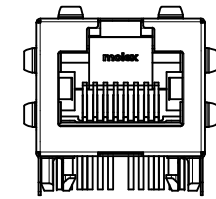
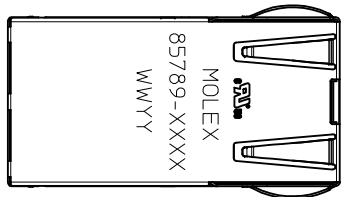
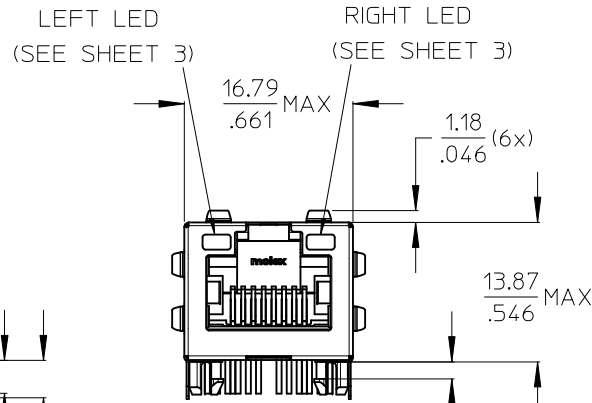


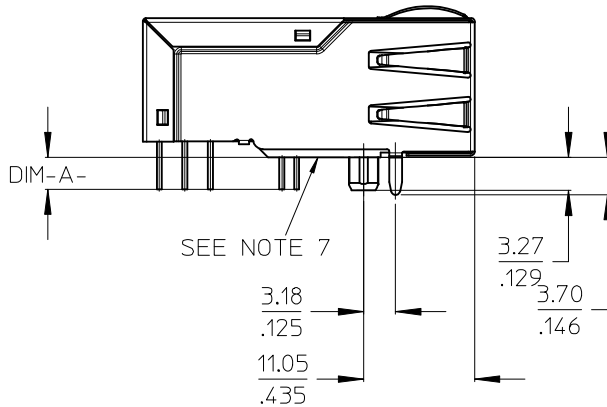
GIGABIT SINGLE PORT MAGNETIC JACK
PoE+ MAGNETICS ACC. TO IEEE802.3at
FOR PSE OR PD APPLICATIONS



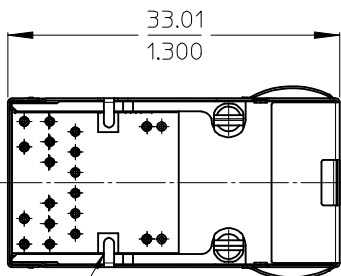
FRONT VIEW
 NON LED VERSION
 P/N 85789-40XX



FRONT VIEW
 LED VERSION
 P/N SEE BOM ON SHEET 3



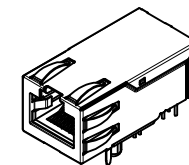
SEE NOTE 7



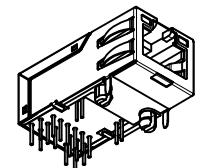
SEE NOTE 9

NOTES:

- 1 - SHIELD MATERIAL: STAINLESS STEEL
(GROUND PINS ARE SOLDER DIPPED)
- 2 - PLASTIC MATERIAL: PBT, BLACK, UL 94V-0
- 3 - TERMINALS MATERIAL: PHOSPOR BRONZE
RJ45 CONTACTS PLATING: 0.76 MICROMETER GOLD
OVER 1.9 MICROMETER NICKEL ON MATING AREA
SOLDER TERMINALS: 3 MICROMETER TIN
- 4 - MATING INTERFACE ACCORDING TO IEC 60603-7
- 5 - PRODUCT SPECIFICATION: PS-85789-001
- 6 - PACKAGING SPECIFICATION: PK-85759-001
- 7 - STAND OFF TO SYSTEM BOARD
- 8 - RECOMMENDED PCB THICKNESS: 1.6mm / 0.067inch
- 9 - STUB PINS AND SHIELD LATCHES: AVOID TO ROUTE TRACES OR TO PLACE ANY VIAS OR PADS BELOW THESE PINS.
- 10 - INSCRIPTION MARKED BY LASER:
1st : MOLEX
2st : P/N (SEE BOM)
3rd : DATE CODE(WEEK/YEAR)
UL LOGO



