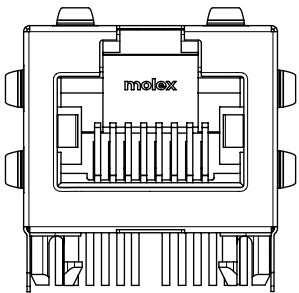
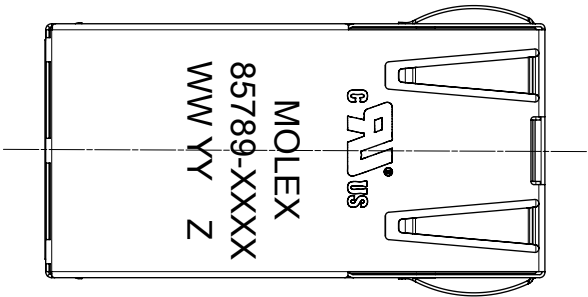
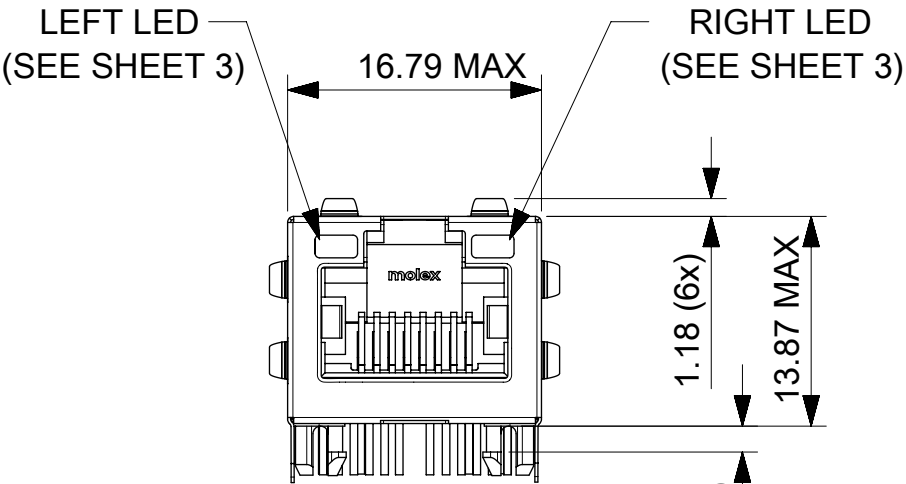
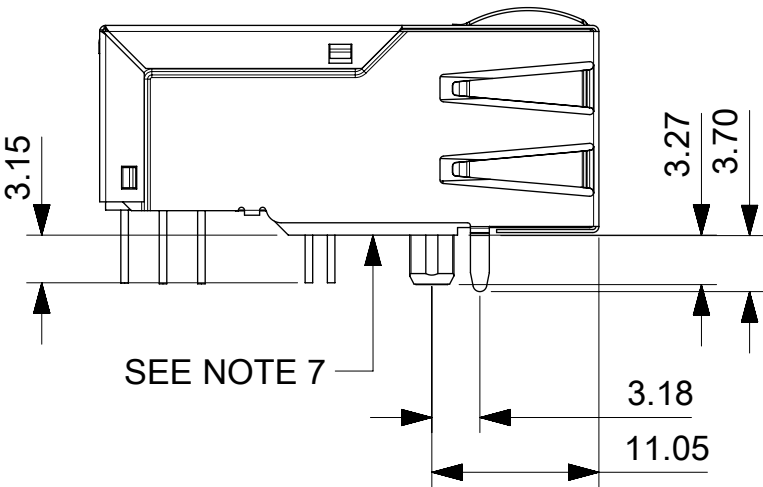


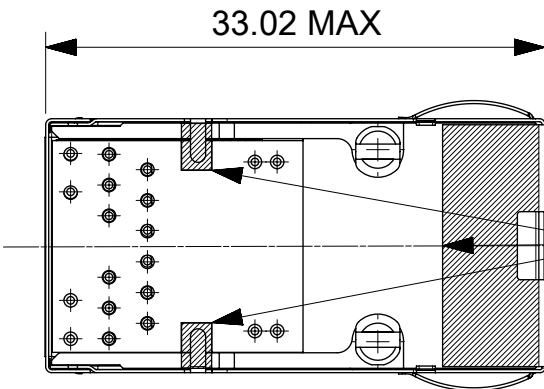
GIGABIT SINGLE PORT MAGNETIC JACK
PoE+ MAGNETICS ACC. TO IEEE802.3at
FOR PSE OR PD APPLICATIONS



