

NTE6241 Silicon Rectifier Super Fast, Dual, Center Tap

Features:

- Dual Positive Center-Tap Rectifier Construction
- Superfast 50ns Recovery Times
- +175°C Operating Junction Temperature
- High Temperature Glass Passivated Junction
- High Voltage Capability to 600V
- Low Leakage Specified at +150°C Case Temperature

Absolute Maximum Ratings:

| | |
|--|----------------|
| Peak Repetitive Reverse Voltage, V_{RRM} | 600V |
| Working Peak Reverse Voltage, V_{RWM} | 600V |
| DC Blocking Voltage, V_R | 600V |
| Average Rectified Forward Current ($V_R = 600V$, $T_C = +150^\circ C$), $I_{F(AV)}$ | |
| Per Diode Leg | 8A |
| Total Device | 16A |
| Peak Repetitive Forward Current, I_{FRM} | |
| (Per Diode Leg, $V_R = 600V$, Square Wave, 20kHz, $T_C = +150^\circ C$) | 16A |
| Non-Repetitive Peak Surge Current, I_{FSM} | |
| (Surge Applied at Rated Load Conditions, Halfwave, Single Phase, 60Hz) | 100A |
| Operating Junction Temperature Range, T_J | -65° to +175°C |
| Storage Temperature Range, T_{stg} | -65° to +175°C |
| Thermal Resistance, Junction-to-Case (Per Diode Leg), R_{thJC} | 2°C/W |

Electrical Characteristics (Per Diode Leg):

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|-------------------------------|----------|---|-----|-----|------|------|
| Instantaneous Forward Voltage | V_F | $i_F = 8A$, $T_C = +150^\circ C$, Note 1 | - | - | 1.20 | V |
| | | $i_F = 8A$, $T_C = +25^\circ C$, Note 1 | - | - | 1.50 | V |
| Instantaneous Reverse Current | i_R | $V_R = 600V$, $T_C = +150^\circ C$, Note 1 | - | - | 500 | μA |
| | | $V_R = 600V$, Note 1, $T_C = +25^\circ C$ | - | - | 10 | μA |
| Reverse Recovery Time | t_{rr} | $I_F = 1A$, $di/dt = 50A/\mu s$ | - | - | 60 | ns |
| | | $I_F = 0.5A$, $i_R = 1A$, $I_{REC} = 0.25A$ | - | - | 50 | ns |

Note 1. Pulse Test: Pulse Width = 300μs, Duty Cycle ≤ 2%.

