DESCRIPTION

Microsemi's™ Power over Ethernet (POE) PSE module design to meet IEEE802.3 AF, AT and POH standards.

The PD67101 module designed to be used in POH application. This module contains the POH functionality only and will be plugged into motherboard that contains the RJ45, line transformer and PHY.

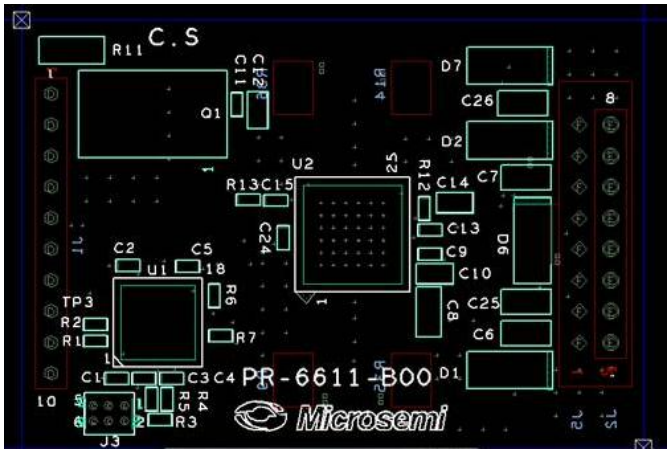


Figure 1: PD67101 Module

KEY FEATURES

- IEEE 802.3AT, IEEE802.3AF and POH standard compliant
- Supports POH detection signature and class interface
- Up to 95W power support
- Power feeding through 4 pairs
- Based on Microsemi's PD69108 and PD69100 chip set
- Integrated solution – minimum external components
- Thermal monitoring and protection capabilities
- EN55024
- UL/cUL/CB
- RoHS compliant

Applications

- HDBase-T up to 95 Watts
- IEEE802.3af and 802.3at
- Indoor and outdoor PoE

IMPORTANT: For the most current data, consult Microsemi's website:
http://www.microsemi.com