FRONT VIEW
NON LED VERSION
P/N 85789-1020

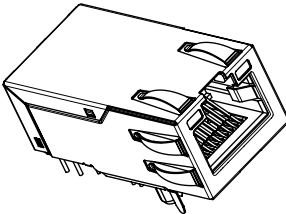
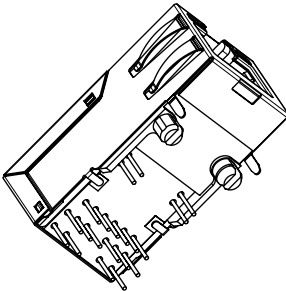


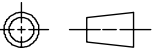
FRONT VIEW
LED VERSION
P/N SEE BOM ON SHEET 3

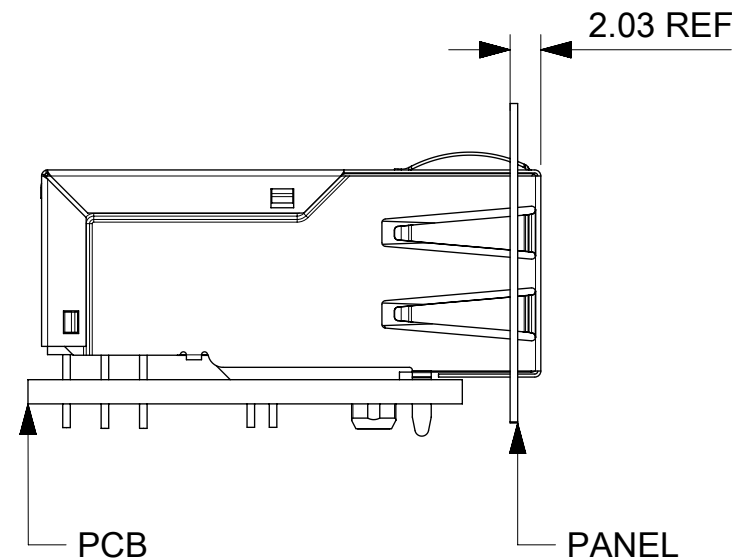


- NOTES:
- 1 - SHIELD MATERIAL: STAINLESS STEEL
(GROUND PINS ARE SOLDER DIPPED)
 - 2 - PLASTIC MATERIAL: PBT, BLACK, UL 94V-0
 - 3 - RJ45 TERMINALS MATERIAL: COPPER ALLOY
CONTACT PLATING: 0.76 MICROMETER GOLD
OVER 1.9 MICROMETER NICKEL
PHY TERMINALS: TIN PLATED
 - 4 - MATING INTERFACE ACCORDING TO IEC 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

