

Product Specification

AC-DC ITE / Household Power
Module

Key Product Features

- Maximun No-Load Watts < 0.1W
- Switching Power Module for PCB Mountable
- Fully Encapsulated Plastic Case
- Universal Input Range 90-264VAC, 47-440Hz
- Low Ripple and Noise
- Isolation Class II
- CE, CB and UL Approval

DPAOD10 Series

10 Watt



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

Product Specification				
Input				
Model	DPAOD10-5S	DPAOD10-12S	DPAOD10-15S	DPAOD10-24S
Max Output Wattage	10W			
Voltage	90-264Vac or 120-370 VDC (N Connect + Vin ; L Connect - Vin)			
Frequency	47-440 Hz			
Current (Full Load)	230 mA max. (115VAC) / 140 mA max. (230 VAC)			
Inrush current	30 A max. (115 VAC) / 60 A max. (230VAC)			
Leakage current	0.25 mA max.			
External Fuse (mandatory)	2 A slow blow type			
External Varistor (mandatory)	10S471K			
External Thermistor (recommended)	10R / 8φ			

NOTES:

- 1- Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.
- 2- It's necessary Varistor 14S471K at L / N input side in parallel
- 3- It's necessary Fuse 250V/2A at L input side in series connection.
- 4- It's recommended 10R / 8φ thermistor at L input side in series connection.
- 5- A fuse 250V/2A is directly connected to the input and this fuse is 3.2mm min. away from each polarity.

Output				
Model	DPAOD10-5S	DPAOD10-12S	DPAOD10-15S	DPAOD10-24S
Voltage	5V	12V	15V	24V
Voltage Accuracy	±2%			
Current (mA) max	2000mA	833mA	667mA	417mA
Line Regulation (LL-HL) (typ.)	±0.2		±0.5%	
Load Regulation (0-100%) (typ.)	±1%			
Minimum Load	0%			
Maximum Capacitive Load	3,500uF	700uF	390uF	180uF
Ripple & Noise (Vp-p) max	<150mV		<160mV	1% Vout
Efficiency (at 230VAC)	80%	84%	85%	85%
Hold-up Time (at 230VAC)	30 ms min.			

Protection	
Over Power Protection	Hiccup technique, auto-recovery
Over Voltage Protection	Zener diode clamp
Short Circuit Protection	Hiccup mode, indefinite (automatic recovery)

Isolation	
Input-Output (V.A.C)	3000V

Environment	
Operating Temperature	-40°C...+70°C (with derating)
Storage Temperature	-40°C...+85°C
Temperature Coefficient	±0.02%/°C
Humidity	95% RH
MTBF	>450,000 h @ 25°C (MIL-HDBK-217F)

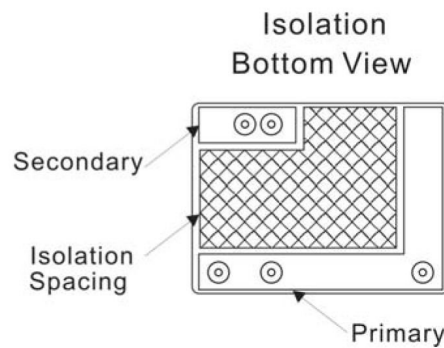
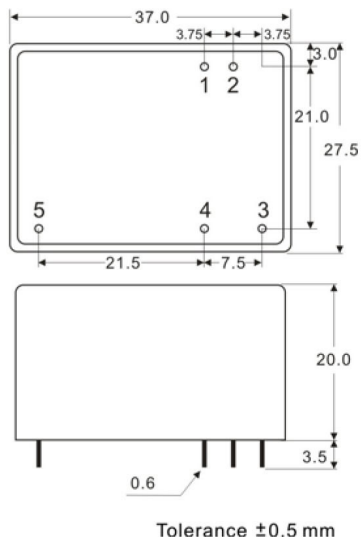
Safety Approvals	
Agency Approvals	UL/cUL 60950-1&IEC/EN60650-1, TUV IEC/EN60335-1, CE

EMC	
EMI (Conducted & Radiated Emission)	EN 55032 class B
EMS (Noise Immunity)	EN 55024

Mechanical Specifications

Dimensions	1.46 X 1.08 X 0.79 in (37.0 x 27.5 x 20.0 mm) Tolerance ±0.5mm
Case Material	Plastic resin (flammability to UL 94V-0)
Weight	35g
Cooling Method	Free air convection

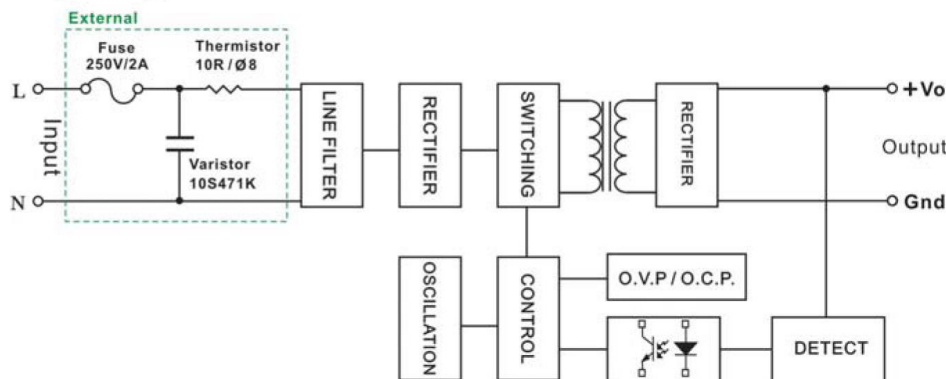
Mechanical Outline



Outline Pin Assignet	
PIN#	Single
1	+Vo
2	GND
3	AC IN (L)
4	AC IN (N)
5	NO CONNECT

Block Diagram

Single Output



Derating Curve

