

NTE1896 & NTE1897 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:

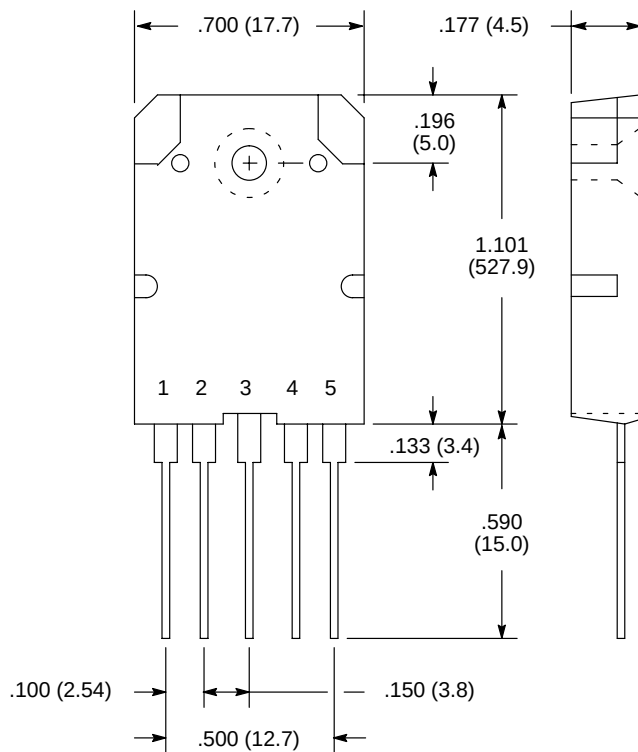
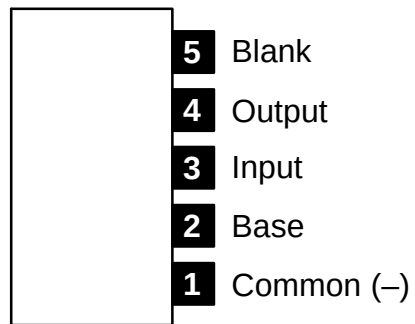
Peak Input Voltage, V_{IN}	200V
Output Current, I_O	1A
Power Dissipation ($T_C = +100^\circ\text{C}$), P_D	27W
Maximum Power Transistor Junction Temperature, T_J	+150°C
Operating Temperature Range (T_C), T_{opr}	-20° to +125°C
Storage Temperature Range, T_{stg}	-30° to +125°C

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output Voltage NTE1896	V_{OUT}	$V_{AC} = 134\text{V}$, $I_{IN} = 5.9\text{mA}$	114.2	115.0	115.8	V
NTE1897		$V_{AC} = 161\text{V}$, $I_{IN} = 7.2\text{mA}$	124.2	125.0	125.8	V
Load Regulation	ΔV_{LOAD}	$I_O = 250\text{mA}$ to 500mA	–	± 0.5	–	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/°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	–	°C/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

