

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
		$V_R = 600V$, $T_C = +25^\circ C$, Note 1	-	-	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%.

