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°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°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°C 5μA
- T_J = +100°C 100μA

Reverse Recovery Time (Note 2), t_{rr}
- NTE582–4 . . . . . 150ns
- NTE582–6 . . . . . 250ns
- NTE582–10 . . . . . 500ns

Typical Junction Capacitance (Note 3), C_J 30pF

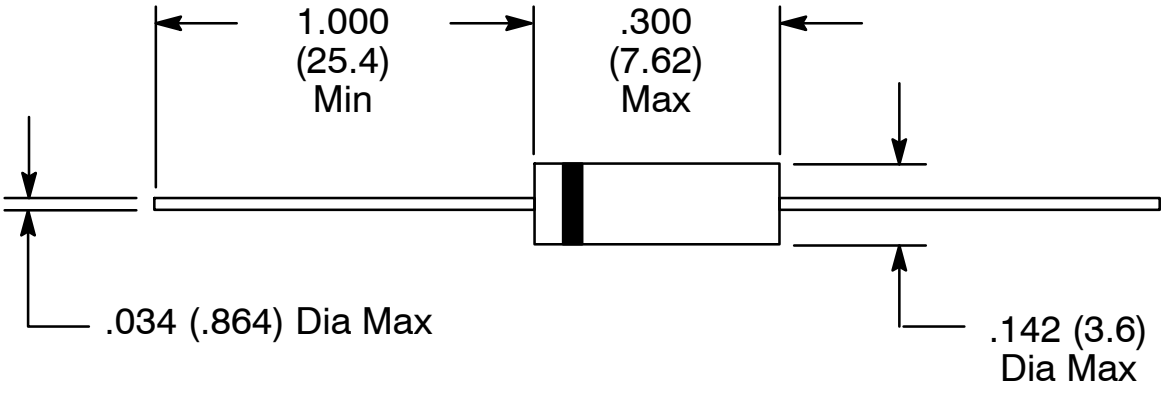
Note 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case.
Note 2. Measured at I_F = 500mA, I_R = 1A, I_{RR} = 250mA..
Note 3. Measured at 1MHz an Applied Reverse Voltage of 4.0VDC.

RoHS 2002/95/EC

Maximum Ratings and Electrical Characteristics (Cont'd): (T_A = +25°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°C
Storage Temperature Range, T_{stg} . . . . . −65° to +150°C

Note 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case.
Note 2. Measured at I_F = 500mA, I_R = 1A, I_{RR} = 250mA..
Note 3. Measured at 1MHz an Applied Reverse Voltage of 4.0VDC.



Color Band Denotes Cathode