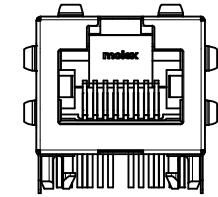
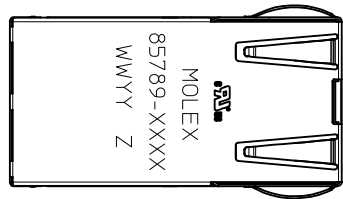
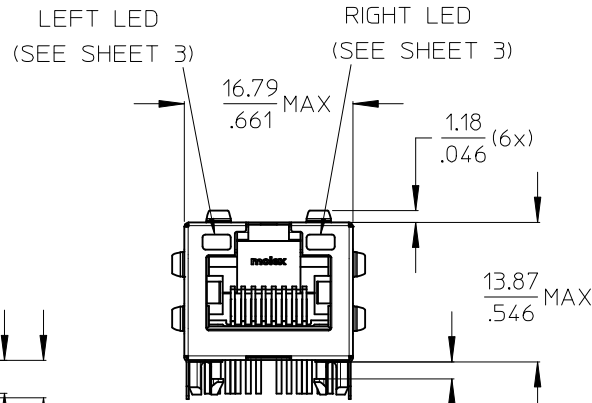


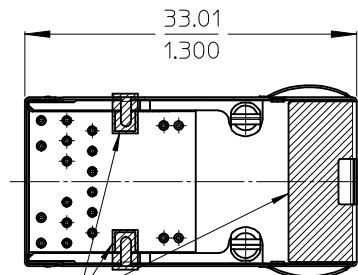
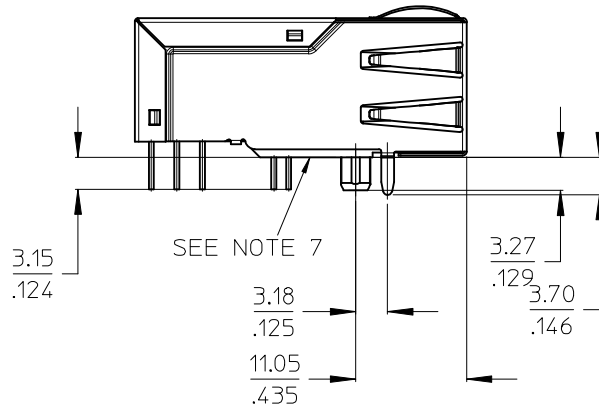
GIGABIT SINGLE PORT MAGNETIC JACK
PoE+ MAGNETICS ACC. TO IEEE802.3at
FOR PSE OR PD APPLICATIONS



FRONT VIEW
 NON LED VERSION
 P/N 85789-1020



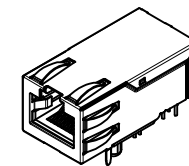
FRONT VIEW
 LED VERSION
 P/N SEE BOM ON SHEET 3



SEE NOTE 9

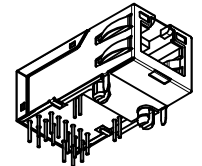
NOTES:

- 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 - SHIELD AND SHIELD LATCHES: AVOID TO ROUTE TRACES OR TO PLACE ANY VIAS OR PADS IN THIS AREA.
- 10 - INSCRIPTION MARKED BY LASER:
UL LOGO
1st : MOLEX
2st : P/N (SEE BOM)
3rd : DATE CODE(WEEK/YEAR)
Z=> MANUFACTURER CODE