NON LED VERSION



LED VERSION

SCALE 1:1

SCALE 1:1

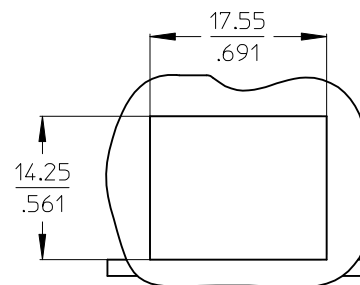
ENTER DESCRIPTION		QUALITY SYMBOLS		GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 2:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
EC NO: IPG2014-1997		2014/04/25		mm		INCH		DRAWN BY		DATE	
DRWN:JBADER		2014/04/25		3 PLACES ± ---		± ---		JBADER		2014/04/25	
CHKD:MMANGARUDOV		2014/05/05		2 PLACES ± 0.20		± ---		CHECKED BY		DATE	
APPR:SSTE INKE		2014/06/11		1 PLACE ± 0.5		± ---		MMANGARUDOV		2014/05/05	
				0 PLACE ±		±		APPROVED BY		DATE	
								SSTE INKE		2014/06/11	
								MATERIAL NO.			
								ANGULAR ± .5 °			
								DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			
								SEE SHEET 3/4			
								SIZE A3			
								THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

GIGABIT MAGNETIC JACK
 POEPLUS ENABLED 1X1 LED

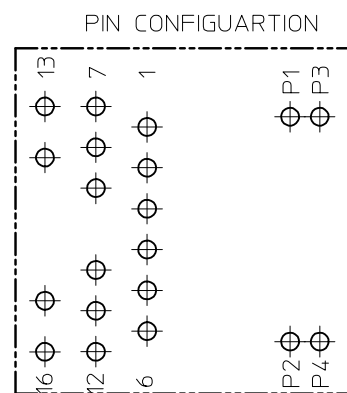
molex

DOCUMENT NO. SD-85789-401

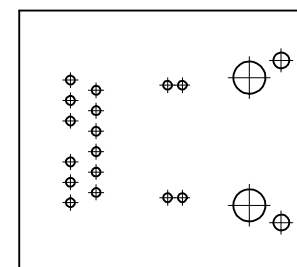
SHEET NO. 1 OF 3



SUGGESTED BOARD LAYOUT - COMPONENT SIDE



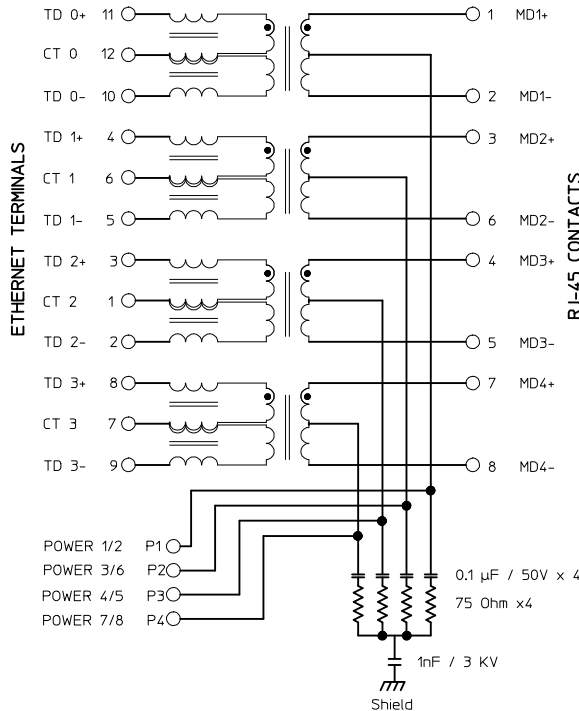
SUGGESTED BOARD LAYOUT
NON LED VERSION



ENTER DESCRIPTION EC NO: IPGG2014-1997 DRAWN: JBADER 2014/04/25 CHKD: MMANGARUDOV 2014/05/05 APPR: SSTEINKE 2014/06/11	DESCRIPTION	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 2:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION ⊙ □			
				mm	INCH	DRAWN BY JBADER	DATE 2014/04/25	TITLE GIGABIT MAGNETIC JACK POEPLUS ENABLED 1X1 LED				
			4 PLACES	± ---	± ---	CHECKED BY	DATE					
			3 PLACES	± ---	± ---	MMANGARUDOV	2014/05/05					
			2 PLACES	± 0.20	± ---	APPROVED BY	DATE	molex				
			1 PLACE	± 0.5	± ---	SSTEINKE	2014/06/11					
			0 PLACE	±	±	MATERIAL NO.	DOCUMENT NO.					
			ANGULAR ± .5 °		SEE SHEET 3/4		SD-85789-401		2 OF 3			
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							

