ELECTRONICS, INC.
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NTE1870
Integrated Circuit
Module – Color TV Switching Regulator

Absolute Maximum Ratings: (T_A = +25°C unless otherwise specified)

Input AC Voltage, V_{AC}max 280V

Output Power, $P_O$max

AC: 90V to 280V 80W

AC: 150V to 280V 100W

Substrate Temperature, $T_C$max . . . . . +105°C

Junction Temperature, T_J . . . . . +105°C

Ambient Operating Temperature Range, T_{opr} . . . . . –10° to +60°C

Storage Temperature Range, T_{stg} . . . . . –30° to +105°C

Thermal Resistance, Junction–to–Case, R_{thJC} . . . . . 1.8°C/W

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

Parameter	Test Conditions	Min	Typ	Max	Unit
Output Voltage					
Hi +B	V_{AC} = 220V, I_O1 = 500mA, I_O2 = 500mA	114.0	115.0	116.0	V
Low +B	V_{AC} = 220V, I_O1 = 500mA, I_O2 = 500mA	–	15.0	–	V
Line Regulation	V_{AC} = 90V to 280V, I_O1 = 500mA, I_O2 = 500mA	–	–	1	V
Load Regulation	V_{AC} = 220V, I_O1 = 300mA to 700mA, I_O2 = 500mA	–	1.5	2.0	V
Ripple Voltage	V_{AC} = 220V, I_O1 = 500mA, I_O2 = 500mA	–	0.3	0.6	$V_{P–P}$
Temperature Stability	V_{AC} = 220V, I_O1 = 500mA, I_O2 = 500mA	–	0.01	–	%/°C
Operating Frequency	V_{AC} = 220V, I_O1 = 500mA, I_O2 = 500mA	–	34	–	kHz
Operating Efficiency	V_{AC} = 220V, I_O1 = 500mA, I_O2 = 500mA	–	80	–	%
Cross Road Regulation	V_{AC} = 220V, I_O1 = 500mA, I_O2 = 0 to 1A	–	0.2	–	V
Dielectric Voltage	Prim – Second	4	–	–	kV

Note 1. Hi +B: V_O1, I_O1; Low +B: V_O2, I_O2

Pin Connection Diagram
(Front View)