

PD Module

DESCRIPTION

13W PD(Powered Device) Integrated Module (Isolation Type)

FEATURES

- IEEE802.3af compliant.
- Low cost.
- Support PoE applications in both of Fast / Gigabit Ethernet environments.
- Support wide input voltage range 37Vdc to 57Vdc.
- Thermal cut off.
- Short circuit protection.
- Over current protection
- High DC/DC converting efficiency.
- Less external component one output decoupling capacitor.
- Isolation level 1.5KVrms.
- Enhanced surge protection
- Internal build in 2 channel bridge rectifiers

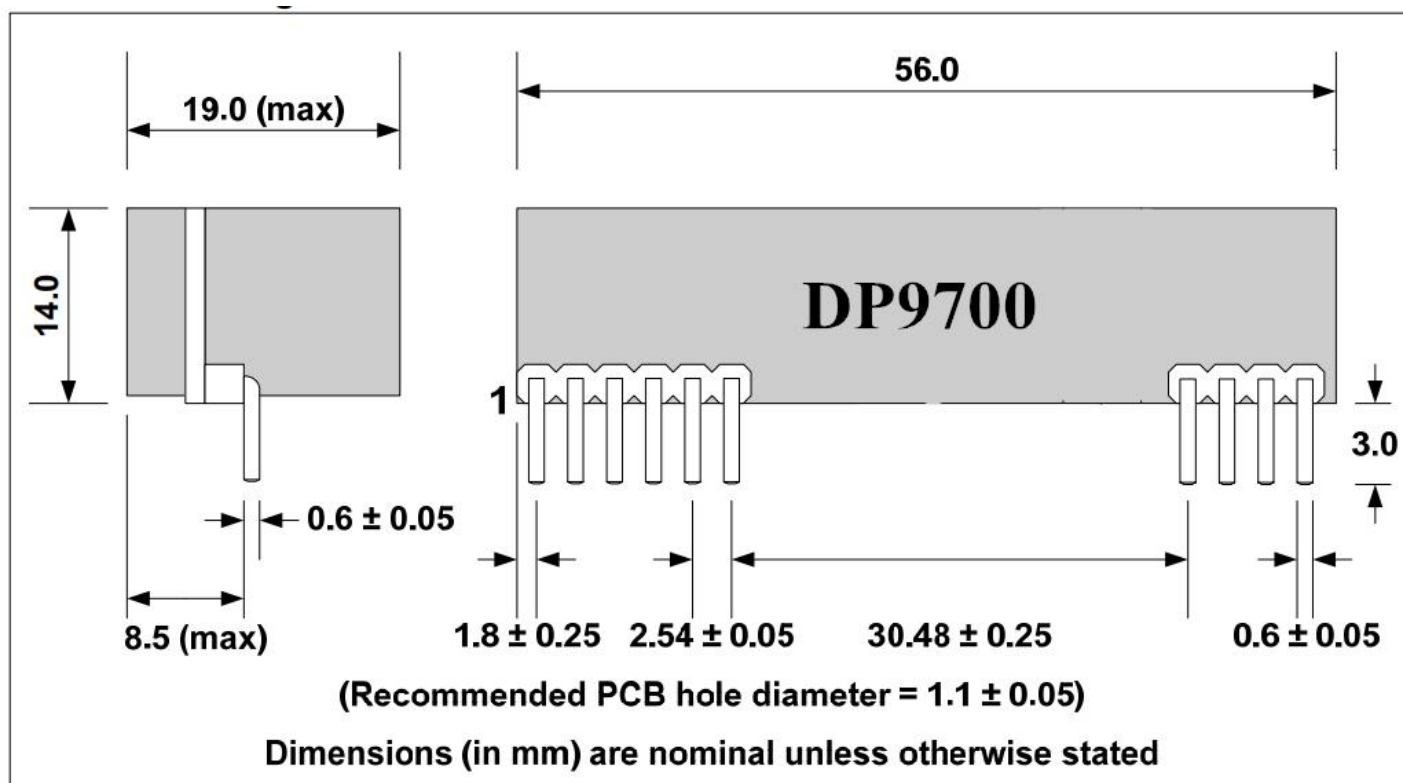
Product List

Part Number	Nominal Output Voltage / Current	Maximum Output Power	Nominal Input Voltage	Marking
DP9705	5.1Vdc / 2.55A	13W @ 25°C	48Vdc	DP9705
DP9712	12Vdc / 1.1A	13W @ 25°C	48Vdc	DP9712

