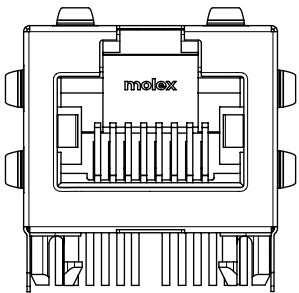
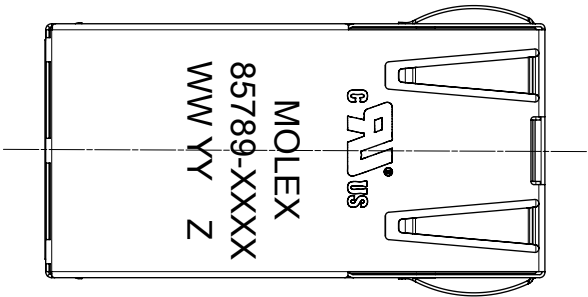
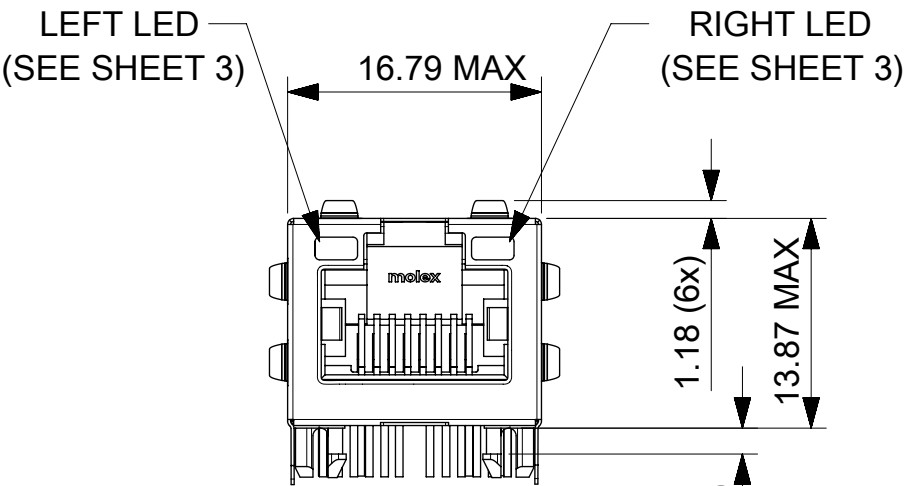
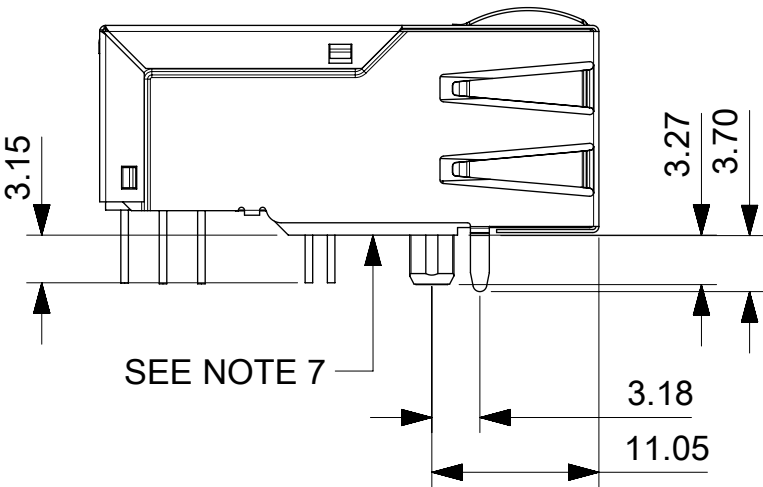


