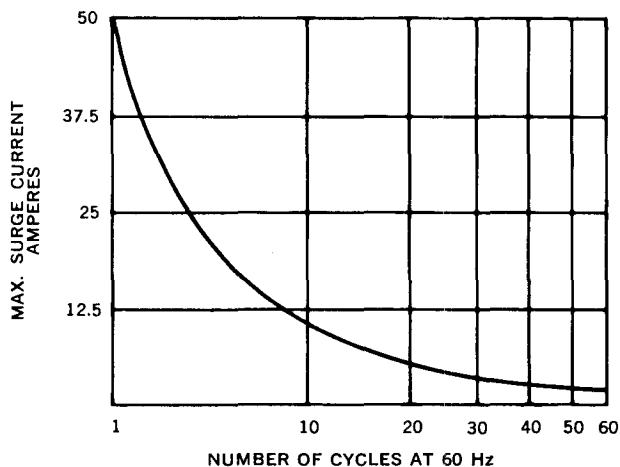
**FIGURE 1**



**FIGURE 2**



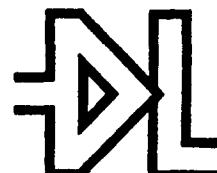
**FIGURE 3**



**NOTE 1:** The derating curve of Figure 1 is applicable only when each diode lead is attached to a heat sink of minimum one square inch surface area at a distance of 0.5 inch from the diode body. This heat sink configuration equals a thermal resistance of approximately 50°C/Watt (junction to ambient), which is a typical condition found in circuit assemblies where the rectifier is mounted on terminals or terminal boards together with associated wiring.

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