PIN ASSIGNMENT

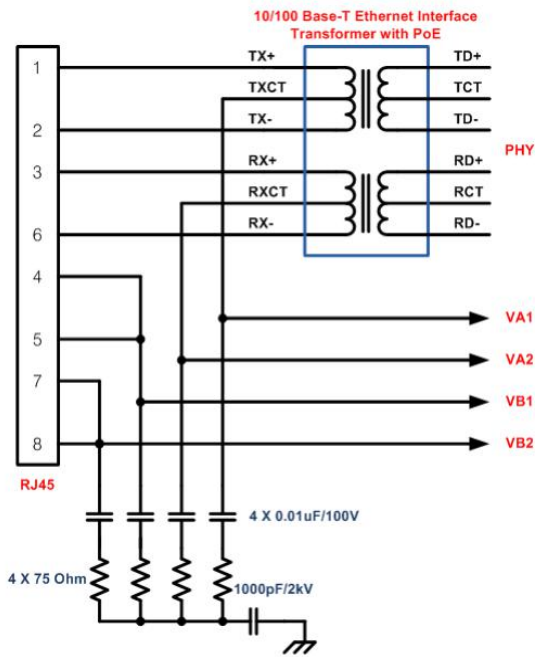
Pin #	Name	Description
1	VA1	RX Input (1). This input pin is used in conjunction with VA2 and connects to the centre tap of the transformer connected to pins 1 & 2 of the RJ45 connector (RX) - it is not polarity sensitive.
2	VA2	TX Input (2). This input pin is used in conjunction with VA1 and connects to the centre tap of the transformer connected to pins 3 & 6 of the RJ45 connector (TX) - it is not polarity sensitive.
3	VB1	Direct Input (1). This input pin is used in conjunction with VB2 and connects to pin 4 & 5 of the RJ45 connector - it is not polarity sensitive.
4	VB2	Direct Input (2). This input pin is used in conjunction with VB1 and connects to pin 7 & 8 of the RJ45 connector - it is not polarity sensitive.
5	IC	Internal Connection. Do not connect to this pin.
6	NC	No Connection.
7	-VDC	DC Return. This pin is the return path for the +VDC output.
8	+VDC	DC Output. This pin provides the regulated output from the DC/DC converter.
9	ADJ	Output Adjust. The output voltage can be adjusted from its nominal value, by connecting an external resistor from this pin to either the +VDC pin or the -VDC pin.
10	IC	Internal Connection. Do not connect to this pin.

Package

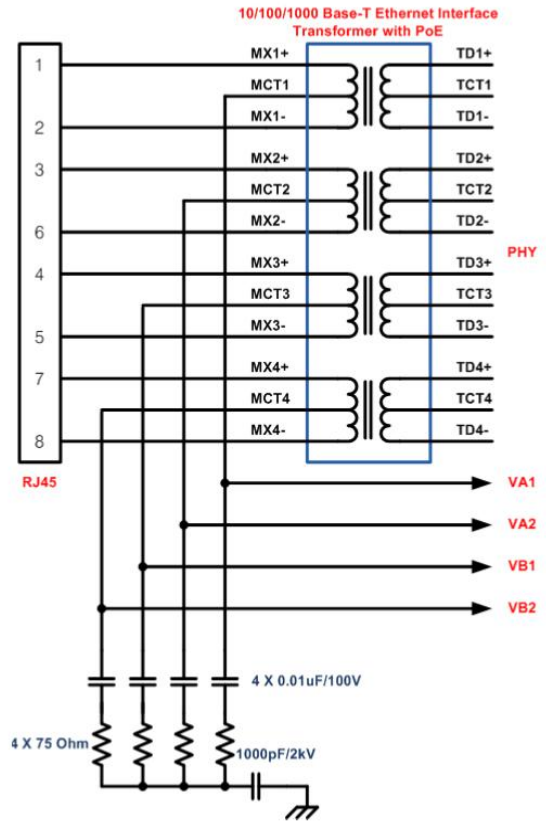


Typical Application

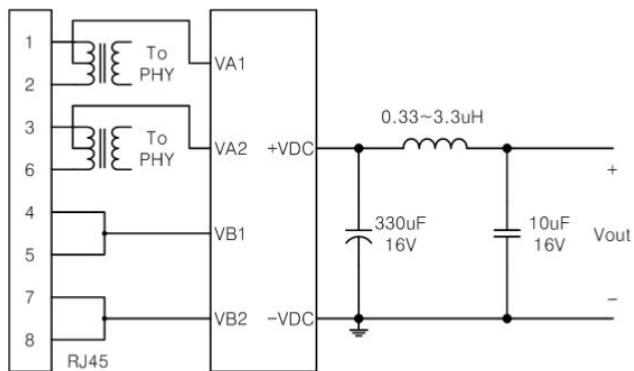
10/100 Base-T APPLICATION



10/100/1000 Base-T APPLICATION



OPTIONAL EXTERNAL LC FILTER FOR LOWER RIPPLE AND NOISE



PD Module

ELECTRICAL SPECIFICATIONS

No	Item	Specification	Comment
1	Input Voltage	44~57V	
2	Output Voltage	12V Typ.	DP9712
		5.1V Typ.	DP9705
3	Output Current (Vin=56V)	1.3A Max.	DP9712
		3A Max.	DP9705
4	Line Regulation	5%	
5	Load Regulation	5%	
6	Ripple & Noise	200mVp-p max.	
7	Efficiency	88% max.	DP9712
		84% max	DP9705
8	Input to Output Isolation	1.5 KV	
9	Type of DC/DC Converter	Flyback Type	
10	Operating Temperature	-40 ~ +85 °C	