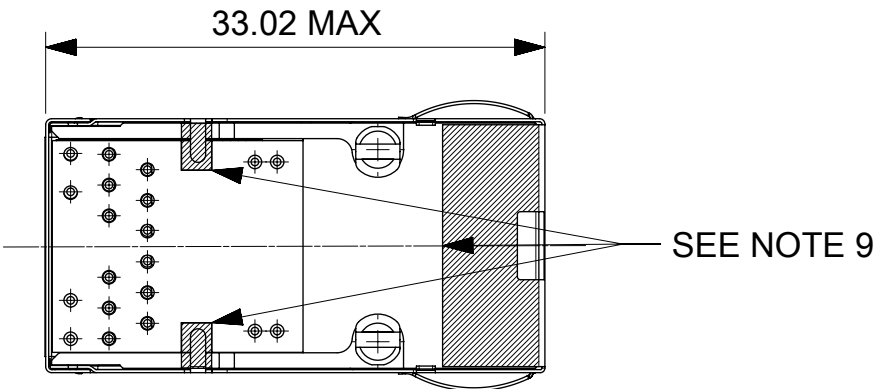
GIGABIT SINGLE PORT MAGNETIC JACK
PoE+ MAGNETICS ACC. TO IEEE802.3at
FOR PSE OR PD APPLICATIONS



FRONT VIEW
NON LED VERSION
P/N 85789-1020

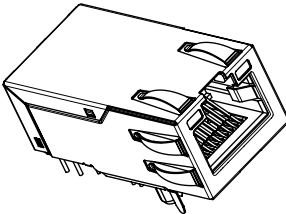
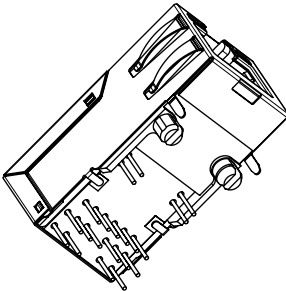


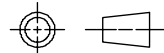
FRONT VIEW
LED VERSION
P/N SEE BOM ON SHEET 3

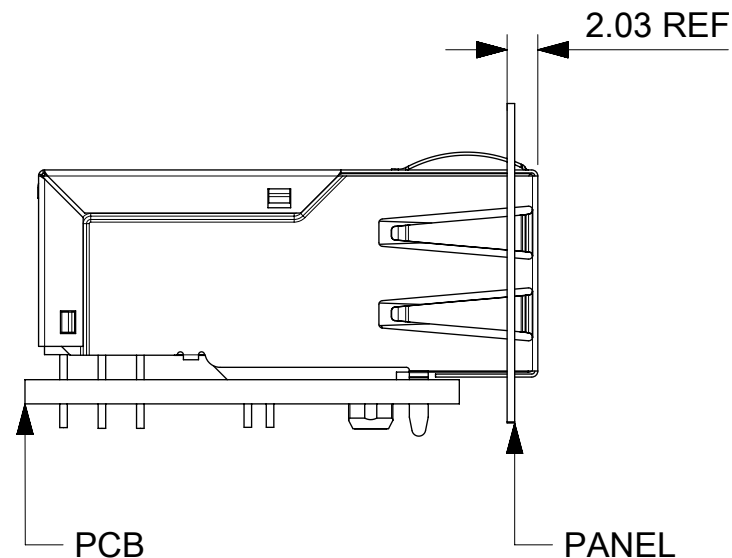


- NOTES:
- 1 - SHIELD MATERIAL: STAINLESS STEEL
(GROUND PINS ARE SOLDER DIPPED)
 - 2 - PLASTIC MATERIAL: PBT, BLACK, UL 94V-0
 - 3 - RJ45 TERMINALS MATERIAL: COPPER ALLOY
CONTACT PLATING: 0.76 MICROMETER GOLD
OVER 1.9 MICROMETER NICKEL
PHY TERMINALS: TIN PLATED
 - 4 - MATING INTERFACE ACCORDING TO IEC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

