



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

NTE582-4, NTE582-6 & NTE582-10 Fast Recovery Silicon Diode, 2A DO-15 Type Package

Features:

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability

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%.)

Peak Repetitive Reverse Voltage, V_{RRM}

NTE582-4	400V
NTE582-6	600V
NTE582-10	1000V

Working Peak Reverse Voltage, V_{RWM}

NTE582-4	400V
NTE582-6	600V
NTE582-10	1000V

DC Blocking Voltage, V_R

NTE582-4	400V
NTE582-6	600V
NTE582-10	1000V

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

NTE582-4	280V
NTE582-6	420V
NTE582-10	700V

Average Forward Rectified Current ($T_A = +55^\circ\text{C}$, Note 1), I_O 2A

Non-Repetitive Peak Forward Surge Current, I_{FSM}

(8.3ms Single half Sine-Wave Superimposed on Rated Load) 60A

Forward Voltage ($I_F = 2A$), V_{FM} 1.2V

Peak Reverse Current (At rated DC Blocking Voltage), I_{RM}

$T_J = +25^\circ\text{C}$	5 μA
$T_J = +100^\circ\text{C}$	100 μA

Reverse Recovery Time (Note 2), t_{rr}

NTE582-4	150ns
NTE582-6	250ns
NTE582-10	500ns

Typical Junction Capacitance (Note 3), C_J 30pF

Note 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case.

Note 2. Measured at $I_F = 500\text{mA}$, $I_R = 1A$, $I_{RR} = 250\text{mA}$.

Note 3. Measured at 1MHz an Applied Reverse Voltage of 4.0VDC.



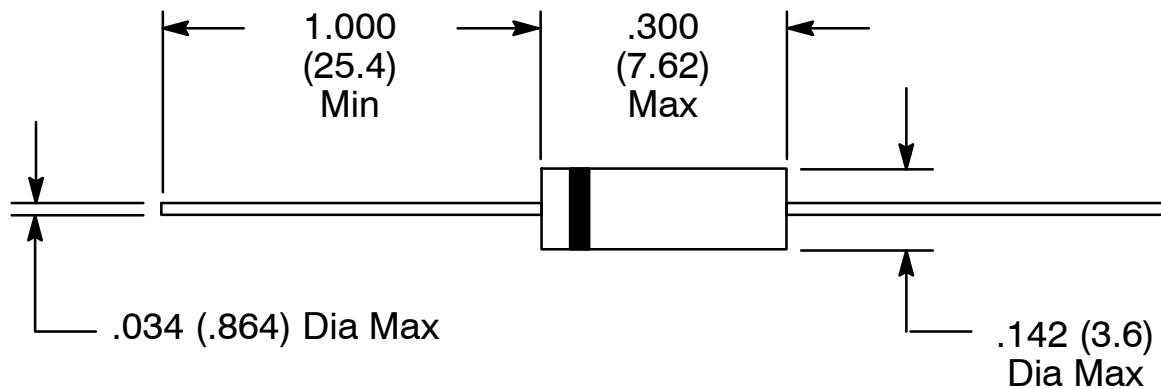
Maximum Ratings and Electrical Characteristics (Cont'd): ($T_A = +25^\circ\text{C}$ unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.)

Thermal Resistance, Junction-to-Ambient (Note 1), R_{thJA}	40°C/W
Thermal Resistance, Junction-to-Lead (Note 1), R_{thJL}	20°C/W
Operating Junction Temperature Range, T_J	-65° to $+125^\circ\text{C}$
Storage Temperature Range, T_{stg}	-65° to $+150^\circ\text{C}$

Note 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case.

Note 2. Measured at $I_F = 500\text{mA}$, $I_R = 1\text{A}$, $I_{RR} = 250\text{mA}$.

Note 3. Measured at 1MHz an Applied Reverse Voltage of 4.0VDC.



Color Band Denotes Cathode