HAAD-5W Series



Features

- \star In/Out Isolation Voltage 2500 VAC
- ★ **DIP Package**
- Temperature Range:-40℃ to +85℃ ★
- \star UL94V-0 Inflaming retarding package
- \star MTBF>1million hours(25℃)
- \star Short-circuit protection

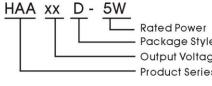


Applications

The HAA_D-5W Series are these AC-DC converters, you can reduce the design point of failure and save the development of micto power supply's manpower, material and time costs, also better ensure product quality stability, protect safety and reliability of the end of products. These products apply to where:

- 1. Input and output isolation noise is required.
- 2. Regulated and low ripple noise is required.

Such as: tele-communications etc, industrial control.



Package Style Output Voltage **Product Series**

Model Detail List Specification									
Model Number	Input Voltage	Output Voltage	Output Current(mA)		Input Current Full load. (mA)		Efficiency	Max. Capacitive	
			Min.	Max.	Max.	No.		Load(µF)	
HAA05D-5W	- 85~265VAC - (90~375VDC)	±5.0V	±50	±500			72%		
HAA12D-5W		±12.0V	±20	±208			78%	500	
HAA15D-5W		±15.0V	±16	±166			81%		

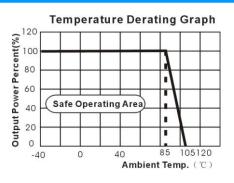
Environmental Specifications						
Item	Test Conditions	Min.	Тур.	Max.	Unit	
Storage Humidity	Non condensing			95	%	
Temp. rise at full load			25	45		
Operating Temperature		-40		+85	۲ ۲	
Storage Temperature	Power derating (above 85℃)	-55		+125		
Soldering Temperature	1.5mm from case for 10 seconds			300		
Isolation Voltage	Tested for 1 minute and leakage current less than 1 mA	2500			VAC	
Switching Frequency	Full load, nominal input		100		KHz	
MTBF	MIL-HDBK-217F@25℃	1000			K hours	
Isolation Resistance	Test at 500VDC	1000			MΩ	
Weight			25		g	
Cooling		Free air convection				

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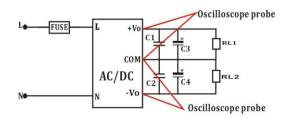
Output Specifications

ltem	Test Conditions	Min.	Тур.	Max.	Unit	
Output Power		0.25		5	w	
Line Voltage Regulation	For Vin change of ±1%			±0.5	- %	
Load regulation	10% to 100% load			0.5		
Ripple			50			
Noise	20MHz Bandwidth		75		mVp-p	
Temperature Drift	100% full load			±0.03	%/°C	
Isolation Capacitance			300		pF	
Short Circuit Protection		Continuous, automatic recovery				

Temperature Derating Graph



Model test circuit



Mechanical Dimensions & **Recommended Footprint** • P1 **∮**1.2 P6• 10 • P 3 P7• 45 10 P8• (Side view) **P8** • P 5 (Top View) 47 -20.5 55 5 Note: Grid 2.54*2.54mm Package L Ν FG +Vo COM -Vo Unit: mm HAAD-5W General tolerances : 0.20mm P1 P3 Ρ5 P6 Ρ7 P8 EMC Recommended Circuit +Vo L^O FUSE LCM RL1 TVS AC/DC ov CYI CXI

Ν

FG

-Vo

RL2

Ν

FG

MOV

CY2