

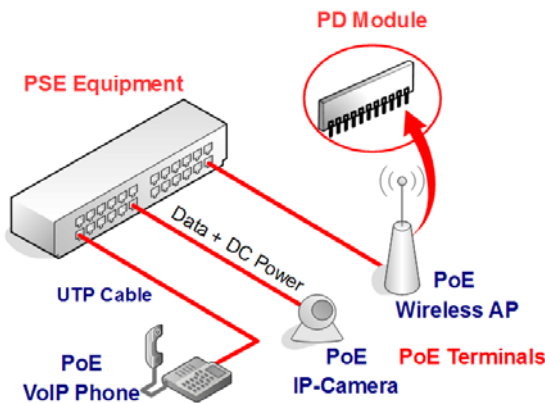
**DESCRIPTION**

5V, 13W max. PD(Powered Device) Integrated Module.

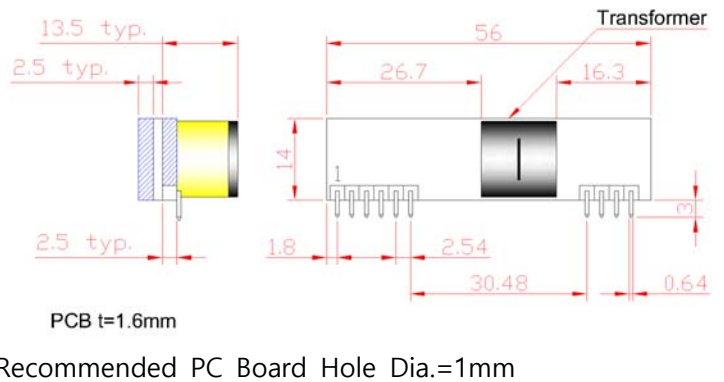
**FEATURES**

- Fully Supports IEEE 802.3af-2003 Compliant
- Input Voltage Range 36V to 57V
- Short Circuit, Over-temperature Protection and In-rush Current Limit
- Default Class : 0 (Adjustable Classifications)
- High Efficiency (85% min. @ Full Load)
- Easy Installation and Low Cost
  - √ Included Input Bridge-Diodes and TVS Diode
  - √ Eliminated the necessity of Output Electrolytic-Capacitors)
- Low Output Ripple and Noise
- Adjustable Output Voltage
- 1500Vrms Isolation (Input-Output)
- RoHS Compliant

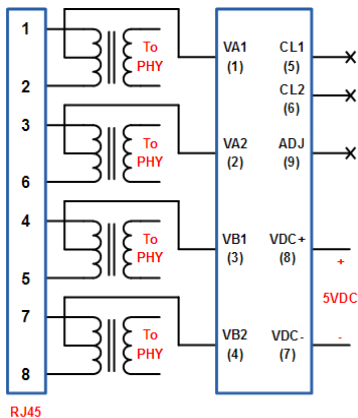
**APPLICATION DIAGRAM**



**OUTLINE DRAWING**

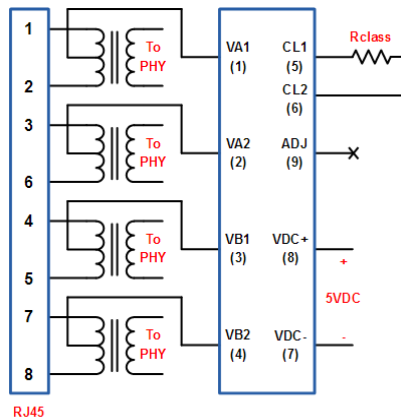


**TYPICAL CONNECTION**



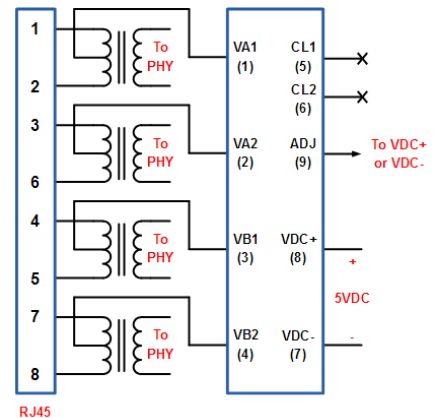
Class : 0 and Vout=5VDC

**CLASSIFICATION CONNECTION**



Class : 1~3 and Vout=5VDC

**VOLTAGE ADJ. CONNECTION**



Class : 0 and Vout=5VDC ± Adj.

