ELECTRONICS, INC.
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NTE7033
Integrated Circuit
Module, Switching Regulator Power Supply

Features:

- Switching regulator power IC
- Single–package, selectorless regulated power supply applicable to a wide range of line voltages from 0 to 280VAC
- The oscillation circuit is of a self–oscillation type.

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

AC Input Voltage, V_{AC} . . . . . 0 to 280V_{rms}

Maximum Output Power, $P_O$max 80W

(150 to 280VAC) 100W

Operating Temperature Range, T_{opg} . . . . . –10° to +65°C

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

Operating Case Temperature, $T_C$max . . . . . +105°C

Thermal Resistance, Junction–to–Case, R_{thJC} . . . . . 1.6°C/W

Junction Temperature, $T_J$max . . . . . +150°C

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

Parameter	Test Conditions	Min	Typ	Max	Unit
Output Voltage Setting	V_{AC} = 200V, I_O = 0.3A	114	115	116	V
Line Regulation	V_{AC} =85 to 280V, I_O = 0.5A	–	0.4	1.0	V
Load Regulation	V_{AC} = 200V, I_O = 0.3 to 0.7A	–	1.0	1.5	V
Input Power	V_{AC} = 200V, I_O = 0.7A	–	103	106	W
Output Ripple Voltage	V_{AC} = 200V, I_O = 0.7A	–	0.4	0.6	$V_{p–p}$
Temperature Coefficient	V_{AC} = 200V, I_O = 0.7A	–	7	–	mV/°C
Light Load Characteristic	V_{AC} = 200V, R_L = 4.7kΩ	–	125	135	V

Internal Equivalent Circuit



