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## NTE622

### Silicon Rectifier, General Purpose, High Voltage, Fast Recovery

### DO-213AA Surface Mount Type Case

**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%.)

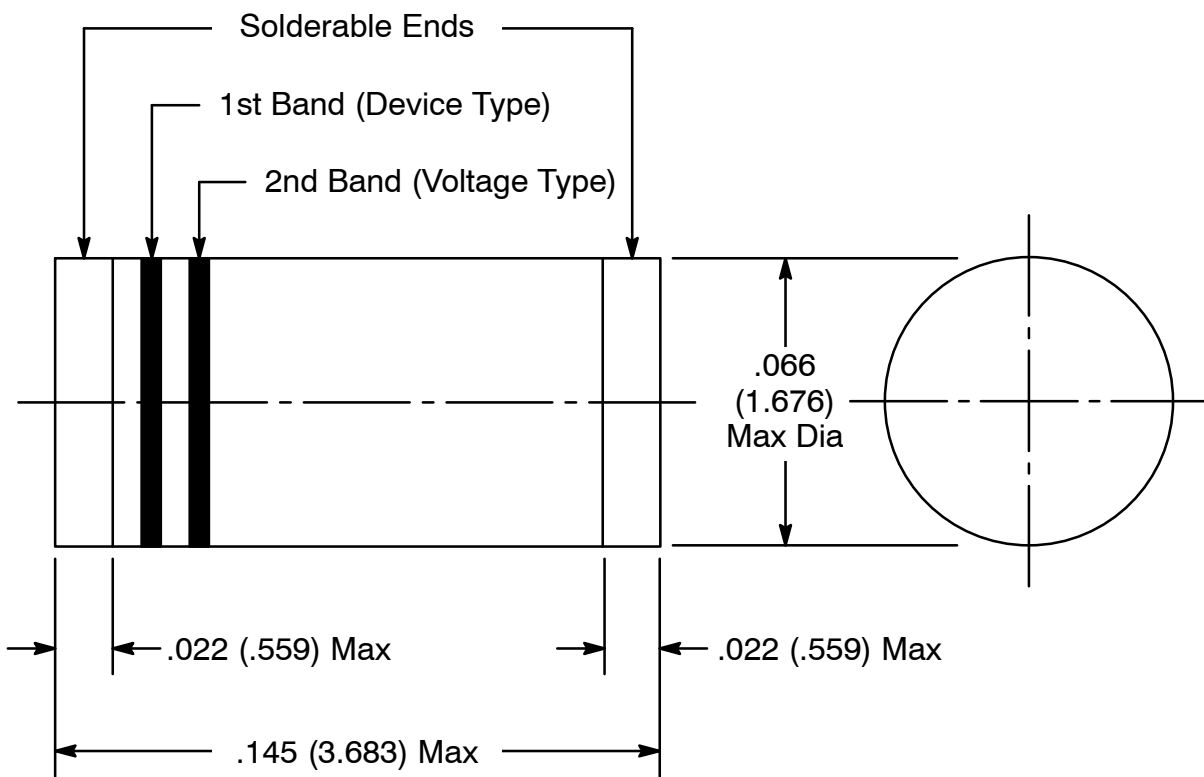
Maximum Recurrent Peak Reverse Voltage, $V_{RRM}$ .....	400V
Maximum RMS Voltage, $V_{RMS}$ .....	280V
Maximum DC Blocking Voltage, $V_{DC}$ .....	400V
Maximum Average Forward Rectified Current ( $T_T = +75^\circ\text{C}$ ), $I_{T(AV)}$ .....	0.5A
Peak Forward Surge Current, $I_{FSM}$ (8.3ms Single Half Sine-Wave Superimposed on Rated Load) .....	10A
Maximum Instantaneous Forward Voltage ( $I_T = 0.5A$ ), $V_F$ .....	1.2V
Maximum DC Reverse Current ( $V_{DC} = 400V$ ), $I_R$	
$T_A = +25^\circ\text{C}$ .....	5 A
$T_A = +125^\circ\text{C}$ .....	50 A
Maximum Reverse Recovery Time ( $T_J = +25^\circ\text{C}$ , Note 1), $t_{rr}$ .....	50ns
Typical Junction Capacitance (Note 2), $C_J$ .....	4pF
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 3), $R_{thJL}$ .....	70°C/W
Maximum Thermal Resistance, Junction-to-Ambient (Note 4), $R_{thJA}$ .....	150°C/W

Note 1. Reverse Recovery Test Conditions:  $I_F = 0.5A$ ,  $I_R = 1A$ ,  $I_{RR} = 0.25A$ ..

Note 2. Measured at 1MHz and applied reverse voltage of  $4V_{DC}$ .

Note 2. Thermal resistance, junction-to-terminal,  $5.0\text{mm}^2$  copper pads to each terminal.

Note 3. Thermal resistance, junction-to-ambient,  $5.0\text{mm}^2$  copper pads to each terminal.



Two Bands Indicates Cathode