## PIN ASSIGNMENT

Pin #	Name	Description
1	VA1	<b>Input (1)</b> : This input pin connects to the centre tap of the transformer connected to pins 1&2 of the RJ45 connector. It is not polarity sensitive.
2	VA2	<b>Input (2)</b> : This input pin connects to the centre tap of the transformer connected to pins 3&6 of the RJ45 connector. It is not polarity sensitive.
3	VB1	<b>Input (3)</b> : This input pin connects to the centre tap of the transformer connected to pins 4&5 of the RJ45 connector. It is not polarity sensitive.
4	VB2	<b>Input (4)</b> : This input pin connects to the centre tap of the transformer connected to pins 7&8 of the RJ45 connector. It is not polarity sensitive.
5	CP1	<b>Class Programming (1)</b> : Connect an external resistor to CP2 will classify of the PD.
6	CP2	<b>Class Programming (2)</b> : Connect an external resistor to CP1 will classify of the PD.
7	VDC-	<b>Negative DC Output</b> : This pin provides the -VDC output.
8	VDC+	<b>Positive DC Output</b> : This pin provides the +VDC output.
9	ADJ	<b>Output Adjust</b> : The output voltage can be adjusted from nominal value, by connecting this pin to +VDC or -VDC pin
10	NC	<b>Do not connect to this pin.</b>

## CLASSIFICATION LEVELS AND REQUIRED EXTERNAL RESISTORS

Class	Rclass	Pmin	Pmax
0	Open	0.44W	12.95W
1	301 ohm	0.44W	3.84W
2	154 ohm	3.84W	6.49W
3	97.6 ohm	6.49W	12.95W
4	RESERVED		

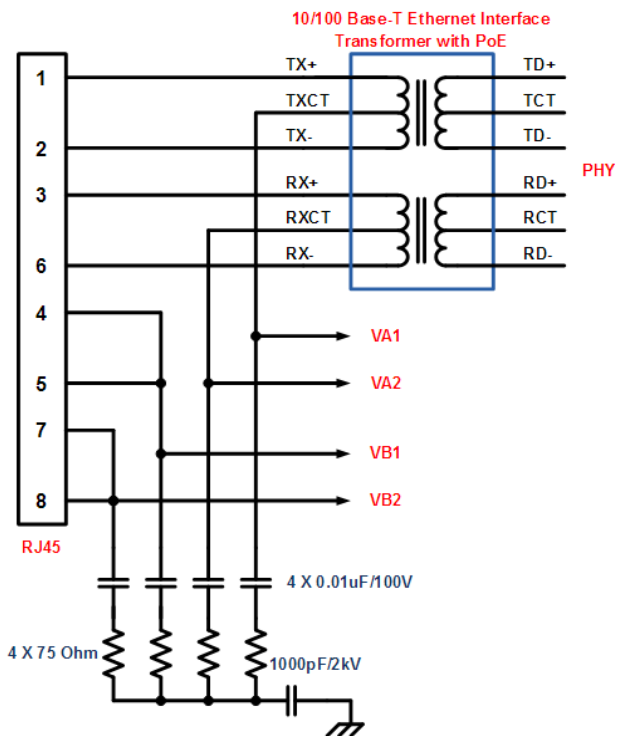
## ADJUSTING THE OUTPUT VOLTAGE LEVELS

Reducing the Output Voltage		Increasing the Output Voltage	
	Voltage		Voltage
ADJ Pin to VDC+	4.45V	ADJ Pin to VDC-	5.65V
Open	5.00V	Open	5.00V

