ELECTRONICS, INC.
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BLOOMFIELD, NJ 07003
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NTE53006 thru NTE53010
Silicon Bridge Rectifier, 15A

Features:
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Ideal for PC Boards
- Mounting Position: Any

Maximum Ratings and Electrical Characteristics: (T_A = +25°C unless otherwise specified. Single Phase, Half Wave, 60Hz, Resistive or Inductive Load, Note 1.)

Maximum Recurrent Peak Reverse Voltage, V_{RRM}
- NTE53006 . . . . . 200V
- NTE53008 . . . . . 600V
- NTE53010 . . . . . 1000V

Working Peak Reverse Voltage, V_{RWM}
- NTE53006 . . . . . 200V
- NTE53008 . . . . . 600V
- NTE53010 . . . . . 1000V

Maximum RMS Bridge Input Voltage, V_{RMS}
- NTE53006 . . . . . 140V
- NTE53008 . . . . . 420V
- NTE53010 . . . . . 700V

Maximum DC Blocking Voltage, V_{DC}
- NTE53006 . . . . . 200V
- NTE53008 . . . . . 600V
- NTE53010 . . . . . 1000V

Maximum Average Forward Rectified Output Current (T_C = +100°C, Note 2), $I_{O(AV)}$ 15A

Peak Forward Surge Current (8.3ms single half wave superimposed on rated load), I_{FSM} . . . 240A

Maximum Forward Voltage Drop (Per element at 7.5A), V_F 1.05V

Maximum Reverse Current at Rated DC Blocking Voltage Per Element, I_R
- T_A = +25°C 10μA
- T_A = +125°C 250μA

Typical Thermal Resistance (Per element)
- Junction–to–Ambient (Note 3), R_{thJA} . . . . . 22°C/W
- Junction–to–Case (Note 2), R_{thJC} . . . . . 1.5°C/W

Operating Temperature Range, T_J . . . . . –55° to +150°C

Storage Temperature Range, T_{stg} . . . . . –55° to +150°C

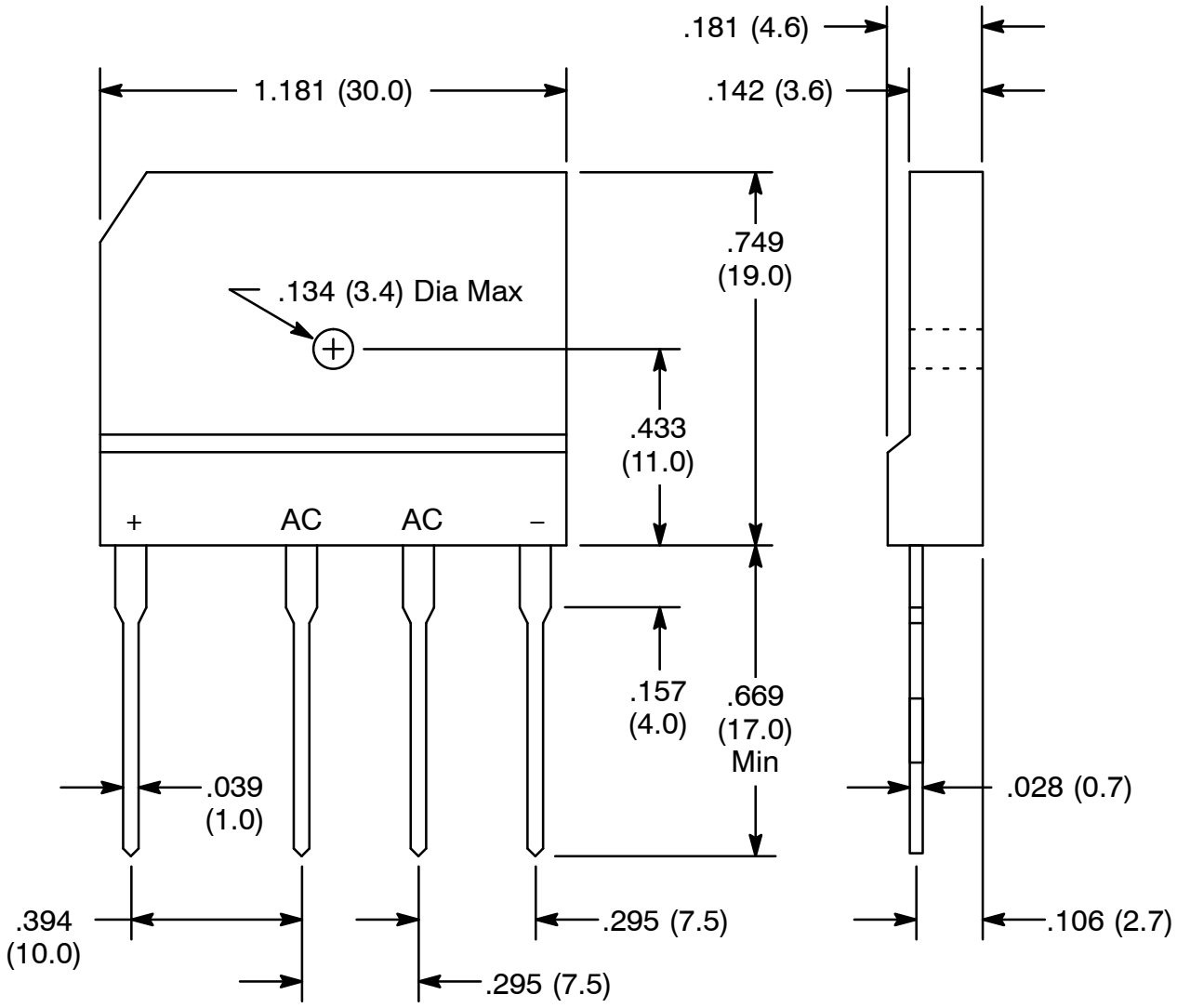
Note 1. For capacitive load, derate current by 20%.

Note 2. Device mounted on a 300mm x 300mm x 1.6mm thick Cu plate heatsink.

Note 3. Device mounted on a PC board without heatsink.

Rev. 01–24

RoHS


.181 (4.6)
1.181 (30.0)
.142 (3.6)
.749
(19.0)
.134 (3.4) Dia Max
.433
(11.0)
+
AC
AC
–
.157
(4.0)
.669
(17.0)
Min
.039
(1.0)
.028 (0.7)
.394
(10.0)
.295 (7.5)
.106 (2.7)
.295 (7.5)