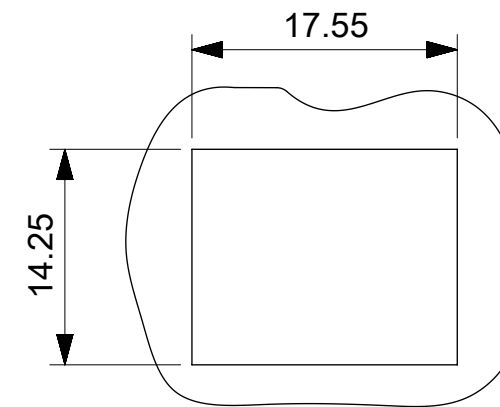
SCALE 1:1



THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																	
EC DESCRIPTION EC NO: 102890 DRWN: MFURKEL CHK'D: RSILLER APPR: RSILLER	2015/09/28 2016/02/23 2016/02/23	QUALITY SYMBOLS F = 0 E = 0 E = 0 ▽ = 0 C = 0 ☒ = 0 ■ = 0 ▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED) ANGULAR TOL ± 0.5 ° 4 PLACES ± 3 PLACES ± 2 PLACES ± 0.25 1 PLACE ± 0.5 0 PLACES ± DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DIMENSION UNITS		SCALE		molex									
				mm		2:1											
								DRWN BY		DATE		GIGABIT MAGNETIC JACK POE PLUS ENABLED					
								MFURKEL		2015/06/15							
								CHK'D BY		DATE							
								APPR BY		DATE		PRODUCT CUSTOMER DRAWING					
								RSILLER		2016/02/23							
								DRAWING SIZE		THIRD ANGLE PROJECTION		SERIES		MATERIAL NUMBER		CUSTOMER	
								A3				85789		SEE BOM/SHEET 3/4			
												DOCUMENT NUMBER			DOC TYPE	DOC PART	SHEET NUMBER
								857891001			PSD	000	1 OF 4				