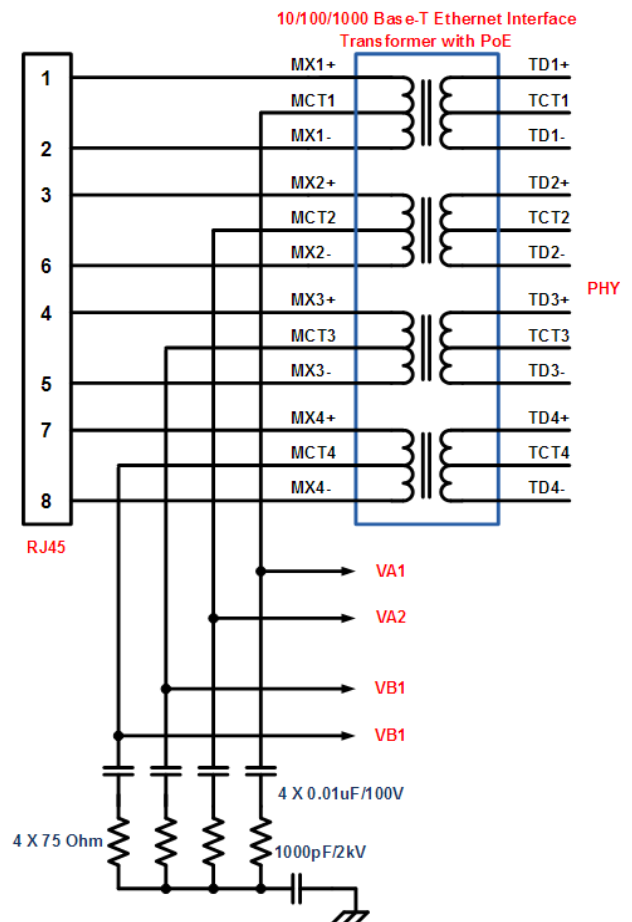
SPECIFICATIONS

No	Item	Specification
1	Input Voltage	36~57V (Nominal : 48V)
2	Output Voltage	5V typ.
3	Output Current (Vin=48V)	2.6A max.
4	Line Regulation (Vin=36~57V)	0.1%
5	Load Regulation (Vin=48V)	0.5%
6	Ripple & Noise (Vin=48V, Iout=2.6A)	100mVp-p max.
7	Efficiency (Vin=48V, Iout=2.6A)	85% min.
8	Input to Output Isolation	1500 Vrms
9	Type of DC/DC Converter	Flyback Type
10	Short Circuit Protection Duration	Inf.
11	Operating Temperature	-25 ~ 70 °C
12	Storage Temperature	-40 ~ 100 °C

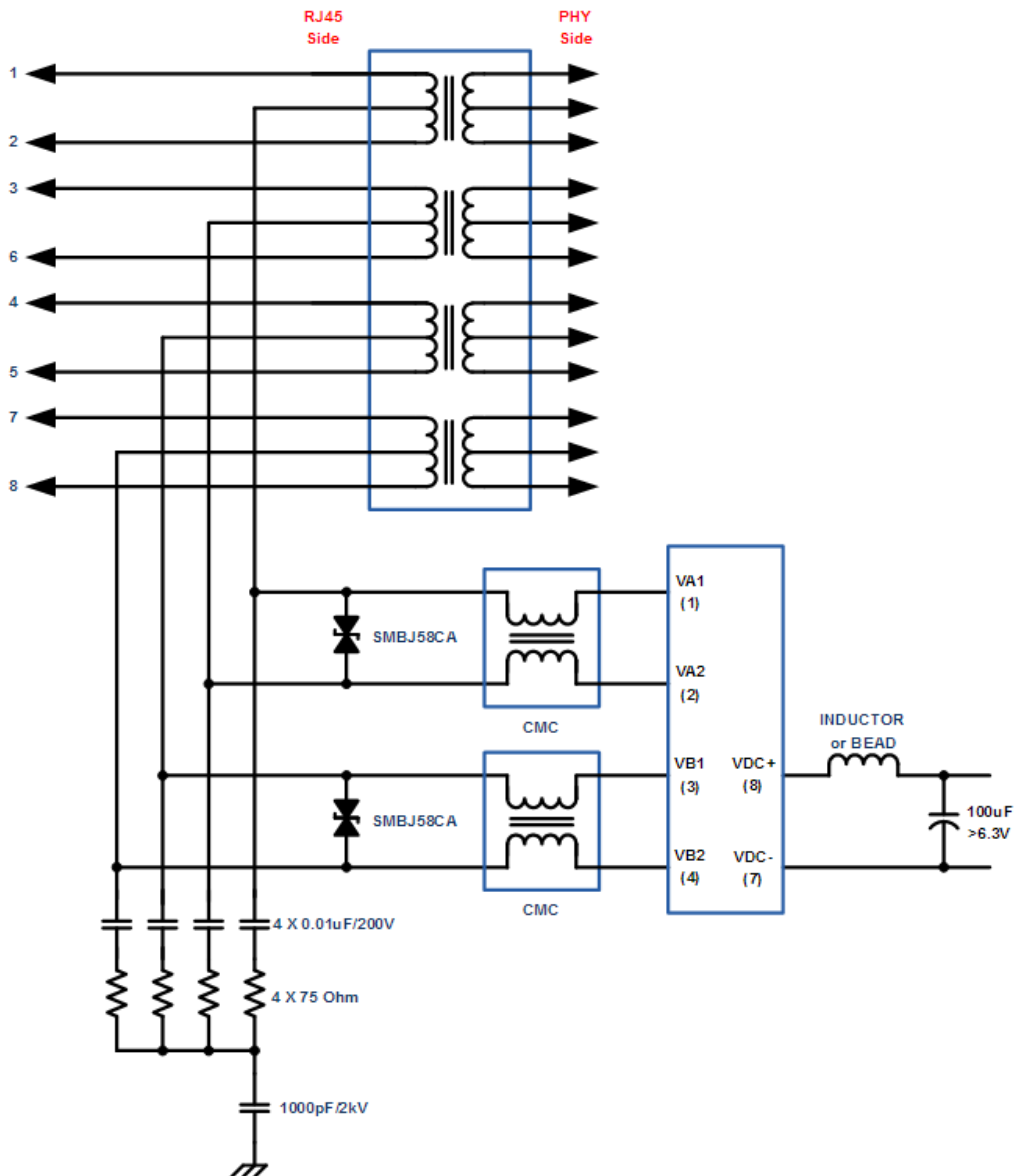
10/100 Base-T APPLICATION



10/100/1000 Base-T APPLICATION



FOR BETTER PERFORMANCE (Option)



LAYOUT RECOMMENDATION

