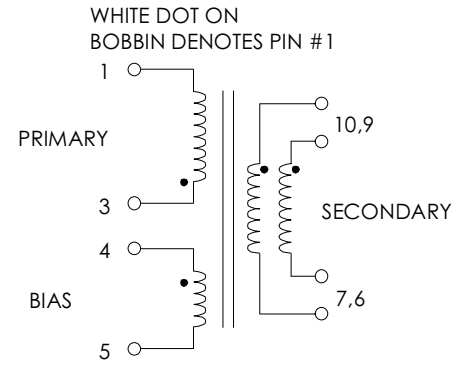


TABLE 1: ELECTRICAL SPECIFICATIONS AT 25 °C
 SWITCHING TRANSFORMER DESIGNED FOR USE WITH POWER INTEGRATIONS
 PWR-TOP226Y. REFER TO APPLICATION CIRCUIT OF FIGURE 3.

PARAMETER	SPEC LIMITS			UNITS
	MIN.	TYP.	MAX.	
PRIMARY INDUCTANCE (3-1) VOLTAGE = 0.250Vrms FREQUENCY = 100 KHZ	540	600	660	μHY
TURN RATIO'S: SEC (10,9-7,6) : PRIMARY (3-1) BIAS (4-5) : PRIMARY (3-1)	-----	1: 14.67 1: 8.80	-----	± 4% ± 4%
PRI LEAKAGE IND. (SEC SHORTED) VOLTAGE = 0.250Vrms FREQUENCY = 100 KHZ	-----	-----	35.0	μHY
HIPOT: PRIMARY TO SECONDARY BIAS TO SECONDARY	3000 3000	----- -----	----- -----	Vrms Vrms
APP CIRCUIT PARAMETERS: (1) AC LINE VOLTAGE 47/400 Hz OUTPUT VOLTAGE OUTPUT CURRENT CONTINUOUS OUTPUT CURRENT PEAK LINE REGULATION (85 TO 265Vac) LOAD REGULATION 10-100% RIPPLE	85 ----- 0.0 ----- ----- ----- ----- -----	----- 7.0 ----- ----- 0.20 0.20 50.0	265 ----- 5.0 5.5 ----- ----- -----	Vac Vdc Amps Amps ±% ±% ±mV

(1) REFER TO APPLICATION CIRCUIT OF FIGURE 3.

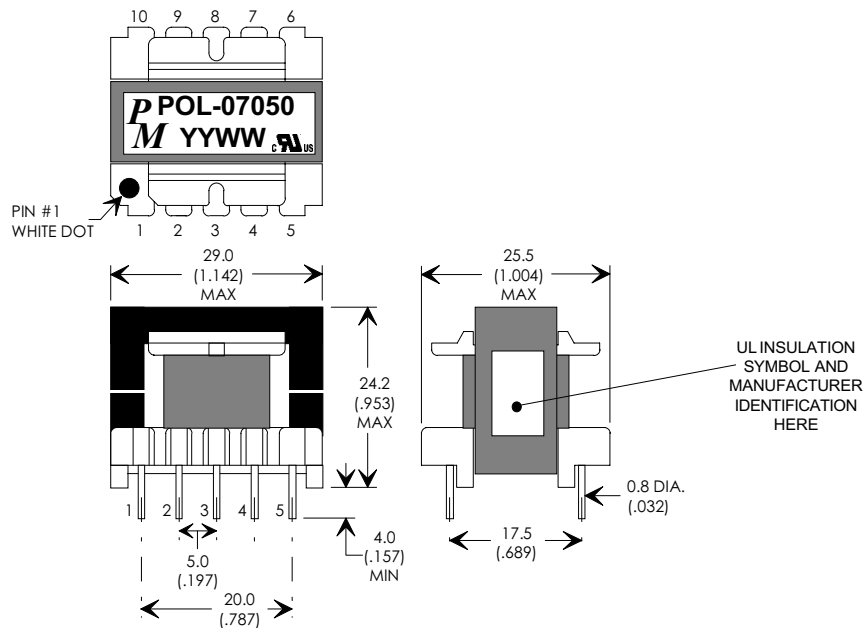
FIGURE 1: SCHEMATIC DIAGRAM



SECONDARY PINS #10 & 9, #7 & 6 MUST BE RESPECTIVELY CONNECTED TOGETHER FOR PROPER OPERATION. I.E. CONNECTED AS ONE PARALLEL WINDING.