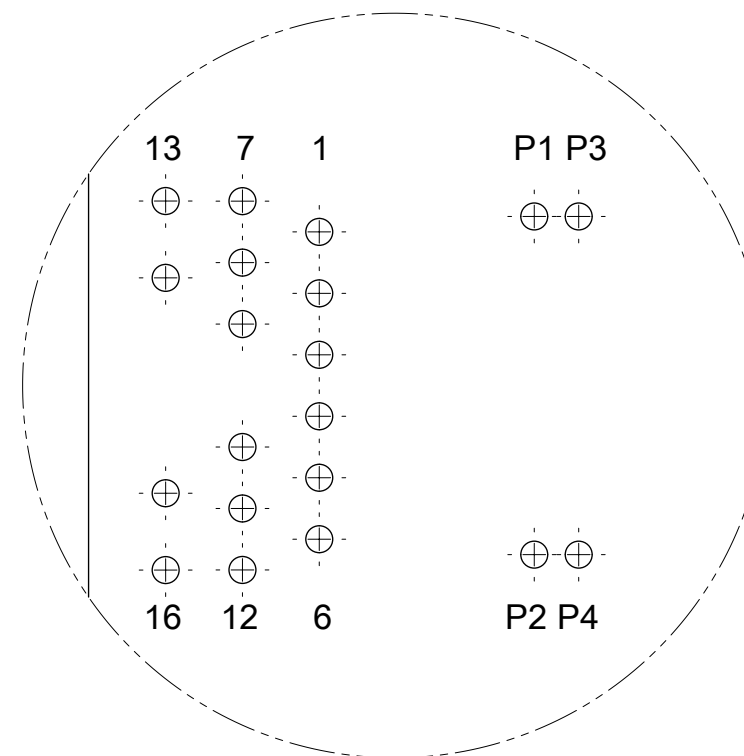


SUGGESTED PANEL CUTOUT

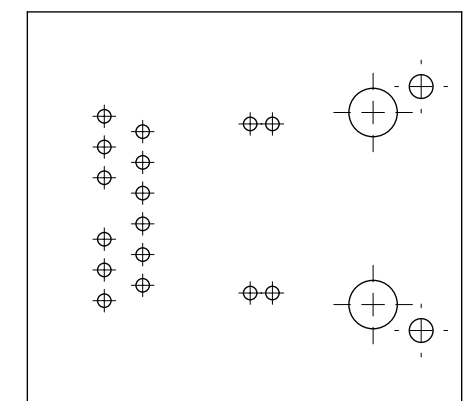


DETAIL X SCALE 4:1

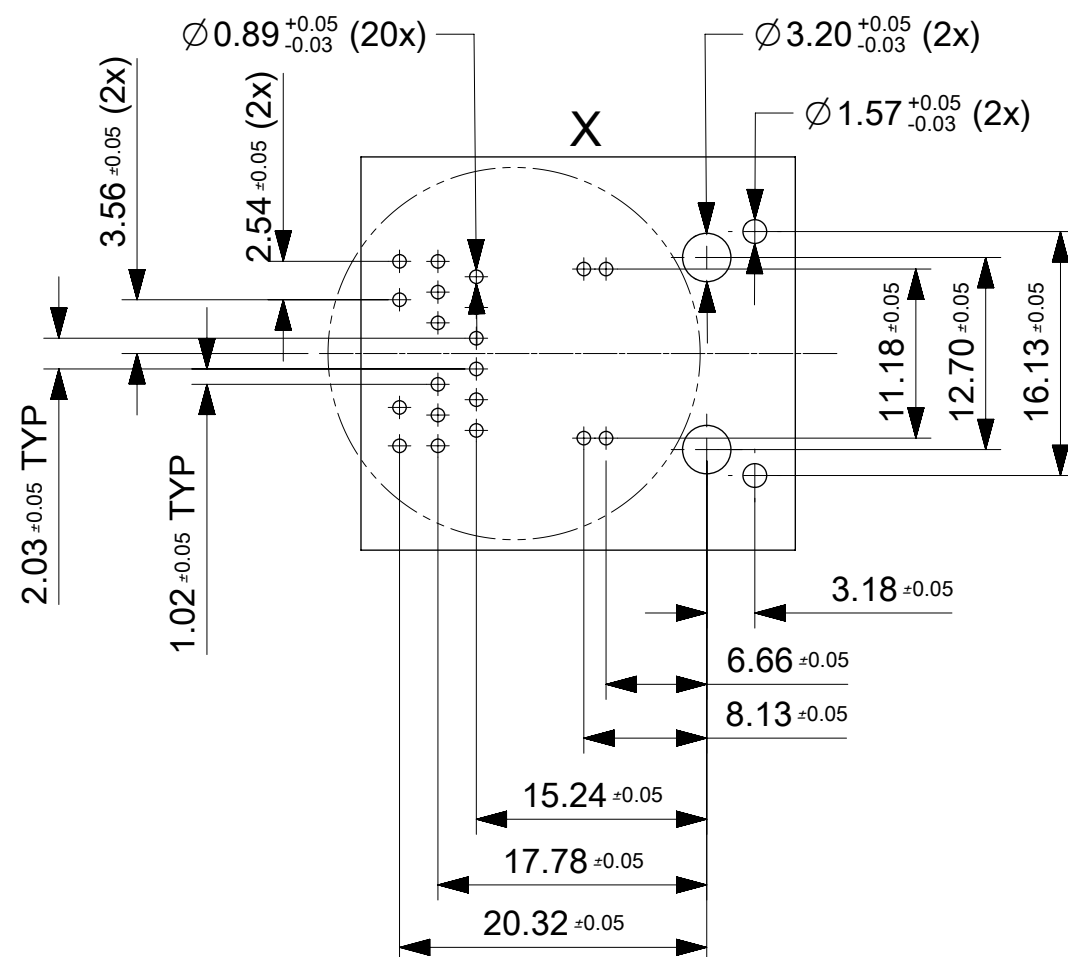
PIN CONFIGURATION

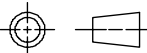


SUGGESTED BOARD LAYOUT FOR NON LED VERSION

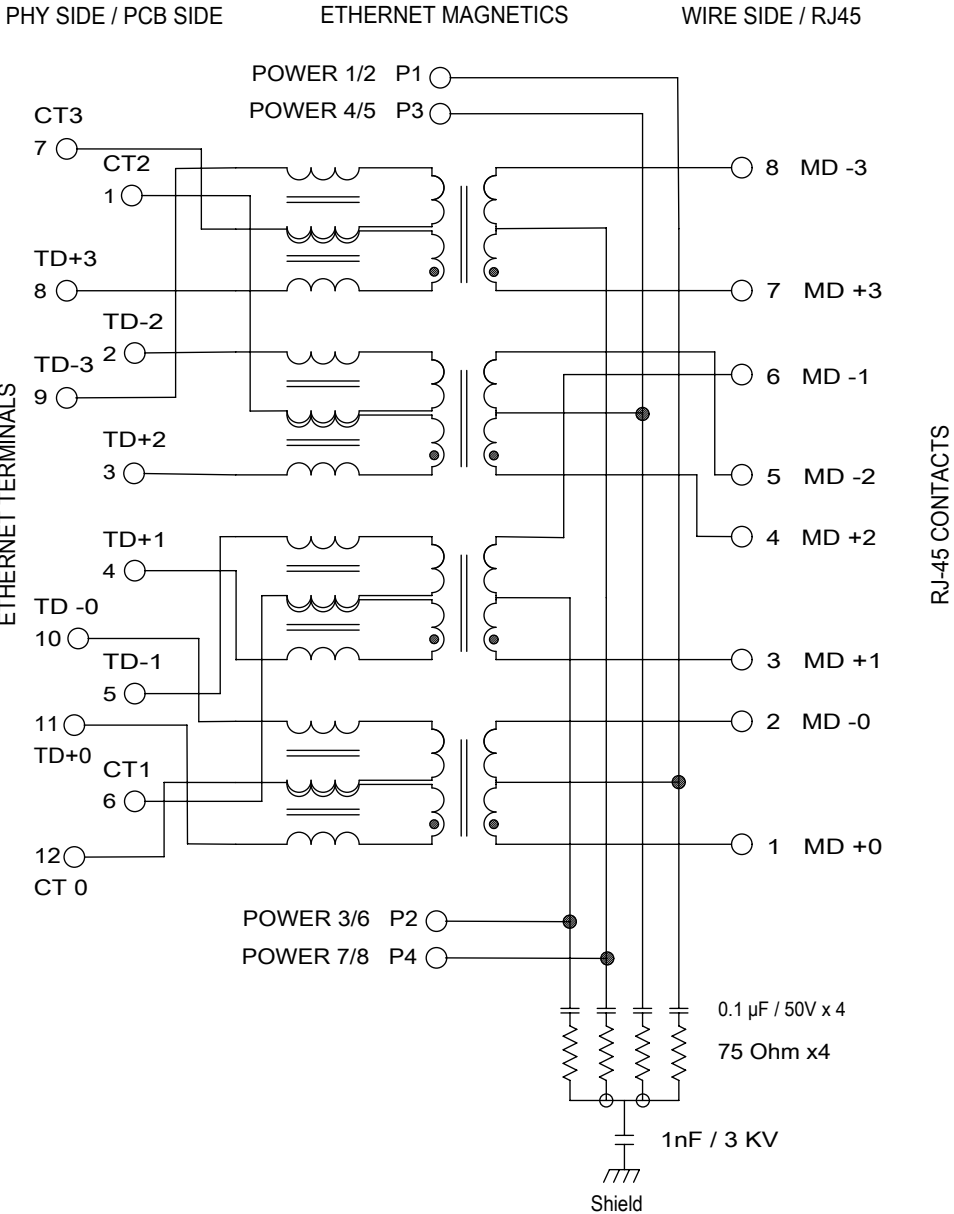


SUGGESTED BOARD LAYOUT- COMPONENT SIDE



THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																		
EC DESCRIPTION EC NO: 102890 DRWN: MFURKEL CHK'D: RSILLER APPR: RSILLER		QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION UNITS		SCALE		molex									
					mm		2:1											
					DRWN BY		DATE		GIGABIT MAGNETIC JACK POE PLUS ENABLED									
			MFURKEL		2015/06/15													
			CHK'D BY		DATE													
