

## NTE619 Silicon Rectifier, Ultra Fast

**Description:**

The NTE619 is a silicon rectifier designed for use in switching power supplies, inverters and as a free wheeling diode.

**Features:**

- Ultra Fast 50ns Recovery Time
- Low Forward Drop
- Low Leakage Current
- High Temperature Glass Passivated Junction

**Absolute Maximum Ratings:**

Peak Repetitive Reverse Voltage, $V_{RRM}$ .....	600V
Working Peak Reverse Voltage, $V_{RWM}$ .....	600V
DC Blocking Voltage, $V_R$ .....	600V
RMS Reverse Voltage, $V_{R(RMS)}$ .....	420V
Average Rectifier Forward Current, $I_O$ .....	5A
Non-Repetitive Peak Surge Current, $I_{FSM}$ (Surge Applied at Rated Load Conditions, half-Wave, Single Phase, 60Hz) .....	75A
Operating Junction Temperature Range, $T_J$ .....	-65° to +175°C
Storage Temperature Range, $T_{stg}$ .....	-65° to +175°C

**Electrical Characteristics:**

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Instantaneous Forward Voltage	$V_F$	$I_F = 5A$	-	-	1.5	V
Instantaneous Reverse Current	$I_R$	$V_R = 600V, T_C = +150^\circ C$	-	-	50	$\mu A$
		$V_R = 600V, T_C = +25^\circ C$	-	-	5	$\mu A$
Junction Capacitance	$C_P$	$V_R = 4V, f = 1MHz$	-	170	-	pF
Reverse Recovery Time	$t_{rr}$	$I_F = 1A, di/dt = 50A/\mu s$	-	50	-	ns

