

DESCRIPTION

25.5W PD(Powered Device) Integrated Module (Isolation Type)

FEATURES

- EEE802.3af/at 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

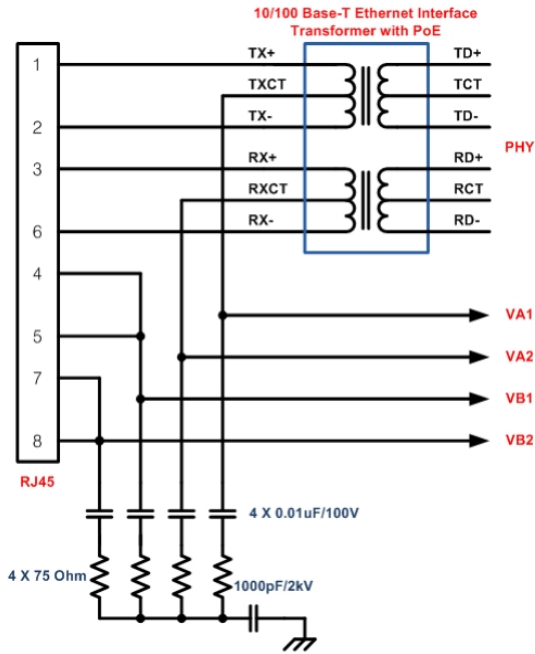
Part Number	Nominal Output Voltage / Current	Maximum Output Power	Nominal Input Voltage
DP9700 at-5V4A	5Vdc / 4A	20W @ 25°C	48Vdc
DP9700 at-12V2A	12Vdc / 2A	24W @ 25°C	48Vdc
DP9700 at-24V1A	24Vdc/1A	24W @ 25°C	48Vdc

PIN ASSIGNMENT

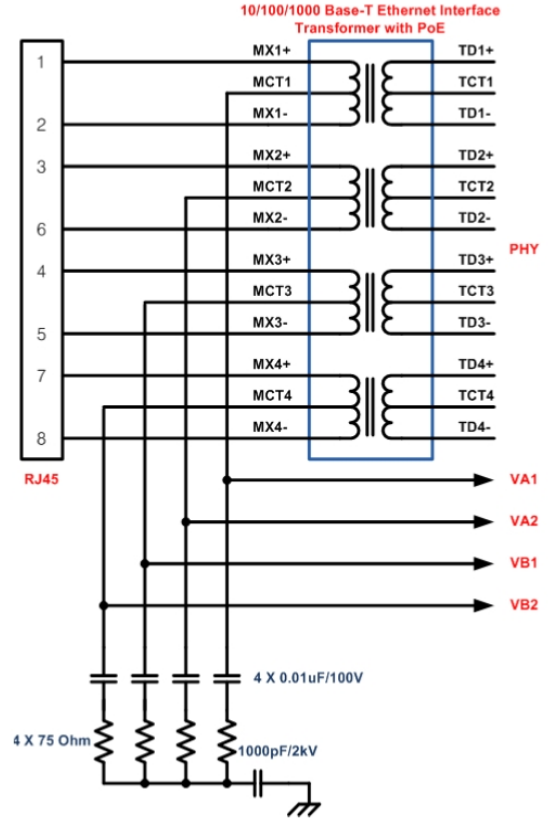
Pin	Name	Description
1	VA1	RX Input (1). This input pin is used in conjunction with VA2 and connects to the centre tap of the transformer connected to pins 1 & 2 of the RJ45 connector (RX) - it is not polarity sensitive.
2	VA2	TX Input (2). This input pin is used in conjunction with VA1 and connects 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.
5,6	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.
9,10	NC	No Connection

Typical Application

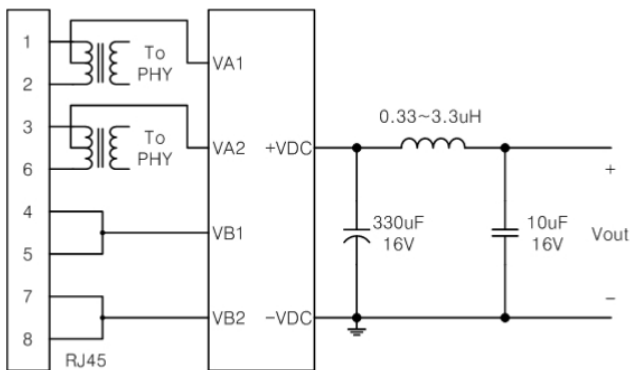
10/100 Base-T APPLICATION



10/100/1000 Base-T APPLICATION



OPTIONAL EXTERNAL LC FILTER FOR LOWER RIPPLE AND NOISE



ELECTRICAL SPECIFICATIONS

No	Item	Specification	Comment
1	Input Voltage	37~57V	
2	Output Voltage	5V Typ.	DP9705
		12V Typ.	DP9712
		24V Typ.	DP9724
3	Output Current (Vin=56V)	4A Max.	DP9705
		2A Max.	DP9712
		1A Max.	DP9724
4	Line Regulation	1%	
5	Load Regulation	1%	
6	Ripple & Noise	200mVp-p max.	
7	Efficiency	83% max.	DP9705
		87% max.	DP9712
		85% max	DP9724
8	Input to Output Isolation	1.5 KV	
9	Type of DC/DC Converter	Flyback Type	
10	Operating Temperature	-40 ~ +85 °C	

Package