			APPR BY		DATE		PRODUCT CUSTOMER DRAWING											
RSILLER		2016/02/23		SERIES		MATERIAL NUMBER		CUSTOMER										
DRAWING SIZE		THIRD ANGLE PROJECTION		85789		SEE BOM/SHEET 3/4												
A3				DOCUMENT NUMBER		857891001		DOC TYPE		DOC PART		SHEET NUMBER						
F		REV	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		 = 0		 = 0		 = 0		 = 0		 = 0		 = 0		 = 0	

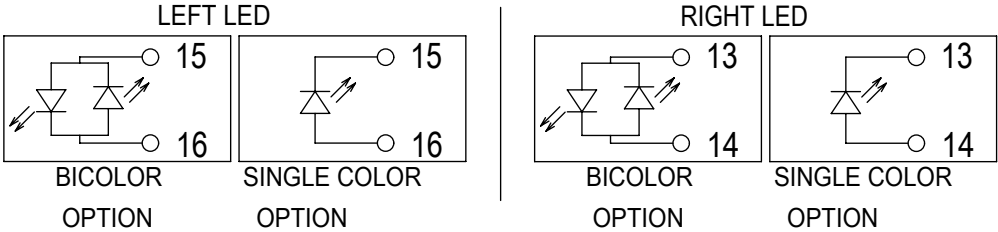
Electrical Specifications @25°C		
Operating temperature (0°C to +70°C)		
Description	VALUE	
OCL POE+TRANSF. 20mA bias (0°C to +70°C)	350µH min.	
OCL NONPOE TRANSF. 8mA bias (0°C to +70°C)	350µH min.	
Turns Ratio	1CT:1CT	
Insertion Loss		
Frequency (MHz)	Limits (dB max.)	Typical Values (dB max.)
1.0-9.9 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	



