



ELECTRONICS, INC.
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NTE15032, NTE15033, NTE15040, & NTE15041 Integrated Circuit TV Fixed Voltage Regulator

Features:

- Triple Diffused Darlington Transistor Chips Incorporated
- Compact Plastic Package with Industry Standard Reliability
- Output Voltage is Pre-Fixed – No External Adjustment is Required

Absolute Maximum Ratings:

Peak Input Voltage, V_{IN} 200V
 Output Current, I_O 1A
 Power Dissipation ($T_C = +100^\circ\text{C}$), P_D 27W
 Maximum Power Transistor Junction Temperature, T_J $+150^\circ\text{C}$
 Operating Temperature Range (T_C), T_{opr} -20° to $+125^\circ\text{C}$
 Storage Temperature Range, T_{stg} -30° to $+125^\circ\text{C}$

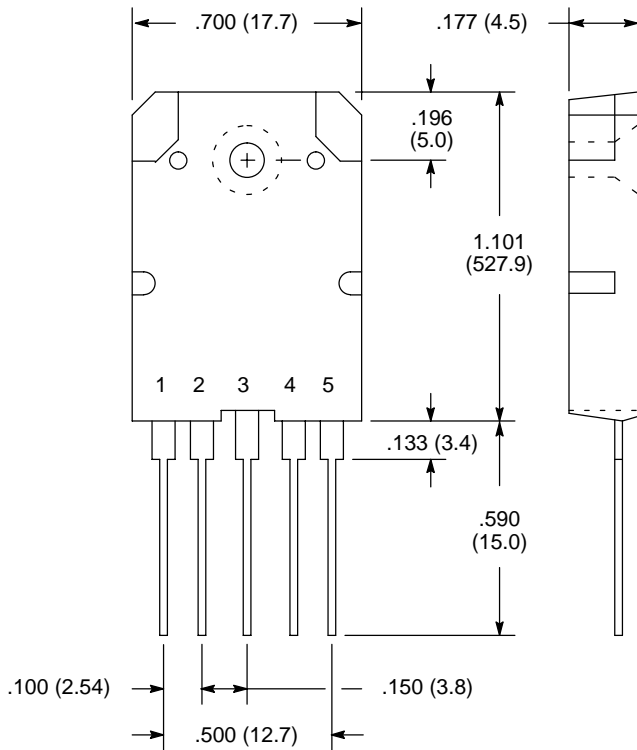
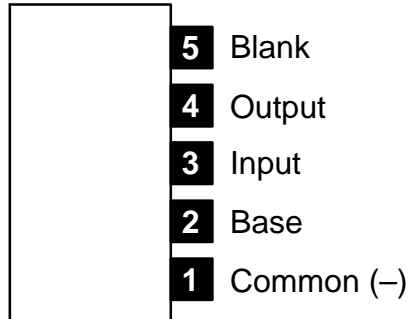
Electrical Characteristics: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|--|-------------------|--|-------|-----------|-------|---------------------------|
| Output Voltage NTE15032 | V_{OUT} | $V_{AC} = 161\text{V}, I_{In} = 6.9\text{mA}$ | 129.2 | 130.0 | 130.8 | V |
| NTE15033 | | | 134.2 | 135.0 | 135.8 | V |
| NTE15040 | | $V_{AC} = 161\text{V}, I_{In} = 7.2\text{mA}$ | 119.2 | 120.0 | 120.8 | V |
| NTE15041 | | | 124.2 | 125.0 | 125.8 | V |
| Load Regulation | ΔV_{LOAD} | $I_O = 250\text{mA}$ to 500mA | – | ± 0.8 | – | V |
| Output Voltage Temperature Coefficient | | $V_{IN} = V_{AC}, I_O = 500\text{mA}, T_C = -20^\circ$ to $+100^\circ\text{C}$ | – | ± 0 | – | mV/ $^\circ\text{C}$ |
| Input–Output Saturation Voltage | $V_{CE(sat)}$ | $I_C = 1\text{A}, I_B = 10\text{mA}$ | – | – | 1.5 | V |
| Input–Output Voltage | V_{CEO} | $I_{CEO} = 10\text{mA}, I_B = 0$ | 200 | – | – | V |
| DC Current Gain | h_{FE} | $I_C = 1\text{A}, V_{CE} = 4\text{V}$ | 1500 | – | 6500 | |
| Power Transistor Thermal Resistance | R_{thJC} | Between Junction and Stem Upper Surface | – | 1.8 | – | $^\circ\text{C}/\text{W}$ |
| Input–Output Cutoff Current | I_{CEO} | $V_{CE} = 200\text{V},$ Pin1, Pin2, and Pin5 Open | – | – | 100 | μA |
| Output–Base Reverse Current Capacity | $I_{EB(S/B)}$ | $t = 65\text{msec}$ (Between Emitter–Base) | – | – | 300 | mA |

Note 1. Recommended Case Temperature: $T_{opr} = +100^\circ\text{C}$.



Pin Connection Diagram (Front View)



OR

