

KEY FEATURES

- Switching Power Module for PCB Mountable
- Fully Encapsulated Plastic Case
- Regulated Output
- Low Ripple and Noise
- Small Size as ANC 15Watt with 50Watt Higher Power
- CE, CB and UL Approval
- 3-Year Product Warranty



ELECTRICAL SPECIFICATIONS

All specifications valid at normal input voltage, full load and +25°C after warm-up time unless otherwise stated.

Model No. (Single Output)	DPANC50-5S	DPANC50-12S	DPANC50-15S	ANC50-24S	DPANC50-48S
Max Output Wattage (W)	40W	50W	50W	50W	50W
Input	Voltage				
	90-264 VAC or 120-370 VDC, " L " to DC " + " ; "N " to DC " - "				
	Frequency (Hz)				
	47-63 Hz				
	Current (Full load)				
	1000 mA max. (115 VAC) / 600 mA max. (230 VAC)				
Inrush Current (<2ms)					
40 A max. (115 VAC) / 60 A max. (230 VAC)					
Leakage Current					
0.25 mA max.					
External Fuse (recommend)					
3.15 A slow blow type					
Output	Voltage (V.DC.)				
	5V	12V	15V	24V	48V
	Voltage Accuracy				
	±2%				
	Current (mA) max				
	8000	4167	3333	2083	1040
	Line Regulation (LL-HL) (typ.)				
	±1%				
	Load Regulation (0-100%) (typ.)				
	±1%				
	Minimum Load				
0%					
Maximum Capacitive Load					
10000 uF	3500 uF	3000 uF	2200 uF	330uF	
Ripple & Noise					
120mV	120mV	150mV	240mV	480mV	
Efficiency (at 230 VAC)					
86%	90%	87%	88%	89%	
Hold-up Time					
10 ms min.					
Switching Frequency (typ.) (at 230 VAC)					
65 kHz					
Protection	Over Power Protection				
	Hiccup technique, auto-recovery				
	Over Voltage Protection				
Zener diode clamp					
Short Circuit Protection					
Hiccup mode (automatic recovery)					
Isolation	Input-Output (V.AC)				
	3000V				
	Input-FG (V.AC)				
1500V					
Output-FG (V.AC)					
500V					
Environment	Operating Temperature				
	-40°C...+70°C (with derating)				
	Storage Temperature				
	-40°C...+85°C				
	Temperature Coefficient				
±0.02%/°C					
Humidity					
95% RH					
MTBF					
>300,000 h @ 25°C (MIL-HDBK-217F)					
Physical	Dimensions (L x W x H)				
	2.91 x 2.13 x 0.87 Inches (74.1 x 54.1 x 22.1 mm)				
	Tolerance ±0.5 mm, Height Tolerance ±1 mm				
	Case Material				
Plastic resin (flammability to UL 94V-0)					
Weight					
166 g					
Cooling Method					
Free air convection					

ELECTRICAL SPECIFICATIONS

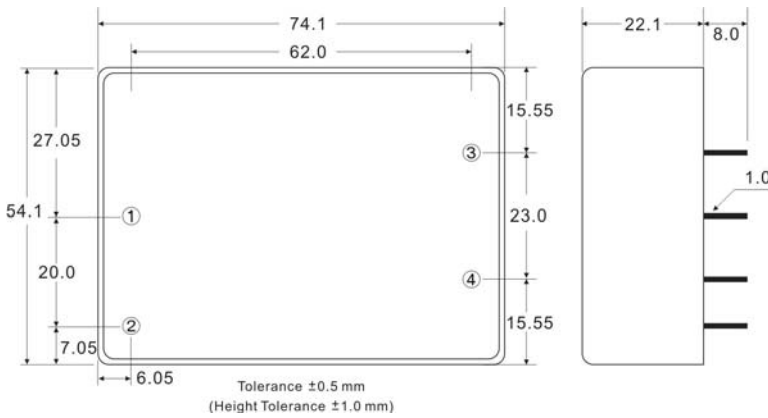
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Model No.	(Single Output)	DPANC50-5S	DPANC50-12S	DPANC50-15S	DPANC50-24S	DPANC50-48S
Safety	Agency Approvals	IEC / EN 60950, UL / IEC / EN 62368-1				
EMC	EMI (Conducted & Radiated Emission)	EN 55032				
	EMS (Noise Immunity)	EN 55024				
	ESD	EN61000-4-2 air ± 8kV , Contact ± 4kV (A)				
	Radiated Immunity	EN61000-4-3 3V/m (A)				
	Fast Transient	EN61000-4-4 ± 1kV (A)				
	Surge	EN61000-4-5 ±2kV (A)				
	Conducted Immunity	EN61000-4-6 3Vrms (A)				
	PFMF	EN61000-4-8 1A/m (A)				
	Dips	EN61000-4-11 30% 500ms (A)				

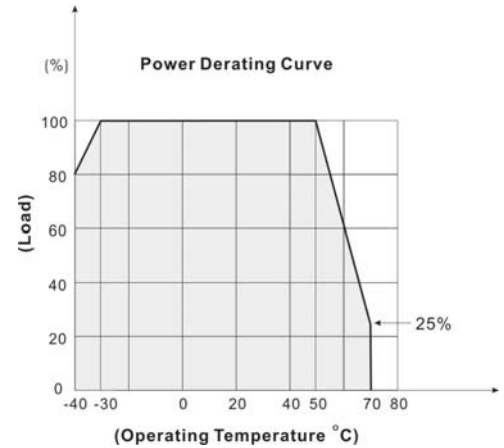
NOTE

1. Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.
2. It's recommended to add Varistor 14S471K at L / N input side in parallel.

MECHANICAL DIMENSIONS (Top View)



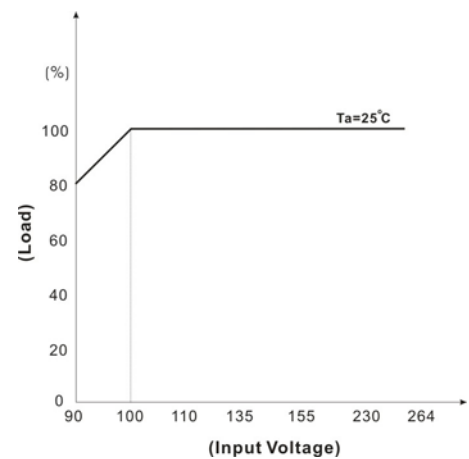
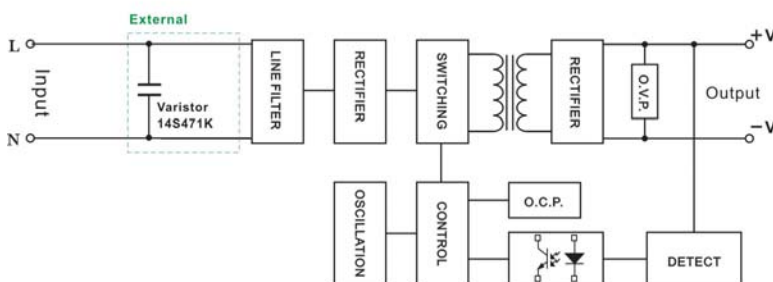
DERATING



BLOCK DIAGRAM

PIN#	Single
1	AC IN (N)
2	AC IN (L)
3	-DC OUT
4	+DC OUT

Single Output



About Digital Power

Digital Power Corporation designs and manufactures full custom, value-added, and standard comprehensive power solutions for the most demanding applications in the defense, healthcare, telecom, and industrial markets.