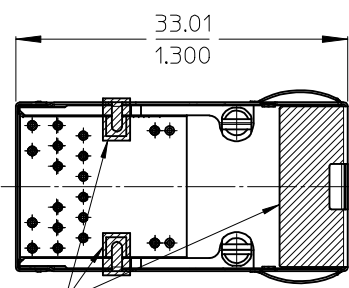
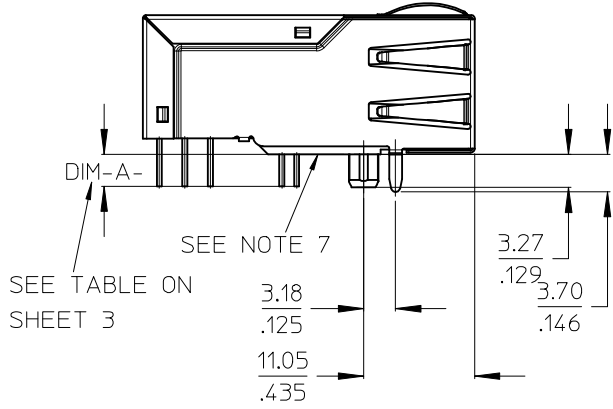
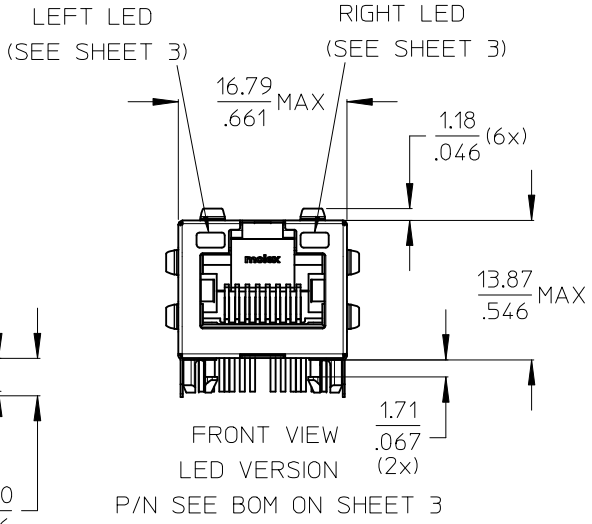
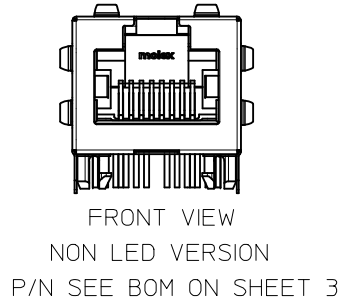
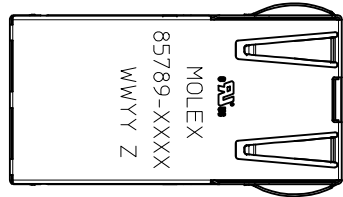
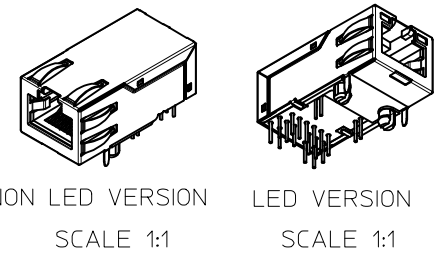


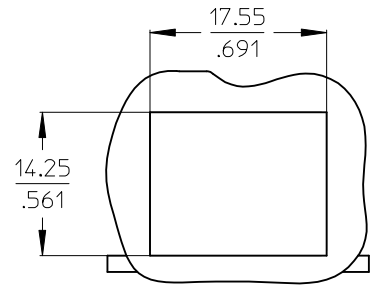
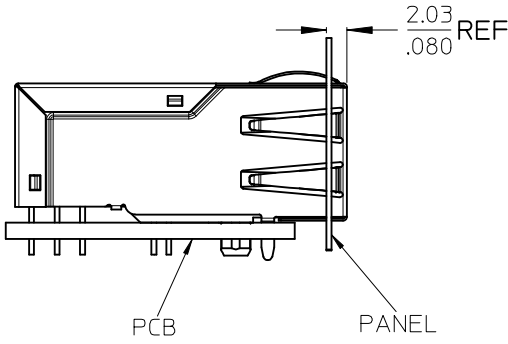
GIGABIT SINGLE PORT MAGNETIC JACK
PoE+ MAGNETICS ACC. TO IEEE802.3at
FOR PSE OR PD APPLICATIONS



