



ELECTRONICS, INC.  
 44 FARRAND STREET  
 BLOOMFIELD, NJ 07003  
 (973) 748-5089  
<http://www.nteinc.com>

## NTE6251 & NTE6252 Silicon Rectifier Dual, Common Cathode

**Features:**

- Dual Rectifier Construction, Positive Center Tap
- Low Forward Voltage, High Current Capability
- Low Thermal Resistance
- Low Power Loss

**Maximum Ratings and Electrical Characteristics:** ( $T_A = +25^\circ\text{C}$  unless otherwise specified)

Maximum Repetitive Peak Reverse Voltage, $V_{RRM}$	
NTE6251 .....	200V
NTE6252 .....	600V
Maximum RMS Voltage, $V_{RMS}$	
NTE6251 .....	140V
NTE6252 .....	420V
Maximum DC Blocking Voltage, $V_{DC}$	
NTE6251 .....	200V
NTE6252 .....	600V
Maximum Average Forward Rectified Current ( $T_C = +100^\circ\text{C}$ ), $I_{F(AV)}$ .....	
30A	
Peak Forward Surge Current, $I_{FSM}$	
(8.3ms Single Half Sine-Wave Superimposed on Rated Load) .....	
300A	
Maximum Instantaneous Forward Voltage (Per Leg at 15A), $V_F$	
NTE6251 .....	0.95V
NTE6252 .....	1.5V
Maximum DC Reverse Current (At Rated $V_{DC}$ ), $I_R$	
$T_C = +25^\circ\text{C}$ .....	10 $\mu\text{A}$
$T_C = +100^\circ\text{C}$ .....	500 $\mu\text{A}$
Maximum Reverse Recovery Time (Per Leg, Note 1), $t_{rr}$	
NTE6251 .....	35ns
NTE6252 .....	50ns
Typical Junction Capacitance (Per Leg, Note 2), $C_J$	
NTE6251 .....	175pF
NTE6252 .....	145pF
Thermal Resistance, Junction-to-Case (Note 3), $R_{thJC}$ .....	
1.0 $^\circ\text{C}/\text{W}$	
Operating Junction Temperature Range, $T_J$ .....	
-55 $^\circ$ to +150 $^\circ\text{C}$	
Storage Temperature Range, $T_{stg}$ .....	
-55 $^\circ$ to +150 $^\circ\text{C}$	

Note 1. Reverse Recovery test conditions:  $I_F = 0.5\text{A}$ ,  $I_R = 1\text{A}$ ,  $I_{rr} = 0.25\text{A}$ .

Note 2. Measured at 1MHz and applied reverse voltage of 4V.

Note 3. Thermal resistance from junction to case per leg mounted on a heatsink.