NON LED VERSION

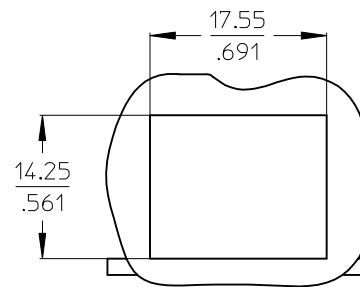
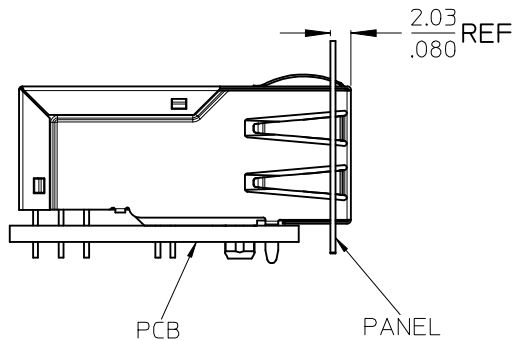
SCALE 1:1



LED VERSION

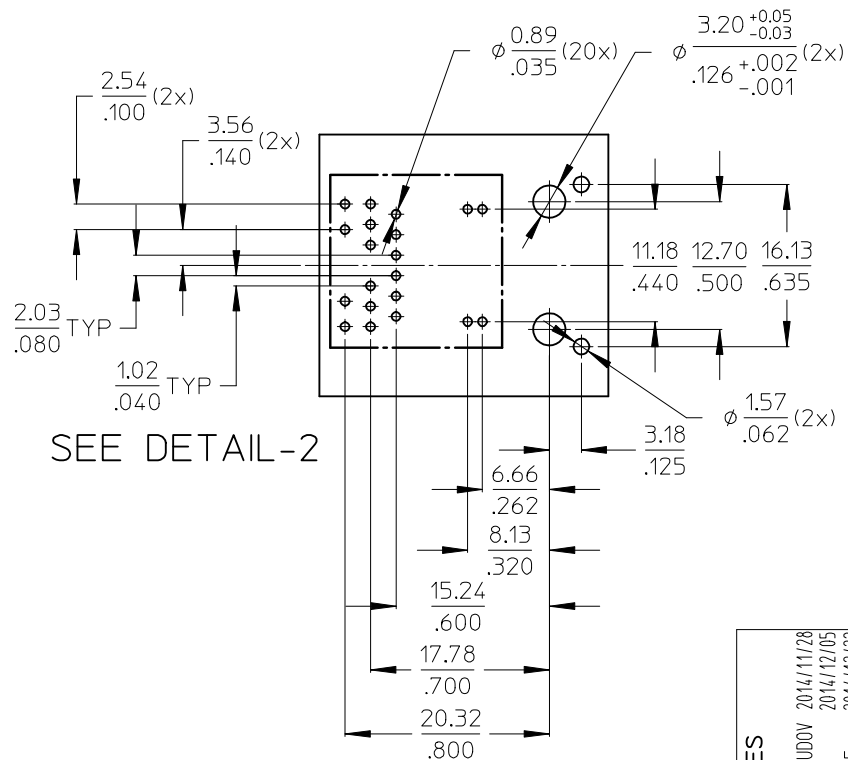
SCALE 1:1

NOTES UPDATE				QUALITY SYMBOLS		GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION		
EC NO:	DATE	DRWN:	CHKD:	APPR:	DESCRIPTION	mm	INCH	MM/IN	DATE	2:1	METRIC			
D	2014/11/28	DRWN:MANGARUDOV	2014/11/28	CHKD:BYRNES	2014/12/05	4 PLACES	± ---	± ---	JBADER	2010/01/14	GIGABIT MAGNETIC JACK POE PLUS ENABLED 1X1			
	2014/12/05	CHKD:BYRNES	2014/12/05	APPR:SSTE INKE	2014/12/22	3 PLACES	± ---	± .010	CHECKED BY	DATE				
						2 PLACES	± 0.25	± .020	MMANGARUDOV	2010/01/14	molex			
						1 PLACE	± 0.5	± ---	APPROVED BY	DATE				
						0 PLACE	±	±	SSTE INKE	2010/03/09			SD-85789-001	
					ANGULAR ± .5 °		MATERIAL NO.		DOCUMENT NO.		SHEET NO.			
					DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SEE SHEET 3/4				1 OF 4		
								SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