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

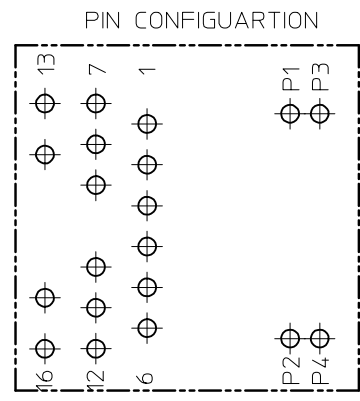
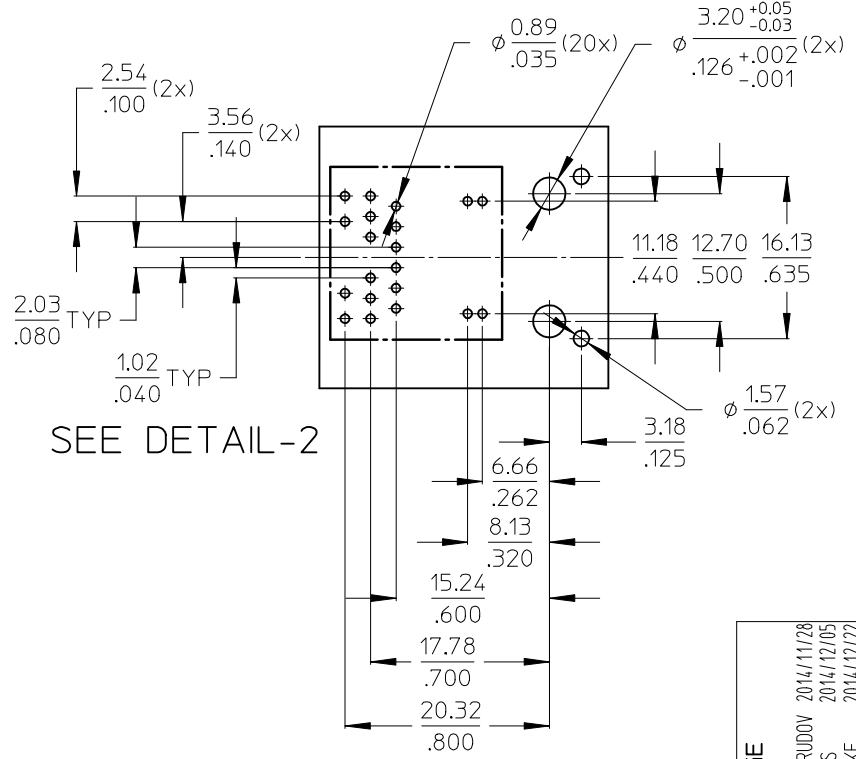


NOTES UPDATE IEC NO: DRWN:MMANGARUDOV 2014/11/28 CH'KD:DBYRNES 2014/12/05 APPR:SSSTE INKE 2014/12/22	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN		SCALE 2:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		4 PLACES ± --- ± ---	mm INCH	DRAWN BY JBADER	DATE 2014/04/25	TITLE GIGABIT MAGNETIC JACK POE PLUS ENABLED 1X1			
		3 PLACES ± --- ± .010		CHECKED BY MMANGARUDOV	DATE 2014/05/05	molex			
		2 PLACES ± 0.25 ± .020		APPROVED BY SSTE INKE	DATE 2014/06/11				
1 PLACE ± 0.5 ± ---		MATERIAL NO. SEE SHEET 3		DOCUMENT NO. SD-85789-401	SHEET NO. 1 OF 3				
0 PLACE ± ±	ANGULAR ± .5 °	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS							



