



ELECTRONICS, INC.
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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 μA
$T_C = +100^\circ\text{C}$	500 μA
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.

