



ELECTRONICS, INC.  
 44 FARRAND STREET  
 BLOOMFIELD, NJ 07003  
 (973) 748-5089  
<http://www.nteinc.com>

## NTE621 Silicon Rectifier, General Purpose, High Voltage, Standard Recovery (Surface Mount)

**Features:**

- High Temperature Metallurgically Bonded
- Glass Passivated Junction
- High Temperature Soldering Guaranteed:  
     +450°C/5 Seconds at Terminals. Complete Device Submersible Temperature of  
     +260°C/10 Seconds in Solder Bath.

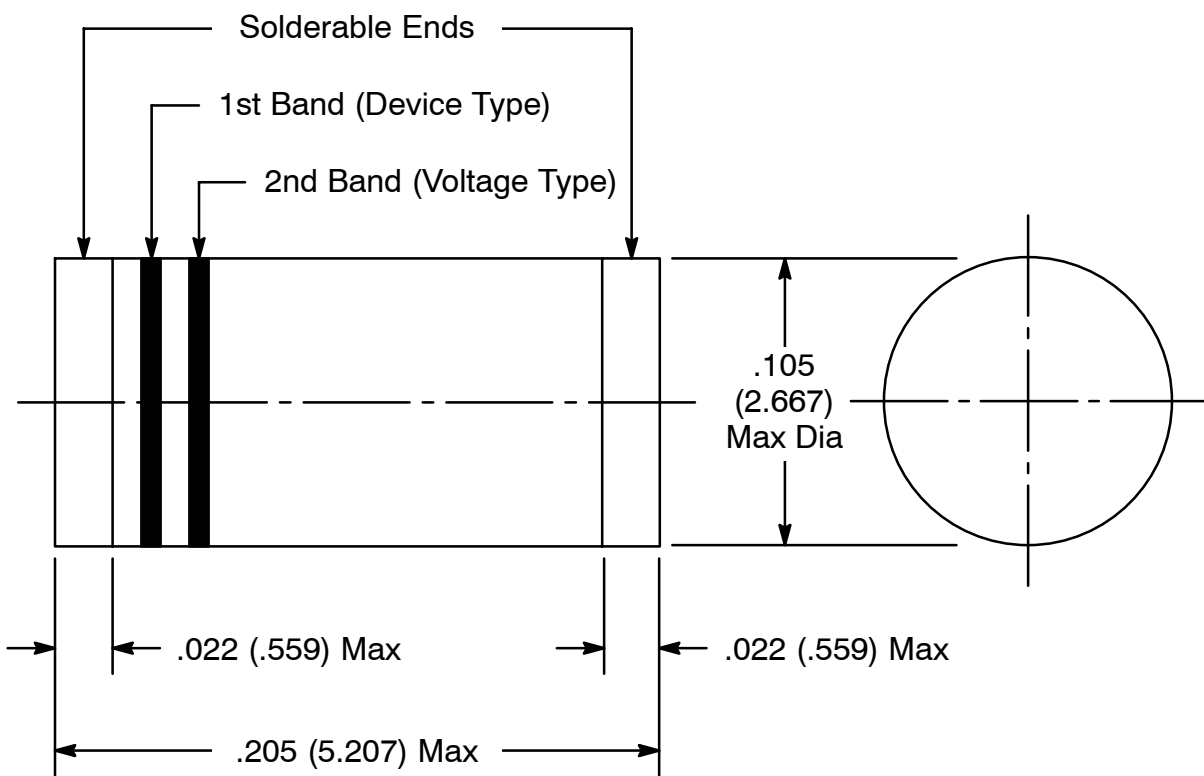
**Maximum Ratings and Electrical Characteristics:** ( $T_A = +25^\circ\text{C}$  unless otherwise specified.  
 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.)

Maximum Recurrent Peak Reverse Voltage, $V_{RRM}$ .....	400V
Maximum RMS Voltage, $V_{RMS}$ .....	280V
Maximum DC Blocking Voltage, $V_{DC}$ .....	400V
Maximum Average Forward Rectified Current, $I_{T(AV)}$ .....	1A
Peak Forward Surge Current, $I_{FSM}$ (8.3ms Single Half Sine-Wave Superimposed on Rated Load) .....	30A
Maximum Instantaneous Forward Voltage ( $I_T = 1A$ ), $V_F$ .....	1.1V
Maximum DC Reverse Current ( $V_{DC} = 400V$ ), $I_R$ $T_A = +25^\circ\text{C}$ .....	10 $\mu\text{A}$
$T_A = +125^\circ\text{C}$ .....	50 $\mu\text{A}$
Maximum Full Load Reverse Current (Full Cycle Average at $T_A = +75^\circ\text{C}$ ), $I_{R(AV)}$ .....	30 $\mu\text{A}$
Typical Junction Capacitance (Note 1), $C_J$ .....	15pF
Operating Junction Temperature Range, $T_J$ .....	-65° to +175°C
Storage Temperature Range, $T_{stg}$ .....	-65° to +175°C
Maximum Thermal Resistance, Junction-to-Terminal (Note 2), $R_{thJL}$ .....	30°C/W
Maximum Thermal Resistance, Junction-to-Ambient (Note 3), $R_{thJA}$ .....	75°C/W

Note 1. Measured at 1MHz and applied reverse voltage of  $4V_{DC}$ .

Note 2. Thermal resistance, junction-to-terminal, 6.0mm<sup>2</sup> copper pads to each terminal.

Note 3. Thermal resistance, junction-to-ambient, 6.0mm<sup>2</sup> copper pads to each terminal.



Two Bands Indicates Cathode