NTE15012 & NTE15018 thru NTE15021
Integrated Circuit
TV Fixed Voltage Regulator

Features:
- Triple Diffused Darlington Transistor Chips Incorporated
- Compact Plastic Package with Indistry 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 40W
Maximum Power Transistor Junction Temperature, T_J . . . . +150°C
Operating Temperature Range (T_C), T_{opr} . . . . −30° to +125°C
Storage Temperature Range, T_{stg} . . . . −30° to +125°C

Note 1. **NTE15021** is a **discontinued** device and **no longer available**.

Electrical Characteristics: (T_A = +25°C unles otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output Voltage NTE15018	V_{OUT}	V_{AC} = 100V, I_{In} = 6mA	114	115	116	V
NTE15021		V_{AC} = 120V, I_{In} = 7mA	122	123	124	V
NTE15020			124	125	126	V
NTE15019			129	130	131	V
NTE15012			134	135	136	V
Load Regulation	ΔV_{LOAD}	I_O = 250mA to 500mA	–	±1	–	V
Output Voltage Temperature Coefficient		V_{IN} = V_{AC}, I_O = 500mA, T_C = −20° to +100°C	–	7	–	mV/°C
Input–Output Saturation Voltage	$V_{CE(sat)}$	I_C = 1A, I_B = 0	–	–	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	
Overload Capacity	$T_{S/B}$	V_{CE} = 100V, I_C = 1A	1.0	–	–	sec
Power Transistor Thermal Resistance	R_{thJC}	Between Junction and Stem Upper Surface	–	1.25	–	°C/W
Input–Output Cutoff Current	I_{CEO}	V_{CE} = 200V, Open (Between Pin1 & Pin2)	–	–	100	µA
Output–Base Reverse Current Capacity	$I_{EB(S/B)}$	t = 65msec (Between Emitter–Base)	300	–	–	mA

Note 2. Recommended Case Temperature: $T_{opr}(T_C)$ = +100°C.

Pin Connection Diagram
(Front View)

5	No Pin
4	Output
3	Common (−)
2	Base
1	Input/Case

1.410 (36.0)

.236 (6.0) Max

.960 (24.4)

1   2   3   4   5

.834 (21.2)

.177 (4.5)

.708 (18.0)

.214 (5.45)

.039 (1.0)

.023 (0.6)