PART NUMBER	LED1 POLARITY			LED2 POLARITY		
	LEFT LED			RIGHT LED		
	PIN15	PIN16	COLOR	PIN13	PIN14	COLOR
857891001	-	+	GRN	-	+	GRN
857891003	-	+	GRN	-	+	GRN
857891006	-	+	GRN	-	+	YW
857891007	-	+	GRN	-	+	GRN
857891012	-	+	YW	-	+	GRN
857891013	-	+	YW	-	+	YW
857891014	-	+	YW	-	+	GRN
857891015	-	+	YW	-	+	GRN
857891017	-	+	GRN	-	+	YW
857891020	NON LED					

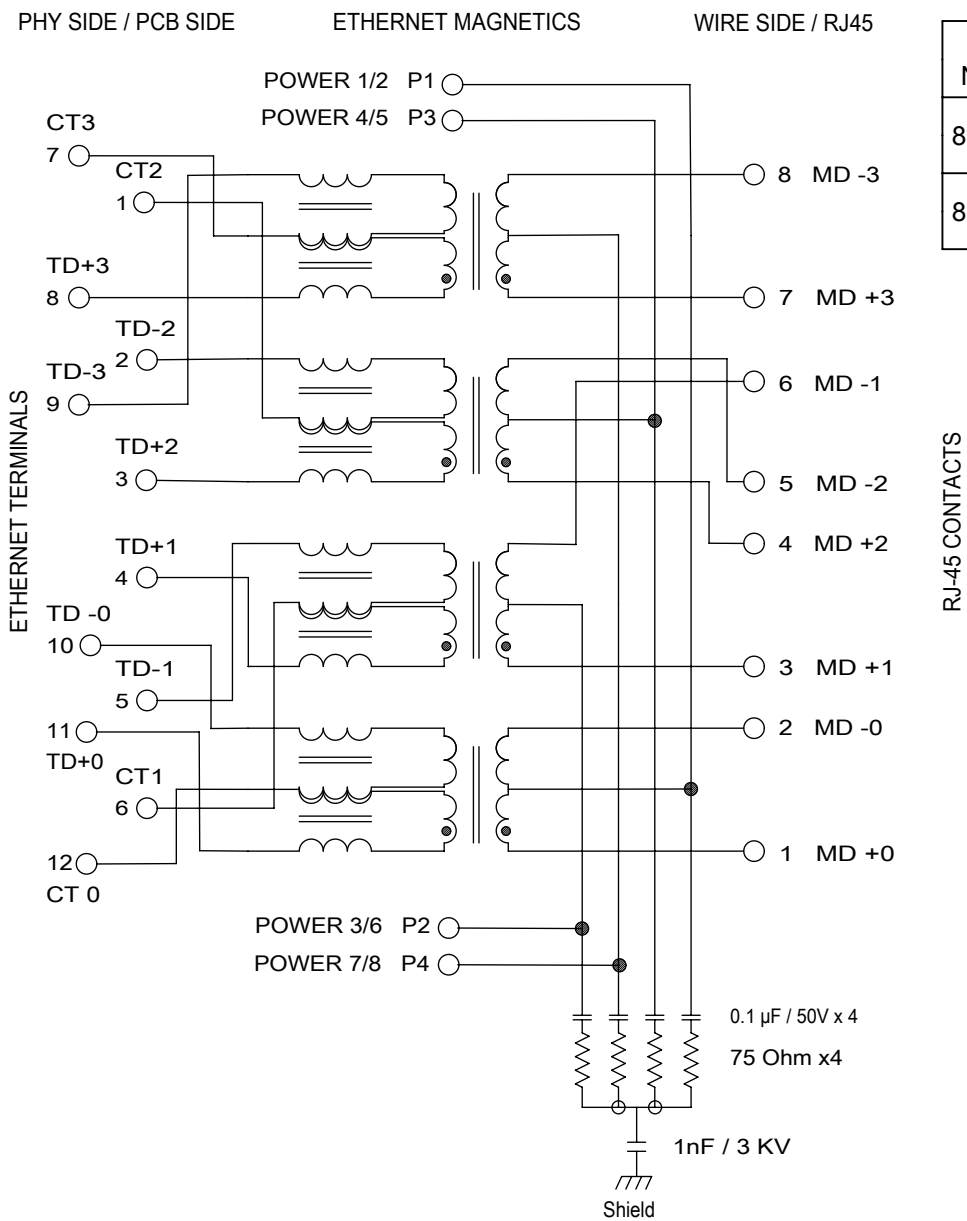
ADDITIONAL LED COLORS AND CONFIGURATIONS
ARE AVAILABLE ON REQUEST

