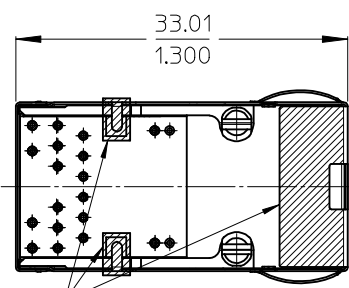
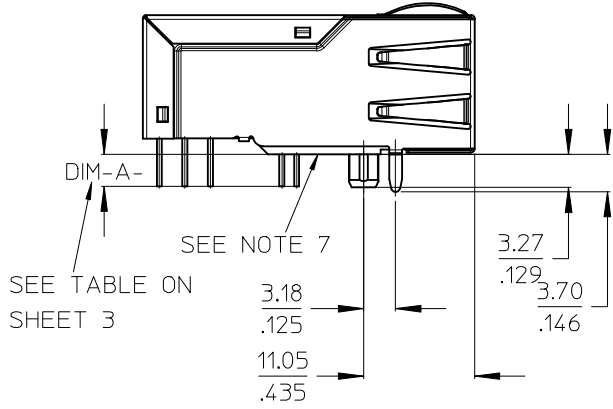
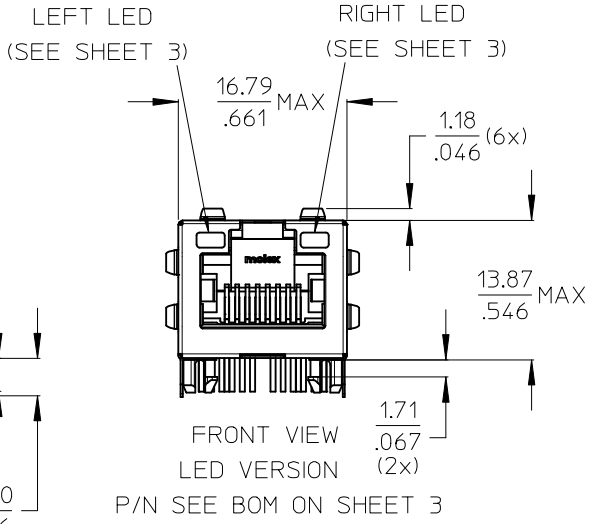
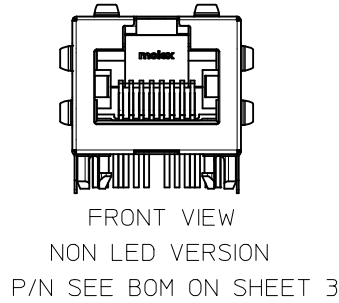
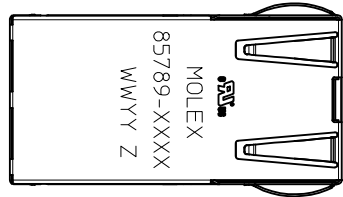
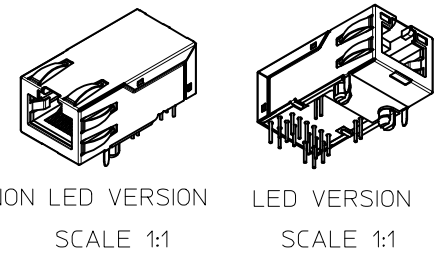


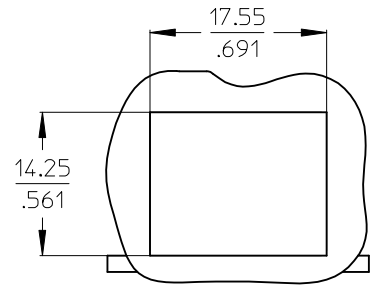
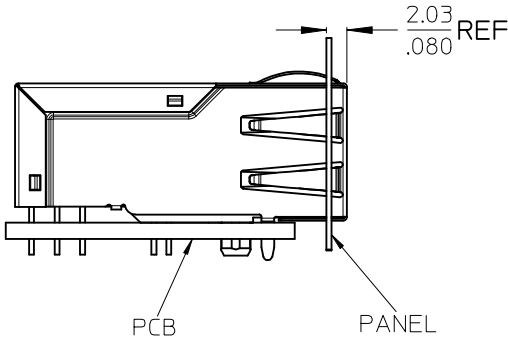
GIGABIT SINGLE PORT MAGNETIC JACK
PoE+ MAGNETICS ACC. TO IEEE802.3at
FOR PSE OR PD APPLICATIONS



