ELECTRONICS, INC.
44 FARRAND STREET
BLOOMFIELD, NJ 07003
(973) 748–5089

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°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°C unles otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output Voltage NTE1896	V_{OUT}	V_{AC} = 134V, I_{In} = 5.9mA	114.2	115.0	115.8	V
NTE1897		V_{AC} = 161V, I_{In} = 7.2mA	124.2	125.0	125.8	V
Load Regulation	ΔV_{LOAD}	I_O = 250mA to 500mA	–	±0.5	–	V
Output Voltage Temperature Coefficient		V_{IN} = V_{AC}, I_O = 500mA, T_C = –20° to +100°C	–	±0	–	mV/°C
Input–Output Saturation Voltage	$V_{CE(sat)}$	I_C = 1A, I_B = 10mA	–	–	1.5	V
Input–Output Voltage	V_{CEO}	I_{CEO} = 10mA, I_B = 0	200	–	–	V
DC Current Gain	h_{FE}	I_C = 1A, V_{CE} = 4V	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} = 200V, Pin1, Pin2, and Pin5 Open	–	–	100	μA
Output–Base Reverse Current Capacity	$I_{EB(S/B)}$	t = 65msec (Between Emitter–Base)		–	300	mA

Note 1. Recommended Case Temperature: T_{opr} = +100°C.

Pin Connection Diagram
(Front View)



