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## NTE625 & NTE626 Silicon Rectifier Fast Recovery

### Description:

The NTE625 and NTE626 are fast recovery silicon rectifiers in a 2-Lead 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,  $V_{RRM}$

|              |      |
|--------------|------|
| NTE625 ..... | 200V |
| NTE626 ..... | 600V |

Working Peak Reverse Voltage,  $V_{RWM}$

|              |      |
|--------------|------|
| NTE625 ..... | 200V |
| NTE626 ..... | 600V |

DC Blocking Voltage,  $V_R$

|              |      |
|--------------|------|
| NTE625 ..... | 200V |
| NTE626 ..... | 600V |

RMS Reverse Voltage,  $V_{R(RMS)}$

|              |      |
|--------------|------|
| NTE625 ..... | 140V |
| NTE626 ..... | 420V |

Average Rectifier Forward Current (Rated  $V_R$ ,  $T_C = +50^\circ\text{C}$ ),  $I_{F(AV)}$  ..... 8A

Non-Repetitive Peak Surge Current,  $I_{FSM}$   
(8.3ms Single half Sine-Wave Superimposed on Rated Load) ..... 150A

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   | $V_F$    | $I_F = 8A$                                   | —   | —   | 1.3 | V       |
| Instantaneous Reverse Current   | $I_R$    | At Rated $V_R$ , $T_C = +25^\circ C$         | —   | —   | 10  | $\mu A$ |
|                                 |          | At Rated $V_R$ , $T_C = +100^\circ C$        | —   | —   | 250 | $\mu A$ |
| Junction Capacitance            | $C_P$    | Note 1                                       | —   | 50  | —   | pF      |
| Reverse Recovery Time<br>NTE625 | $t_{rr}$ | $I_F = 0.5A$ , $I_R = 1A$ , $i_{rr} = 0.25A$ | —   | —   | 150 | ns      |
| NTE626                          |          |  | —   | —   | 250 | ns      |

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