NOTE1:
REINFORCED INSULATION SYSTEM, UL 1950, IEC950, CSA-950:
 A) ALL MATERIALS MEET "UL", "CSA" & "IEC" REQUIREMENTS
 B) TRIPLE BASIC INSULATED SECONDARY.
 C) DESIGNED TO MEET ≥6.2mm CREEPAGE REQUIREMENTS.
 D) VARNISH FINISHED ASSEMBLY.
 E) UL1950 & CSA-950 CERTIFIED: FILE #E162344.
 F) UL CLASS (B) 130 INSULATION SYSTEM PM130-R1, PM130-H1, PM130-H1A (UL FILE #E177139) OR ANY UL AUTHORIZED CLASS (B) INSULATION SYSTEM.

FIGURE 2: PHYSICAL DIMENSIONS mm (INCHES)



EE, EI28/11, 10-PIN VERTICAL BOBBIN

REV.	DESCRIPTION OF CHANGES	BY
02/16/96	ORIGINAL RELEASE	TO
07/07/98	CORRECTED WIDTH DIMENSION, NO OTHER CHANGES	PP
04/16/99	UPDATE TO UL CLASS (B) INSULATION SYSTEM	MD



**Premier
Magnetics Inc.**

UNLESS OTHERWISE SPECIFIED
 DIMENSIONS ARE IN MM
 DIMENSIONAL TOLERANCES ARE:
 DECIMALS ANGLES
 .X ± .25 ±0° 30'
 .XX ± .15
 DO NOT SCALE DRAWING

