

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

AC Input Voltage, V_{AC}	0 to 280V _{rms}
Maximum Output Power, P_{Omax}	80W
(150 to 280VAC)	100W
Operating Temperature Range, T_{opg}	-10° to $+65^\circ\text{C}$
Storage Temperature Range, T_{stg}	-30° to $+105^\circ\text{C}$
Operating Case Temperature, T_{Cmax}	$+105^\circ\text{C}$
Thermal Resistance, Junction-to-Case, R_{thJC}	1.6°C/W
Junction Temperature, T_{Jmax}	$+150^\circ\text{C}$

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

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

Internal Equivalent Circuit