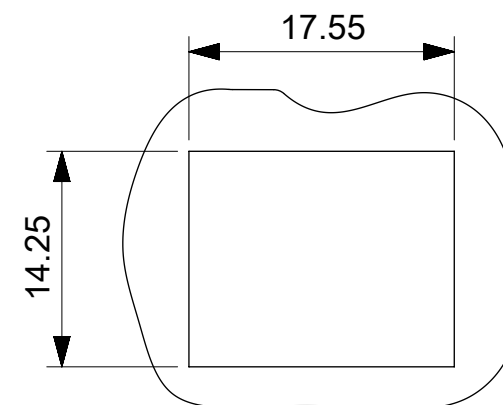
SCALE 1:1



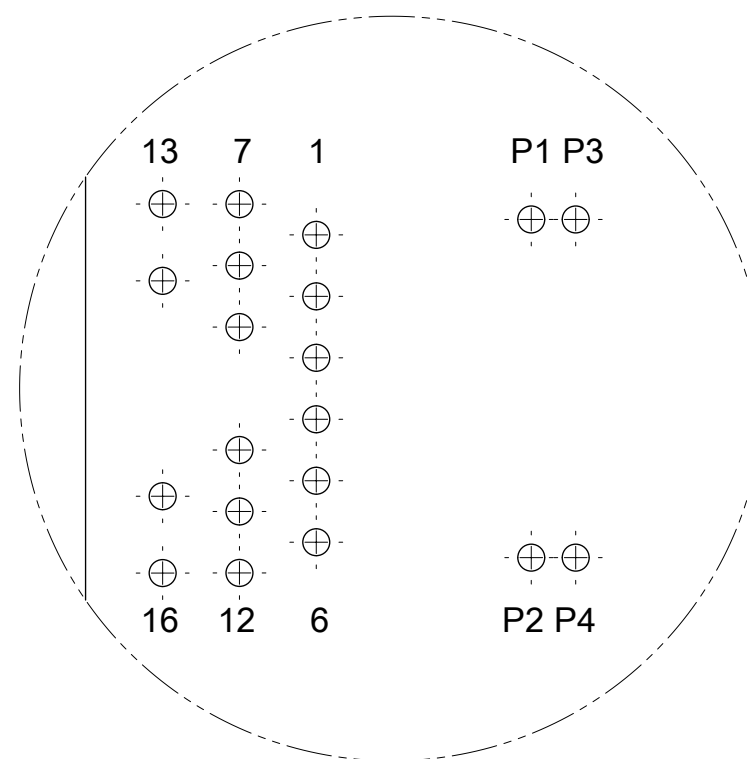
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																			
EC DESCRIPTION EC NO: 102890 DRWN: MFURKEL CHK'D: RSILLER APPR: RSILLER	2015/09/28 2016/02/23 2016/02/23	QUALITY SYMBOLS ▽ = 0 ▽ = 0 ▽ = 0 ▼ = 0 ▽ = 0 ☒ = 0 ■ = 0 ▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED) ANGULAR TOL ± 0.5 ° 4 PLACES ± 3 PLACES ± 2 PLACES ± 0.25 1 PLACE ± 0.5 0 PLACES ± 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		PRODUCT CUSTOMER DRAWING						
									APPR BY		DATE		SERIES			MATERIAL NUMBER		CUSTOMER	
									RSILLER		2016/02/23								
									DRAWING SIZE		THIRD ANGLE PROJECTION		85789		SEE BOM/SHEET 3/4				
									A3				DOCUMENT NUMBER		DOC TYPE		DOC PART		SHEET NUMBER
								857891001		PSD		000		1 OF 4					