TRANSFORMER CONTROL DRAWING

PREMIER P/N: POL-07050	REVISION: 04/16/99
DRAWN BY: TOM O'NEIL	REF: PWR-TOP226Y
SCALE: NONE	SHEET: 1 OF 6

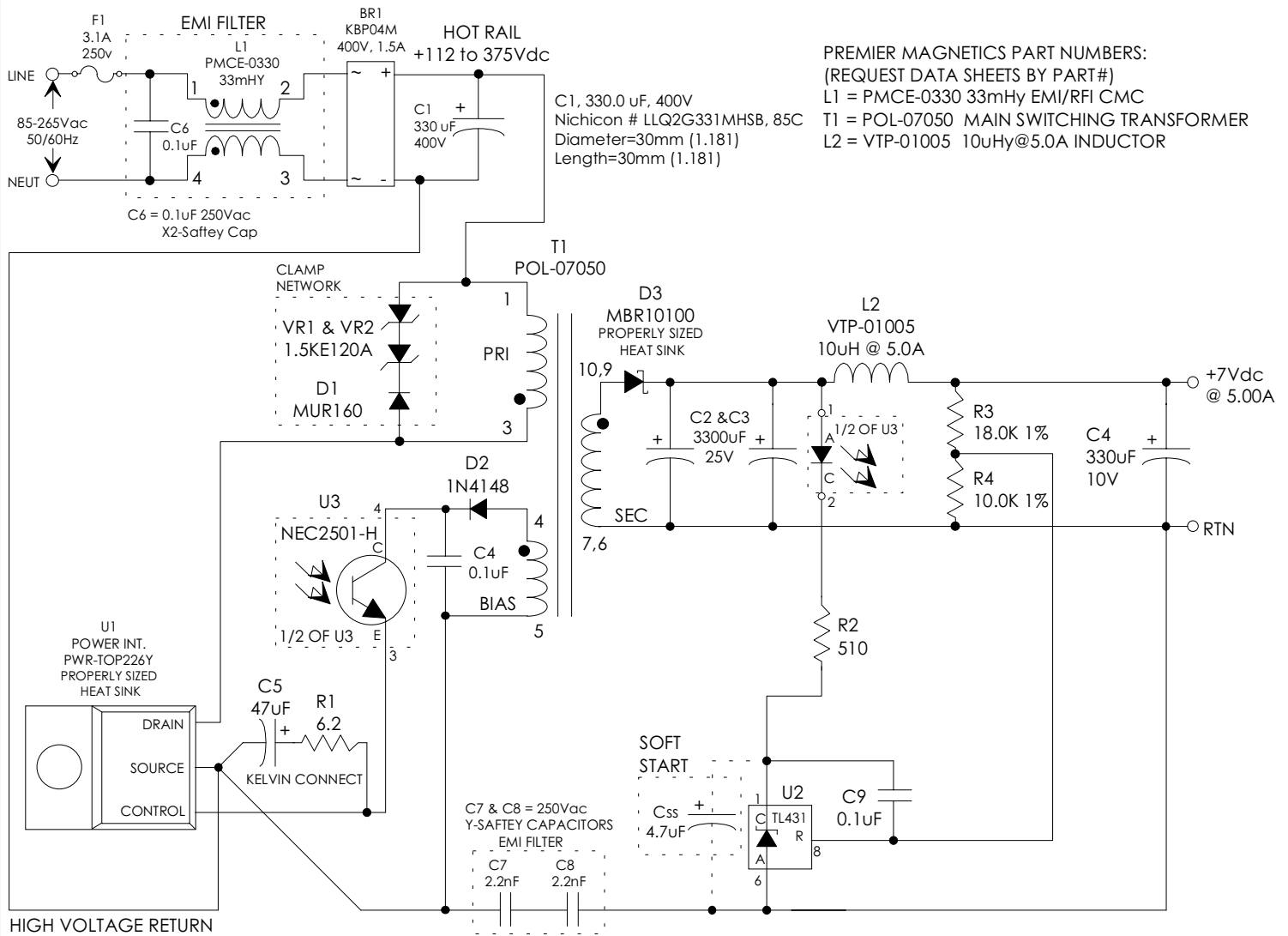
APPLICATION NOTES

Premier Magnetic's POL-07050 Switch Mode Transformer was designed for use with Power Integrations, Inc. PWR-TOP226Y three terminal off-line PWM switching regulator in the Flyback Buck-Boost circuit configuration. This conversion topology can provide isolated multiple outputs with efficiencies up to 90%. Premier's POL-07050 transformer has been optimized to provide maximum power throughput.

The PWR-TOPXXX series from Power Integrations, Inc. are self contained 100kHz three terminal voltage controlled PWM switching regulators. This series contains all necessary functions for an off-line switched mode control DC power source. These switching regulators provide a very simple solution to off-line designs. The inductors and transformer used with the PWR-TOPXXX are critical to the performance of the circuit. They define the overall efficiency, output power and overall physical size.

Below is a universal input high precision 35 watt application circuit utilizing Power Integrations PWR-TOP226 switching regulator in the flyback buck-boost configuration. The component values listed are intended for reference purposes only. Properly sized heat sinks for the PWR-TOP204 & Diode D1 are required for efficient and reliable operation. Soft start capacitor C_{ss} is optional and application dependent.

FIGURE 3: TYPICAL APPLICATION CIRCUIT



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Magnetics Inc.**

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN MM
DIMENSIONAL TOLERANCES ARE:
DECIMALS ANGLES
.X ± .25 ±0° 30'
.XX ± .15
DO NOT SCALE DRAWING

TRANSFORMER CONTROL DRAWING

PREMIER P/N: POL-07050	REVISION: 04/16/99
DRAWN BY: TOM O'NEIL	REF: PWR-TOP226Y
SCALE: NONE	SHEET: 2 OF 6