- 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

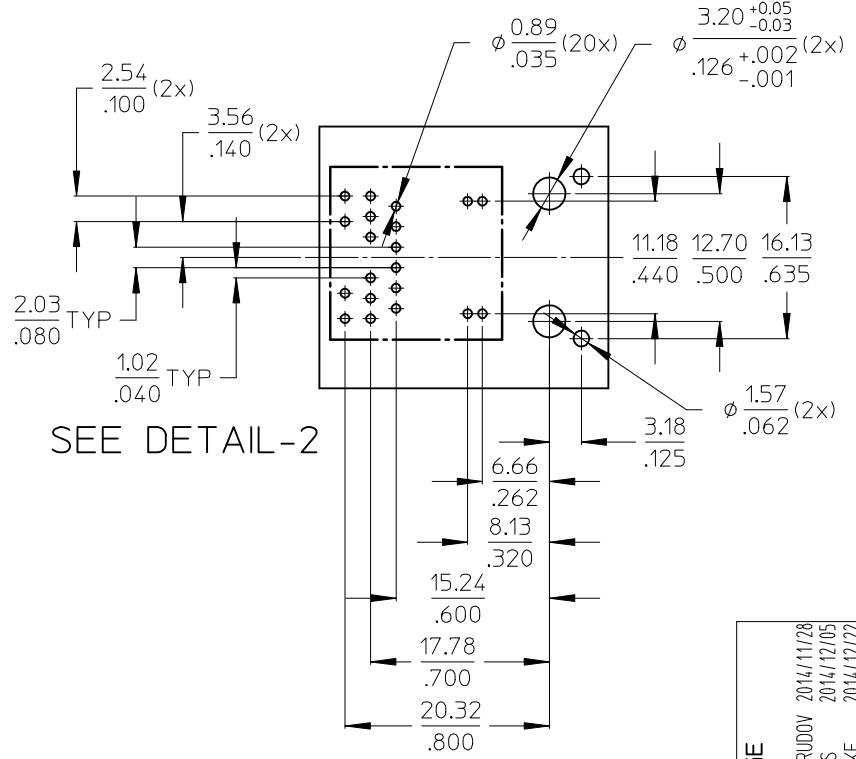


NOTES UPDATE IEC NO: DRWN:MMANGARUDOV 2014/11/28 CH'KD:DBYRNES 2014/12/05 APPR:SSSTE INKE 2014/12/22	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± .010 2 PLACES ± 0.25 ± .020 1 PLACE ± 0.5 ± --- 0 PLACE ± ± ANGULAR ± .5 °	DIMENSION STYLE MM/IN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

