

## 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	$\mu A$
		$V$ , Note 1 $R = 600V$ , $T_C = +25^\circ C$	-	-	10	$\mu A$
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 = 300 $\mu s$ , Duty Cycle  $\leq$  2%.

