

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	μA
		$V_R = 600V, T_C = +25^\circ C$	—	—	5	μA
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