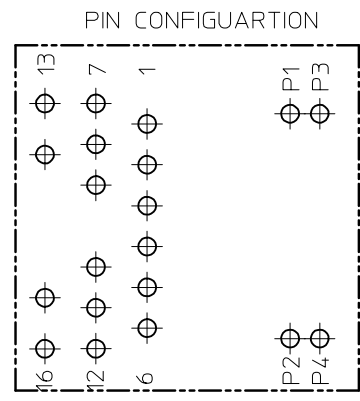


SUGGESTED PANEL CUTOUT

SUGGESTED BOARD LAYOUT - COMPONENT SIDE

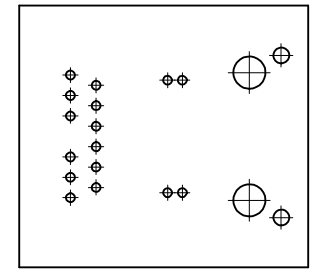


SEE DETAIL-2



DETAIL-2
SCALE 4:1

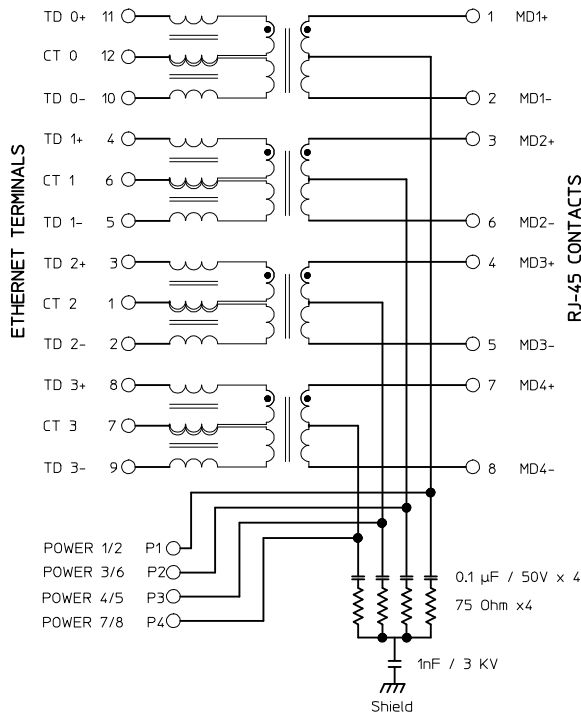
SUGGESTED BOARD LAYOUT
NON LED VERSION



NO CHANGE EC NO: DRW:MMANGARUDOV 2014/11/28 CHK:DJBRYNES 2014/12/05 APPR:SSSTEINKE 2014/12/22	REV DESCRIPTION	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	MATERIAL NO.						
		2 PLACES ± 0.25 ± .020		APPROVED BY SSSTEINKE	DATE 2014/06/11	DOCUMENT NO. SD-85789-401						
1 PLACE ± 0.5 ± ---		ANGULAR ± .5 °		SEE SHEET 3		SHEET NO. 2 OF 3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
0 PLACE ± ±		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A3								

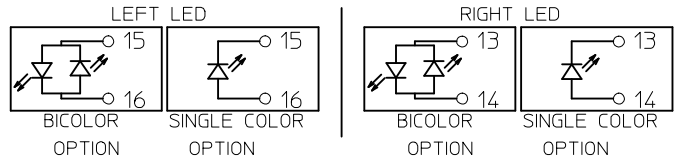
Electrical Specifications @25°C		
Operating temperature (-40°C to +85°C)		
Description	Value	
OCL POE+TRANSF. 20mA bias (-40°C to +85°C)	350μH min.	
OCL NONPOE TRANSF. 8mA bias (-40°C to +85°C)	350μH min.	
Turns Ratio	1CT:1CT	
Insertion Loss		
Frequency (MHz)	Limits (dB max.)	Typical Values (dB max.)
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 REV DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
	▽=0 ◻=0	mm INCH	MM/IN	5:1	METRIC		
		4 PLACES ± --- ± ---	DRAWN BY DATE	TITLE	GIGABIT MAGNETIC JACK POE PLUS ENABLED 1X1		
		3 PLACES ± --- ± .010	JBADER 2014/04/25				
		2 PLACES ± 0.25 ± .020	CHECKED BY DATE				
	1 PLACE ± 0.5 ± ---	MMANGARUDOV 2014/05/05					
	0 PLACE ± ±	APPROVED BY DATE		MATERIAL NO. DOCUMENT NO. SHEET NO.			
		ANGULAR ± .5 °	SIZE	SEE BOM SD-85789-401 3 OF 3			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			