

## NTE5329 thru NTE5331 Single Phase Bridge Rectifier 6 Amp

### **Features:**

- High Case Dielectric Strength of 1500V<sub>RMS</sub>
- Surge Overload Rating: 250A (Peak)
- Ideal for Printed Circuit Board
- Reliable Construction Utilizing Molded Plastic Technique
- Glass Passivated Chip Junctions

**Maximum Ratings and Electrical Characteristics:** ( $T_A = +25^\circ\text{C}$  unless otherwise specified.  
60Hz Resistive or Inductive Load. For Capacitive Load, Derate Current by 20%)

Maximum Recurrent Peak Reverse Voltage,  $P_{RV}$

|               |       |
|---------------|-------|
| NTE5329 ..... | 200V  |
| NTE5330 ..... | 600V  |
| NTE5331 ..... | 1000V |

Maximum RMS Voltage,  $V_{RMS}$

|               |      |
|---------------|------|
| NTE5329 ..... | 140V |
| NTE5330 ..... | 420V |
| NTE5331 ..... | 700V |

Maximum DC Blocking Voltage,  $V_{DC}$

|               |       |
|---------------|-------|
| NTE5329 ..... | 200V  |
| NTE5330 ..... | 600V  |
| NTE5331 ..... | 1000V |

Maximum Average Forward Output Current,  $I_{F(AV)}$

|                                  |    |
|----------------------------------|----|
| $T_C = +100^\circ\text{C}$ ..... | 6A |
| $T_A = +40^\circ\text{C}$ .....  | 6A |

Peak Forward Surge Current,  $I_{FSM}$

(Half Sine-Wave Superimposed on Rated Load) ..... 250A

Maximum Instantaneous Forward Voltage Drop (Per Bridge Element,  $I_F = 6A$ ),  $V_F$  ..... 1.0V

Maximum DC Reverse Current (at Rated DC Blocking Voltage per Element),  $I_R$

|                                  |           |
|----------------------------------|-----------|
| $T_A = +25^\circ\text{C}$ .....  | 5 $\mu$ A |
| $T_A = +125^\circ\text{C}$ ..... | 1mA       |

Operating Junction Temperature Range,  $T_J$  .....  $-50^\circ$  to  $+150^\circ\text{C}$

Storage Temperature Range,  $T_{stg}$  .....  $-50^\circ$  to  $+150^\circ\text{C}$

Thermal Resistance, Junction to Case (Note 1),  $R_{\theta JC}$  .....  $4.7^\circ\text{C/W}$

Thermal Resistance, Junction to Ambient (Note 2),  $R_{\theta JA}$  .....  $4.7^\circ\text{C/W}$

Note 1. Mounted on a 2.6" x 1.4" x 0.06" THK (6.5cm. x 3.5cm. x 1.5cm.) Al. Plate

Note 2. P.C. Board mounted on 0.5" sq. (12mm<sup>2</sup>) Cu. pads, .375" (9.5mm) lead lengths

Note 3. Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw.