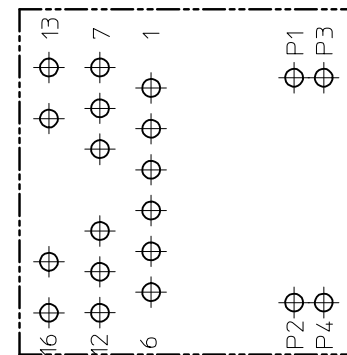


SUGGESTED PANEL CUTOUT

SUGGESTED BOARD LAYOUT - COMPONENT SIDE



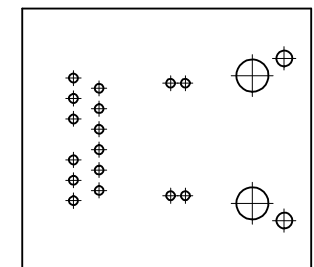
PIN CONFIGURATION



DETAIL-2

SCALE 4:1

SUGGESTED BOARD LAYOUT
NON LED VERSION



NO CHANGES	EC NO: D	DESCRIPTION REV	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN		SCALE 2:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION 		
						DRAWN BY JBADER	DATE 2010/01/14	TITLE GIGABIT MAGNETIC JACK POE PLUS ENABLED 1X1				
						CHECKED BY MMANGARUDOV	DATE 2010/01/14					
						APPROVED BY SSTEINKE	DATE 2010/03/09	molex				
				ANGULAR ± .5 °		MATERIAL NO.						
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE SHEET 3/4		SD-85789-001			2 OF 4	
						SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

F

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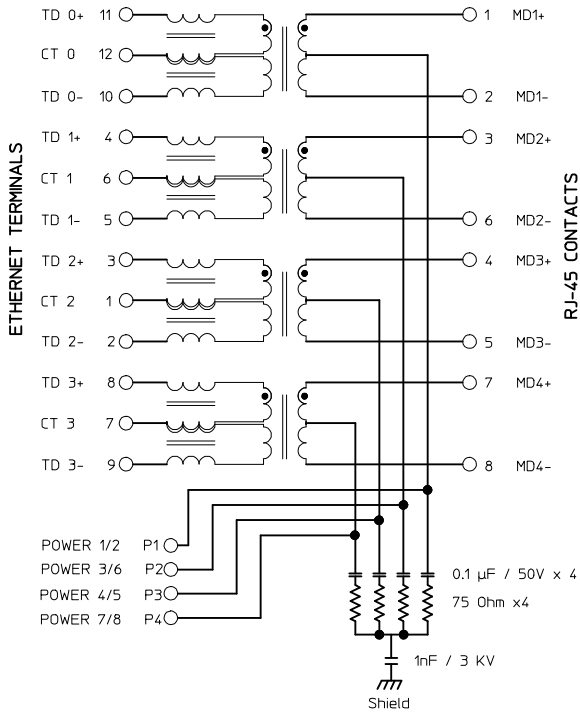
C

B

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Electrical Specifications @25°C		
Operating temperature (0°C to +70°C)		
Description	Value	
OCL POE+TRANSF. 20mA bias (0°C to +70°C)	350μH min.	
OCL NONPOE TRANSF. 8mA bias (0°C to +70°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	

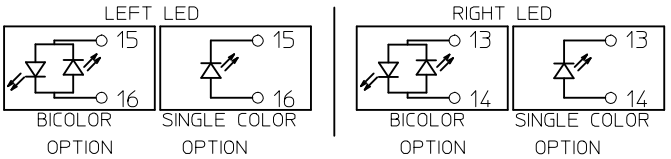
PHY SIDE / PCB SIDE ETHERNET MAGNETICS WIRE SIDE / RJ45