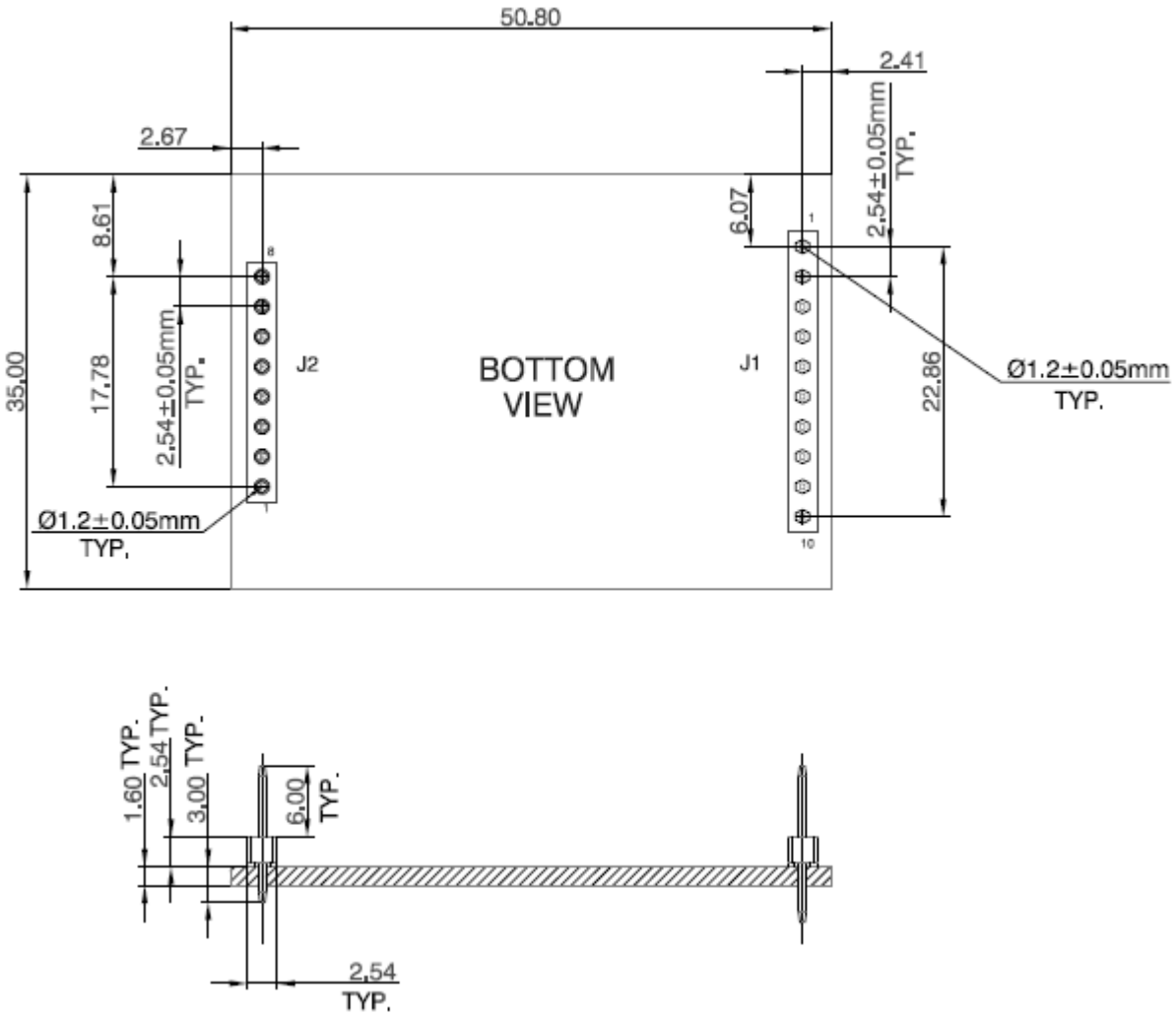
Ordering Information

Part Number	
PD67101	1 Port 95W – POH PSE module

APPLICABLE DOCUMENTS

- IEEE 802.3at-2009 standard.
- POH standard

MECHANICAL DRWAING



PIN DESCRIPTION		
# PIN	NAME	Description
J1	Input Connector	10 pins input connector, located at the left side, receive the power from power supply to be injected on the port and power the module
1	VDC+	VDC+
2		
3	NC	NC
4	LED_OUT1	LED data for Port 1
5	LED_OUT2	
6	DRV_VAUX5	Driven outputs for 5 VDC external regulation; if internal regulation is used, connect to pin 7. If an external NPN is used to regulate the voltage, connect this pin to the "Base".
7	VAUX5	Regulated 5 VDC output voltage source; it needs to be connected to a filtering capacitor of 4.7 uF or higher. If an external NPN is used to regulate the voltage, connect this pin to the "Emitter" (the "collector" should be connected to Vmain)
8	NC	NC
9	VDC-	VDC RTN
10		
J2	OUTPUT Connector	8 pins input connector, located at the right side, inject the power to the output RJ45
1	VDC+	to transformer center-tap A
2	VDC+	to transformer center-tap A
3	VDC-	to transformer center-tap B
4	VDC-	to transformer center-tap B
5	VDC-	to transformer center-tap D
6	VDC-	to transformer center-tap D
7	VDC+	to transformer center-tap C
8	VDC+	to transformer center-tap C

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ABSOLUTE MAXIMUM RATINGS			
	Min	**Max**	**Units**
DC Input voltage	-0.3	60	V
Storage temperature	-40°C	+125°C	°C
Performance is not necessarily guaranteed over this entire range. These are maximum stress ratings only. Exceeding these ratings, even momentarily, can cause immediate damage, or negatively impact long-term operating reliability. The voltages are with respect to negative input (VIN-).			

RECOMMENDED OPERATING CONDITIONS			
	Min	**Max**	**Units**
DC Input voltage	50	57	V
Operating Relative Humidity (non-condensing)	5	95	%
Operating temperature	-10°C	+70°C	°C

Performance is generally guaranteed over this range as further detailed below under Electrical Characteristics. The voltages are with respect to negative input (VIN-).

ELECTRICAL CHARACHTERISTICS						
	SYM	**Condition**	**Min**	**Typ**	**Max**	**Units**
Output power	P_{OUT}	Operation at 4 pair PoH configuration	95	97.5		W
Overload/Short Circuit Identification & Protection	Icut	Current which exceeds Icut for a duration longer than Tcut will shut the output off per each 2 pair				
		IEEE802.3at	600	643	686	mA
		PoH	950	1025	1100	mA
	Tcut		50	65	75	mS
Inrush/Limiting Current Protection	Ilim	Current which exceeds ILim For a duration longer than Tcut will shut the output off per each 2 pair				
		IEEE802.3at	686	728	771	mA
		POH	1100	1165	1230	mA
Unless otherwise specified under conditions, the Min and Max ratings stated here apply over the entire specified operating ratings of the device.						

Revision History

Revision Level / Date	Description
0.1 / October 31 , 2012	Initial release
0.2 / January 08, 2013	Update new mechanical dimensions
0.3/ March 11, 2013	General update
1.0 / April 03rd, 2013	Production version

For support contact: sales_AMSG@microsemi.com
Visit our web site at: www.microsemi.com

Catalogue Number: DS_PD67101