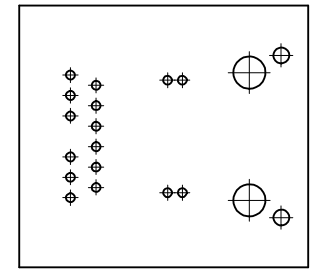
SUGGESTED PANEL CUTOUT

SUGGESTED BOARD LAYOUT - COMPONENT SIDE



DETAIL-2
SCALE 4:1

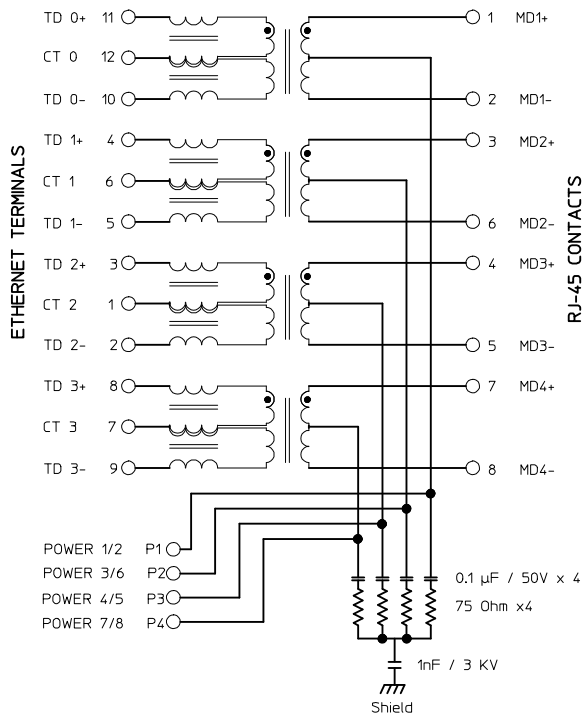
SUGGESTED BOARD LAYOUT
NON LED VERSION



NO CHANGE EC NO: DRW:MMANGARUDOV 2014/11/28 CHKD:DBYRNES 2014/12/05 APPR:SSSTEINKE 2014/12/22	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
	▽=0 ▽=0	mm INCH	MM/IN	2:1	METRIC		
		4 PLACES ± --- ± --- 3 PLACES ± --- ± .010 2 PLACES ± 0.25 ± .020 1 PLACE ± 0.5 ± --- 0 PLACE ± ±	DRAWN BY DATE JBADER 2014/04/25	TITLE	GIGABIT MAGNETIC JACK POE PLUS ENABLED 1X1		
		ANGULAR ± .5 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	CHECKED BY DATE MMANGARUDOV 2014/05/05				
	SEE SHEET 3	APPROVED BY DATE SSTEINKE 2014/06/11		DOCUMENT NO. SD-85789-401			
			SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

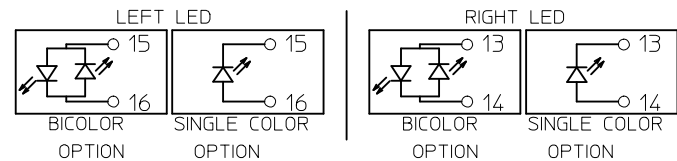
Electrical Specifications @25°C		
Operating temperature (-40°C to +85°C)		
Description	Value	
OCL POE+TRANSF. 20mA bias (-40°C to +85°C)	350μH min.	
OCL NONPOE TRANSF. 8mA bias (-40°C to +85°C)	350μH min.	
Turns Ratio	1CT:1CT	
Insertion Loss		
Frequency (MHz)	Limits (dB max.)	Typical Values (dB max.)
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



PART NUMBER	DIM-A-SHEET 1	LED1 POLARITY			LED2 POLARITY		
		PIN15	PIN16	COLOR	PIN13	PIN14	COLOR
85789-4008	2.50mm	-	+	GREEN	-	+	GREEN
		+	-	YELLOW	+	-	YELLOW
85789-4020	2.50mm	NON LED					

ADDITIONAL LED COLORS AND CONFIGURATIONS ARE AVAILABLE ON REQUEST



SEE TABLE FOR LED OPTIONS

BOM UPDATE EC NO: DRWIN:MANGARUDOV 2014/11/28 CHKD:DBYRNES 2014/12/05 APPR:SSSTEINKE 2014/12/22	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION																		
		<table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>3 PLACES</td> <td>± ---</td> <td>± .010</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.25</td> <td>± .020</td> </tr> <tr> <td>1 PLACE</td> <td>± 0.5</td> <td>± ---</td> </tr> <tr> <td>0 PLACE</td> <td>±</td> <td>±</td> </tr> </table>		mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± .010	2 PLACES	± 0.25	± .020	1 PLACE	± 0.5	± ---	0 PLACE	±	±	MM/IN	5:1	METRIC	
		mm	INCH																					
	4 PLACES	± ---	± ---																					
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1 PLACE	± 0.5	± ---																						
0 PLACE	±	±																						
ANGULAR ± .5 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY: JBADER CHECKED BY: MMANGARUDOV APPROVED BY: SSSTEINKE DATE: 2014/04/25 DATE: 2014/05/05 DATE: 2014/06/11	TITLE	GIGABIT MAGNETIC JACK POE PLUS ENABLED 1X1																					
	SEE BOM	MATERIAL NO.	DOCUMENT NO.	SHEET NO.																				
	SIZE: A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																						