PART NUMBER	LED1 POLARITY			LED2 POLARITY		
	LEFT LED			RIGHT LED		
	PIN15	PIN16	COLOR	PIN13	PIN14	COLOR
85789-1001	-	+	GREEN	-	+	GREEN
85789-1003	-	+	GREEN	-	+	GREEN
85789-1006	-	+	GREEN	-	+	YELLOW
85789-1007	-	+	GREEN	-	+	GREEN
85789-1012	-	+	YELLOW	-	+	GREEN
85789-1013	-	+	YELLOW	-	+	YELLOW
85789-1014	-	+	YELLOW	-	+	GREEN
85789-1015	-	+	YELLOW	-	+	GREEN
85789-1017	-	+	GREEN	-	+	YELLOW
85789-1020	NON LED					

ADDITIONAL LED COLORS AND CONFIGURATIONS
AVAILABLE ON REQUEST

SEE TABLE FOR
LED OPTIONS



NO CHANGES EC NO: DRWN:MANGARUDOV 2014/11/28 CHKD:BYRNES 2014/12/05 APPR:SSTEINKE 2014/12/22	DESCRIPTION	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN		SCALE 5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
				mm	INCH	DRAWN BY JBADER	DATE 2010/01/14	TITLE GIGABIT MAGNETIC JACK POE PLUS ENABLED 1X1				
			4 PLACES	± ---	± ---	CHECKED BY	DATE					
			3 PLACES	± ---	± .010	MMANGARUDOV	2010/01/14					
			2 PLACES	± 0.25	± .020	APPROVED BY	DATE	molex				
			1 PLACE	± 0.5	± ---	SSTEINKE	2010/03/09					
			0 PLACE	±	±	MATERIAL NO.	DOCUMENT NO.				SD-85789-001	SHEET NO. 3 OF 4
			ANGULAR ± .5 °		SEE BOM							
			DRAFT WHERE APPLICABLE		SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					
			MUST REMAIN WITHIN DIMENSIONS									

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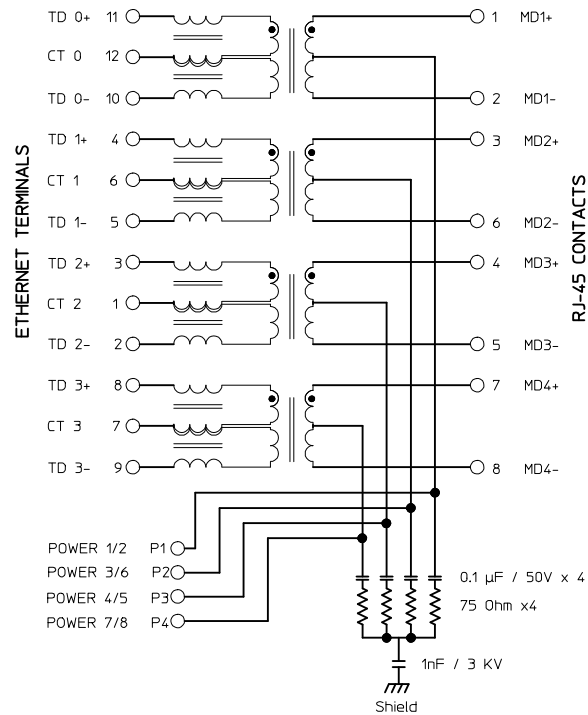
C

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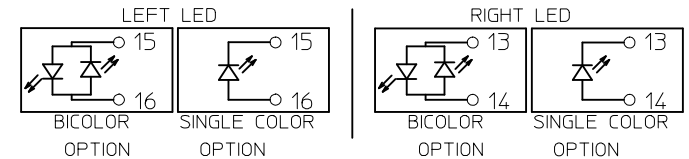
Electrical Specifications @25°C		
Operating temperature (-40°C to +85°C)		
Description	Value	
OCL POE+TRANSF. 20mA bias (-40°C to +85°C)	350uH min.	
OCL NONPOE TRANSF. 8mA bias (-40°C to +85°C)	350uH min.	
Turns Ratio	1CT:1CT	
Insertion Loss		
Frequency (MHz)	Limits (dB max.)	Typical Values (dB max.)
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	LED1 POLARITY			LED2 POLARITY		
	LEFT LED			RIGHT LED		
	PIN15	PIN16	COLOR	PIN13	PIN14	COLOR
85789-3006	-	+	GREEN	-	+	YELLOW
85789-3016	-	+	GREEN	+	-	GREEN
	+	-	YELLOW			

