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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° 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	$I_F = 3A$	–	–	1.3	V
Instantaneous Reverse Current	I_R	At Rated V_R , $T_C = +25^\circ C$	–	–	5	μA
		At Rated V_R , $T_C = +100^\circ C$	–	–	100	μA
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.

