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## NTE517 Silicon High Voltage Plastic Rectifier for Industrial and Microwave Oven

**Features:**

- Controlled Avalanche Characteristic Combined with the Ability to Dissipate Reverse Power
- Low Forward Voltage Drop
- Typical  $I_R$  less than 0.1 A
- High Overload Surge Capacity

**Maximum Ratings and Electrical Characteristics:** ( $T_A = +25^\circ\text{C}$  unless otherwise specified, Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load derate current by 20%.)

Maximum Recurrent Peak Reverse Voltage, $P_{RV}$ .....	15000V
Maximum RMS Voltage, .....	10500V
Maximum DC Blocking Voltage, .....	15000V
Maximum Average Forward Rectified Current ( $T_A = +60^\circ\text{C}$ ), $I_O$ .....	550mA
Peak Forward Surge Current, $I_{FM(\text{Surge})}$ (8.3ms Single Half Sine-Wave Superimposed on Rated Load) .....	50A
Maximum Peak Reverse Surge Current, $I_{FRM(\text{Surge})}$ .....	100mA
Maximum Instantaneous Forward Voltage ( $I_O = 550\text{mA}$ ), $V_F$ .....	14V
Maximum DC Reverse Current (at Rated Blocking Voltage), $I_R$ .....	5 A
Operating Junction Temperature Range, $T_J$ .....	$-65^\circ$ to $+150^\circ\text{C}$
Storage Temperature Range, $T_{stg}$ .....	$-65^\circ$ to $+150^\circ\text{C}$
Maximum Thermal Resistance, Junction-to-Ambient (Note 1), $R_{thJA}$ .....	$18^\circ\text{C/W}$
Lead Temperature (During Soldering, 3/8" from body, 10sec), $T_L$ .....	$+260^\circ\text{C}$
Reverse Recovery Time .....	100nS

Note 1. Thermal Resistance from Junction to Ambient at .375" (9.5mm) lead lengths.