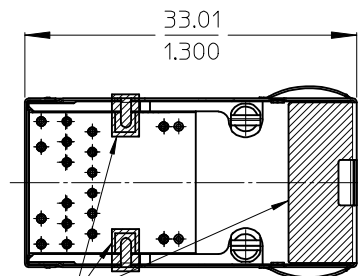
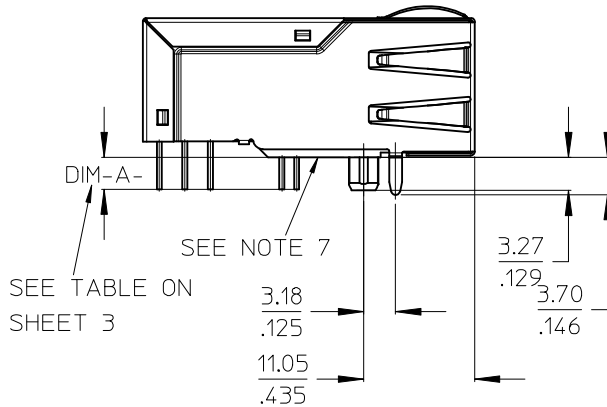
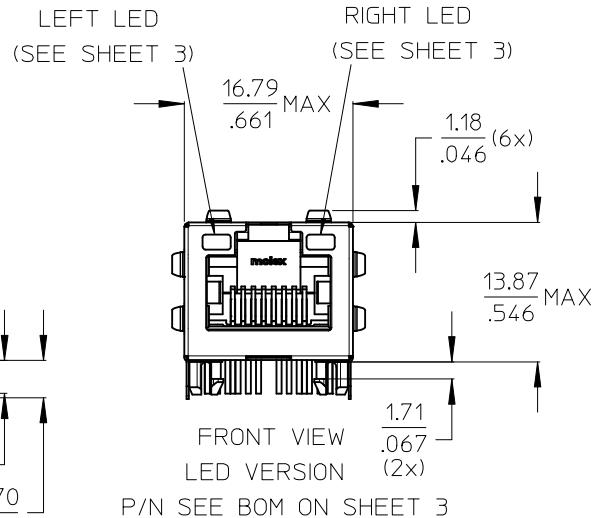
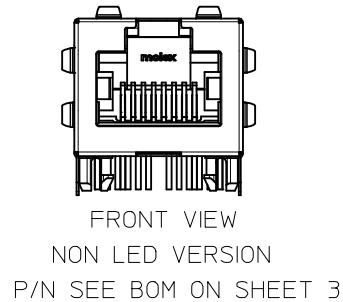
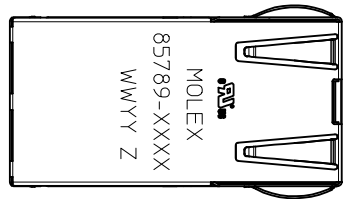
ADDITIONAL LED COLORS AND CONFIGURATIONS
AVAILABLE ON REQUEST