Electrical Specifications @25°C		
Operating temperature (-40°C to +85°C)		
Description	Value	
OCL POE+TRANSF. 20mA bias (-40°C to +85°C)	350μH min.	
OCL NONPOE TRANSF. 8mA bias (-40°C to +85°C)	350μH min.	
Turns Ratio	1CT:1CT	
Insertion Loss		
Frequency (MHz)	Limits (dB max.)	Typical Values (dB max.)
1.0-9.9 MHz	0.4+0.1*log(F)	0.5 @ 10MHz
10-49.9 MHz	0.5+0.3*log(F/10)	0.7 @ 50MHz
50-79.9 MHz	1+1.4*log(F/80)	1.0 @ 80MHz
80-100 MHz	1.3+3*log(F/100)	1.3 @ 100MHz
Return Loss		
Frequency (MHz)	Limits (dB min.)	TYPICAL Values (dB min.)
1-9.9 MHz	27dB min.	27 @ 10MHz
10-100 MHz	27-17*log(F/10)	10 @ 100MHz
CMR		
Frequency (MHz)	Limits (dB min.)	TYPICAL Values (dB min.)
1-9.9 MHz	34dB min.	34 @ 10MHz
10-79.9 MHz	27dB min.	27 @ 80MHz
80-199.9 MHz	27-14.5*log(F/80)	21.5 @ 200MHz
200-399.9 MHz	21.5-39*log(F/200)	10 @ 400MHz
400-1000 MHz	10	10 @ 1000MHz
NEXT		
Frequency (MHz)	Limits (dB min.)	TYPICAL Values (dB min.)
1-5.9 MHz	50	50 @ 6MHz
6-49.9 MHz	45-16*log(F/10)	34 @ 50MHz
50-100 MHz	25-30*log(F/100)	25 @ 100MHz
Isolation PHY to Wire side	2.25kVDC/60sec	

PHY SIDE / PCB SIDE ETHERNET MAGNETICS WIRE SIDE / RJ45



		LED1 POLARITY			LED2 POLARITY		
PART NUMBER	DIM-A-SHEET 1	LEFT LED			RIGHT LED		
		PIN15	PIN16	COLOR	PIN13	PIN14	COLOR
85789-4008	2.5mm	-	+	GREEN	-	+	GREEN
		+	-	YELLOW	+	-	YELLOW
85789-4020	2.5mm	NON LED					

ADDITIONAL LED COLORS AND CONFIGURATIONS ARE AVAILABLE ON REQUEST

ENTER DESCRIPTION EC NO: IPG2014-1997 DRWN:JBADER 2014/04/25 CHKD:MMANGARUDOV 2014/05/05 APPR:SSTEINKE 2014/06/11	QUALITY SYMBOLS =0 =0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
								GIGABIT MAGNETIC JACK POEPLUS ENABLED 1X1 LED	
								SD-85789-401	
A	REV	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE BOM		DOCUMENT NO.		SHEET NO.	
				SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		3 OF 3	