SEE TABLE FOR
LED OPTIONS



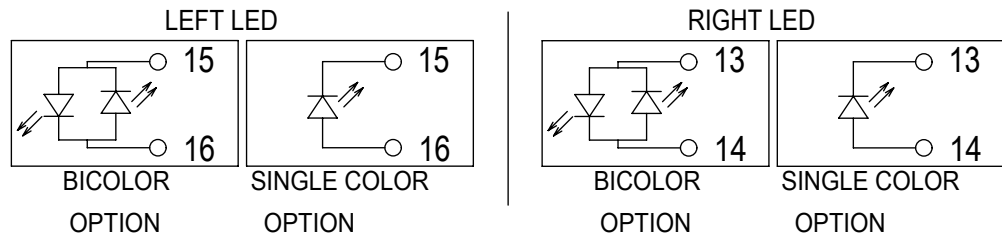
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION											
EC DESCRIPTION EC NO: 102890 DRWN: MFURKEL CHK'D: RSILLER APPR: RSILLER	QUALITY SYMBOLS ▽ = 0 ▽ = 0 ▽ = 0 ▼ = 0 ▽ = 0 ☒ = 0 ■ = 0 ▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED) ANGULAR TOL ± 0.5 ° 4 PLACES ± 3 PLACES ± 2 PLACES ± 0.25 1 PLACE ± 0.5 0 PLACES ±		DIMENSION UNITS mm	SCALE 5:1	molex GIGABIT MAGNETIC JACK POE PLUS ENABLED					
				DRWN BY MFURKEL	DATE 2015/06/15						
				CHK'D BY	DATE						
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPR BY RSILLER	DATE 2016/02/23	PRODUCT CUSTOMER DRAWING					
				DRAWING SIZE A3	THIRD ANGLE PROJECTION	SERIES 85789	MATERIAL NUMBER SEE BOM/SHEET 3/4	CUSTOMER			
						DOCUMENT NUMBER 857891001	DOC TYPE PSD	DOC PART 000	SHEET NUMBER 3 OF 4		

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.	
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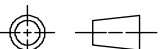


PART NUMBER	LED1 POLARITY			LED2 POLARITY		
	LEFT LED			RIGHT LED		
	PIN15	PIN16	COLOR	PIN13	PIN14	COLOR
857893006	-	+	GRN	-	+	YW
857893016	-	+	GRN	-	+	GRN
	+	-	YW			

ADDITIONAL LED COLORS AND CONFIGURATIONS
ARE AVAILABLE ON REQUEST



SEE TABLE FOR LED OPTIONS

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EC DESCRIPTION EC NO: 102890 DRWN: MFURKEL CHK'D: RSILLER APPR: RSILLER		2015/09/28 2016/02/23 2016/02/23 2016/02/23	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION UNITS	SCALE	molex GIGABIT MAGNETIC JACK POE PLUS ENABLED									
			 = 0		mm	5:1										
			 = 0		DRWN BY DATE											
			 = 0		MFURKEL 2015/06/15											
			 = 0		CHK'D BY DATE											
			 = 0	APPR BY DATE												
			 = 0	RSILLER 2016/02/23												
			 = 0	DRAWING SIZE THIRD ANGLE PROJECTION												
			F		REV	 = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	A3		SERIES		MATERIAL NUMBER		CUSTOMER		
						85789				SEE BOM/SHEET 3/4						
DOCUMENT NUMBER		DOC TYPE				DOC PART				SHEET NUMBER						
			 = 0				857891001		PSD		000		4 OF 4			

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