

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 $0.1\mu A$
- High Overload Surge Capacity

Maximum Ratings and Electrical Characteristics: ($T_A = +25^\circ C$ 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 ($T_A = +60^\circ C$), I_O	550mA
Peak Forward Surge Current, $I_{FM(Surge)}$ (8.3ms Single Half Sine-Wave Superimposed on Rated Load)	200A
Maximum Peak Reverse Surge Current (Note 1), $I_{FRM(Surge)}$	100mA
Maximum Instantaneous Forward Voltage ($I_O = 550mA$), V_F	10V
Maximum DC Reverse Current (at Rated Blocking Voltage), I_R	$5\mu A$
Operating Junction Temperature Range, T_J	-40° to $+130^\circ C$
Storage Temperature Range, T_{stg}	-40° to $+130^\circ C$
Maximum Thermal Resistance, Junction-to-Ambient (Note 2), R_{thJA}	$18^\circ C/W$

Note 1. Measured at 8.3ms single half sine-wave, single pulse.

Note 2. Thermal Resistance from Junction to Ambient at .375" (9.5mm) lead lengths.

