

NTE629 & NTE630 Silicon Rectifier Fast Recovery, Dual, Center Tap

Description:

The NTE629 and NTE630 are dual, fast recovery silicon rectifiers in a TO220 type package designed for special applications such as DC power supplies, inverters, converters, ultrasonic systems, choppers and low RF interference.

Features:

- Low Forward Voltage
- High Current Capability
- Fast Switching for High Efficiency
- High Surge Capacity
- Glass Passivated Chip Junction

Absolute Maximum Ratings:

Peak Repetitive Reverse Voltage, V_{RRM}	
NTE629	200V
NTE630	600V
Working Peak Reverse Voltage, V_{RWM}	
NTE629	200V
NTE630	600V
DC Blocking Voltage, V_R	
NTE629	200V
NTE630	600V
RMS Reverse Voltage, $V_{R(RMS)}$	
NTE629	140V
NTE630	420V
Average Rectifier Forward Current (Rated V_R , $T_C = +150^\circ\text{C}$), $I_{F(AV)}$	
Per Diode	8A
Total Device	16A
Non-Repetitive Peak Surge Current, I_{FSM} (8.3ms Single half Sine-Wave Superimposed on Rated Load)	250A
Operating Junction Temperature Range (Reverse Voltage Applied), T_J	-65° to $+175^\circ\text{C}$
Storage Temperature Range (Reverse Voltage Applied), T_{stg}	-65° to $+175^\circ\text{C}$

Electrical Characteristics:

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Instantaneous Forward Voltage	V_F	$I_F = 8A$	—	—	1.3	V
Instantaneous Reverse Current	I_R	At Rated V_R , $T_C = +25^{\circ}C$	—	—	10	μA
		At Rated V_R , $T_C = +100^{\circ}C$	—	—	250	μA
Junction Capacitance	C_P	Note 1	—	50	—	pF
Reverse Recovery Time NTE629	t_{rr}	$I_F = 0.5A$, $I_R = 1A$, $i_{rr} = 0.25A$	—	—	150	ns
NTE630			—	—	250	ns

Note 1. Measured at 1MHz and applied reverse voltage of 4V.