SEE TABLE FOR LED OPTIONS

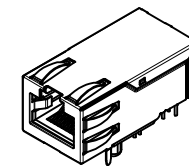
BOM CHANGED EC NO: DRAWN:MANGARUDOV 2014/11/28 CHKD:DBYRNES 2014/12/05 APPR:SSTEINKE 2014/12/22	QUALITY SYMBOLS ▽=0 C=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN		SCALE 5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY JBADER	DATE 2010/01/14	TITLE GIGABIT MAGNETIC JACK POE PLUS ENABLED 1X1			
		4 PLACES	± ---	± ---	CHECKED BY	DATE				
		3 PLACES	± ---	± .010	MMANGARUDOV	2010/01/14	molex			
		2 PLACES	± 0.25	± .020	APPROVED BY	DATE				
		1 PLACE	± 0.5	± ---	SSTEINKE	2010/03/09				
		0 PLACE	±	±	MATERIAL NO.					
		ANGULAR ± .5 °		SEE BOM		SD-85789-001		4 OF 4		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

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



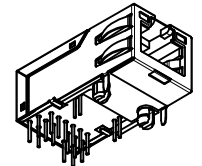
NOTES:

- 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 - SHIELD AND SHIELD LATCHES: AVOID TO ROUTE
TRACES OR TO PLACE ANY VIAS OR PADS IN THIS AREA.
- 10 - INSCRIPTION MARKED BY LASER:
UL LOGO
1st : MOLEX
2st : P/N (SEE BOM)
3rd : DATE CODE(WEEK/YEAR)
Z=> MANUFACTURER CODE



NON LED VERSION

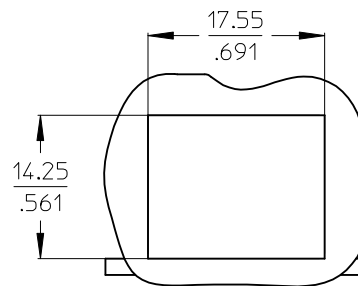
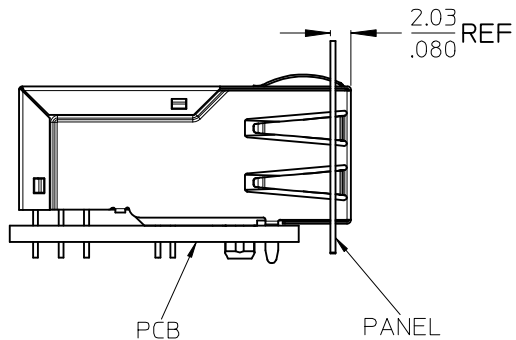
SCALE 1:1



