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## NTE623 & NTE624 Silicon Rectifier Fast Recovery, Dual, Center Tap

**Description:**

The NTE623 and NTE624 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, $V_{RRM}$	
NTE623 .....	200V
NTE624 .....	600V
Working Peak Reverse Voltage, $V_{RWM}$	
NTE623 .....	200V
NTE624 .....	600V
DC Blocking Voltage, $V_R$	
NTE623 .....	200V
NTE624 .....	600V
RMS Reverse Voltage, $V_{R(RMS)}$	
NTE623 .....	140V
NTE624 .....	420V
Average Rectifier Forward Current (Rated $V_R$ , $T_C = +150^\circ\text{C}$ ), $I_{F(AV)}$	
Per Diode .....	3A
Total Device .....	6A
Non-Repetitive Peak Surge Current, $I_{FSM}$ (8.3ms Single half Sine-Wave Superimposed on Rated Load) .....	50A
Operating Junction Temperature Range (Reverse Voltage Applied), $T_J$ .....	$-65^\circ$ to $+175^\circ\text{C}$
Storage Temperature Range (Reverse Voltage Applied), $T_{stg}$ .....	$-65^\circ$ to $+175^\circ\text{C}$

**Electrical Characteristics:**

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Instantaneous Forward Voltage	$V_F$	$I_F = 3A$	–	–	1.3	V
Instantaneous Reverse Current	$I_R$	At Rated $V_R$ , $T_C = +25^\circ C$	–	–	5	$\mu A$
		At Rated $V_R$ , $T_C = +100^\circ C$	–	–	100	$\mu A$
Junction Capacitance	$C_P$	Note 1	–	60	–	pF
Reverse Recovery Time NTE623	$t_{rr}$	$I_F = 0.5A, I_R = 1A, i_{rr} = 0.25A$	–	–	150	ns
NTE624			–	–	250	ns

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

