ELECTRONICS, INC.
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NTE627 & NTE628
Silicon Rectifier
Fast Recovery, Dual, Center Tap

Description:

The NTE627 and NTE628 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 Switching Capability, Low Switching Noise
- High Voltage Capability
- Low Power Loss, High Reliability
- High Surge Capability
- Low Leakage Current

Absolute Maximum Ratings:

Peak Repetitive Reverse Voltage, V_{RRM}
- NTE627 . . . . . 200V
- NTE628 . . . . . 600V

Working Peak Reverse Voltage, V_{RWM}
- NTE627 . . . . . 200V
- NTE628 . . . . . 600V

DC Blocking Voltage, V_R
- NTE627 . . . . . 200V
- NTE628 . . . . . 600V

RMS Reverse Voltage, $V_{R(RMS)}$
- NTE627 . . . . . 140V
- NTE628 . . . . . 420V

Average Rectifier Forward Current (Rated V_R, T_C = +150°C), $I_{F(AV)}$
- Per Diode 6A
- Total Device 12A

Non–Repetitive Peak Surge Current, I_{FSM}
- (8.3ms Single half Sine–Wave Superimposed on Rated Load) 120A

Operating Junction Temperature Range (Reverse Voltage Applied), T_J . . . . . –65° to +175°C

Storage Temperature Range (Reverse Voltage Applied), T_{stg} . . . . . –65° to +175°C

Electrical Characteristics:

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Instantaneous Forward Voltage	V_F	I_F = 6A	–	–	1.3	V
Instantaneous Reverse Current	I_R	At Rated V_R, T_C = +25°C	–	–	10	µA
		At Rated V_R, T_C = +100°C	–	–	250	µA
Reverse Recovery Time	t_{rr}	I_F = 0.5A, I_R = 1A, i_{rr} = 0.25A	–	–	250	ns