LED VERSION

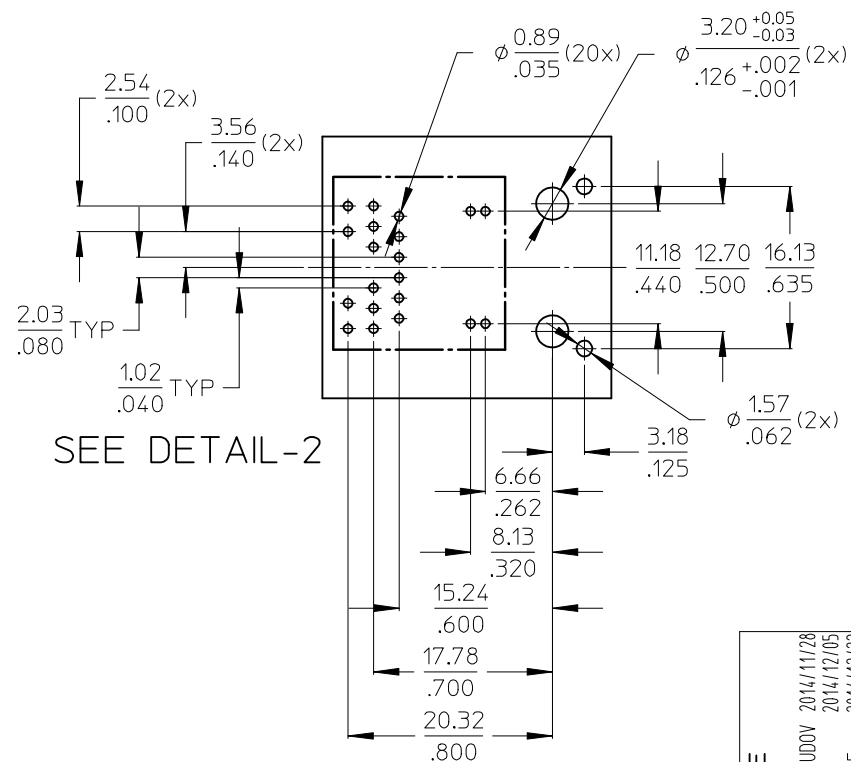
SCALE 1:1

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

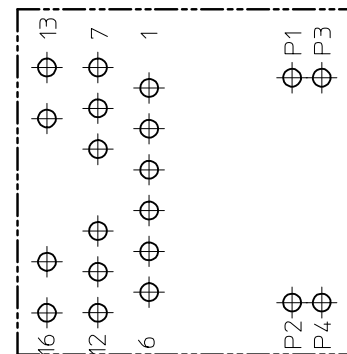


SUGGESTED PANEL CUTOUT

SUGGESTED BOARD LAYOUT - COMPONENT SIDE

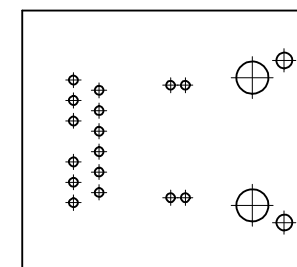


PIN CONFIGURATION



DETAIL-2
SCALE 4:1

SUGGESTED BOARD LAYOUT
NON LED VERSION



NO CHANGE EC NO: B	DESCRIPTION REV	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN		SCALE 2:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION 		
					DRAWN BY JBADER	DATE 2014/04/25	TITLE GIGABIT MAGNETIC JACK POE PLUS ENABLED 1X1				
					CHECKED BY MMANGARUDOV	DATE 2014/05/05					
					APPROVED BY SSTEINKE	DATE 2014/06/11					
			ANGULAR ± .5 °		MATERIAL NO.		DOCUMENT NO.		SHEET NO.		
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE SHEET 3		SD-85789-401		2 OF 3		
					THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						

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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

ETHERNET TERMINALS

TD 0+ 11

CT 0 12

TD 0- 10

TD 1+ 4

CT 1 6

TD 1- 5

TD 2+ 3

CT 2 1

TD 2- 2

TD 3+ 8

CT 3 7

TD 3- 9

1 MD1+

2 MD1-

3 MD2+

6 MD2-

4 MD3+

5 MD3-

7 MD4+

8 MD4-

POWER 1/2 P1

POWER 3/6 P2

POWER 4/5 P3

POWER 7/8 P4

0.1 μF / 50V x 4

75 Ohm x4

1nF / 3 KV

Shield

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

ADDITIONAL LED COLORS AND CONFIGURATIONS ARE AVAILABLE ON REQUEST

LEFT LED

BICOLOR OPTION

SINGLE COLOR OPTION

RIGHT LED

BICOLOR OPTION

SINGLE COLOR OPTION

SEE TABLE FOR LED OPTIONS

BOM UPDATE

EC NO: DRVN:MANGARUDOV 2014/11/28

CHKD:DBYRNES 2014/12/05

APPR:SSTEINKE 2014/12/22

REV

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 °

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE

MM/IN

DRAWN BY

DATE

CHECKED BY

DATE

APPROVED BY

DATE

MATERIAL NO.

JBADER 2014/04/25

MMANGARUDOV 2014/05/05

SSTEINKE 2014/06/11

SEE BOM

SCALE

5:1

DESIGN UNITS

METRIC

THIRD ANGLE PROJECTION

TITLE

GIGABIT MAGNETIC JACK POE PLUS ENABLED 1X1

molex

SD-85789-401

3 OF 3

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Rev E1 2012/01/25

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Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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