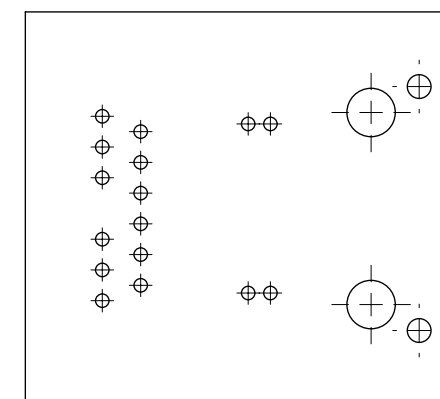
SUGGESTED PANEL CUTOUT



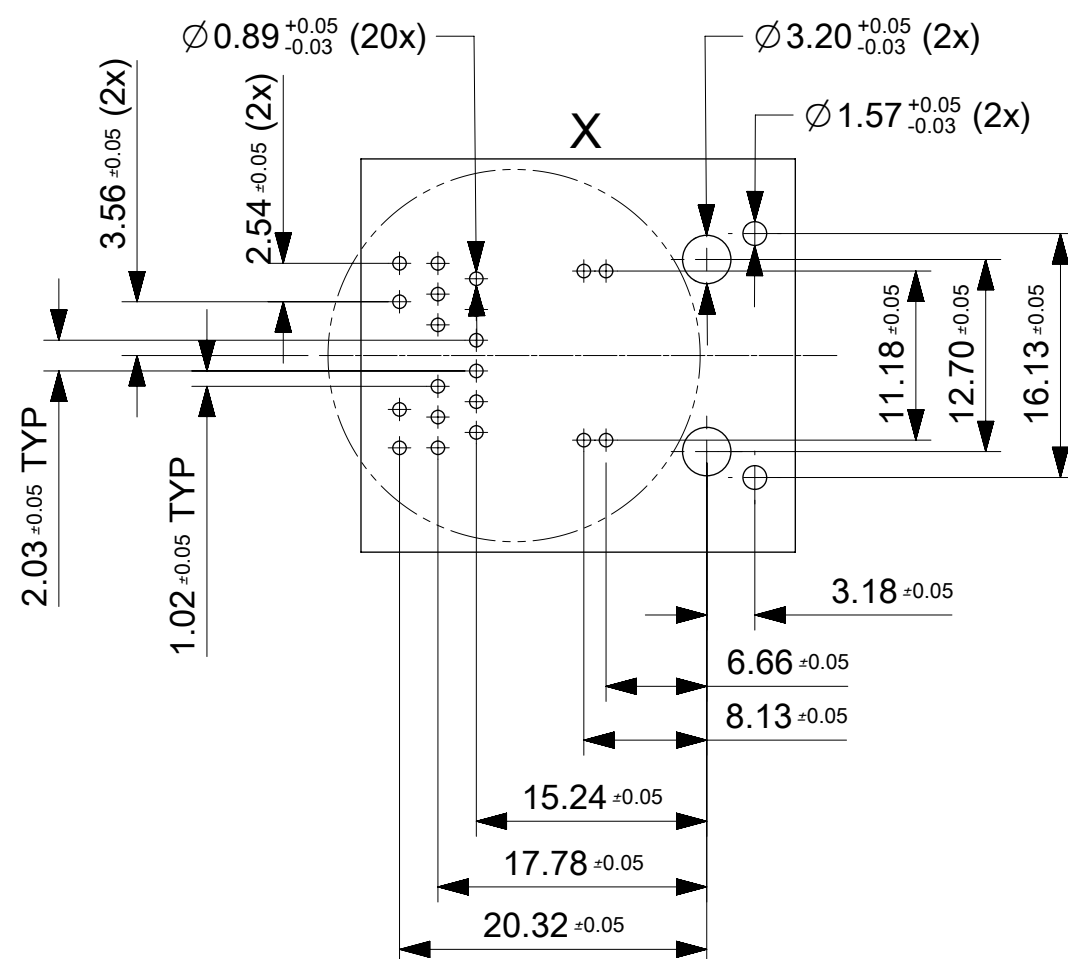
DETAIL X SCALE 4:1 PIN CONFIGURATION

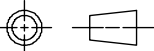


SUGGESTED BOARD LAYOUT FOR NON LED VERSION

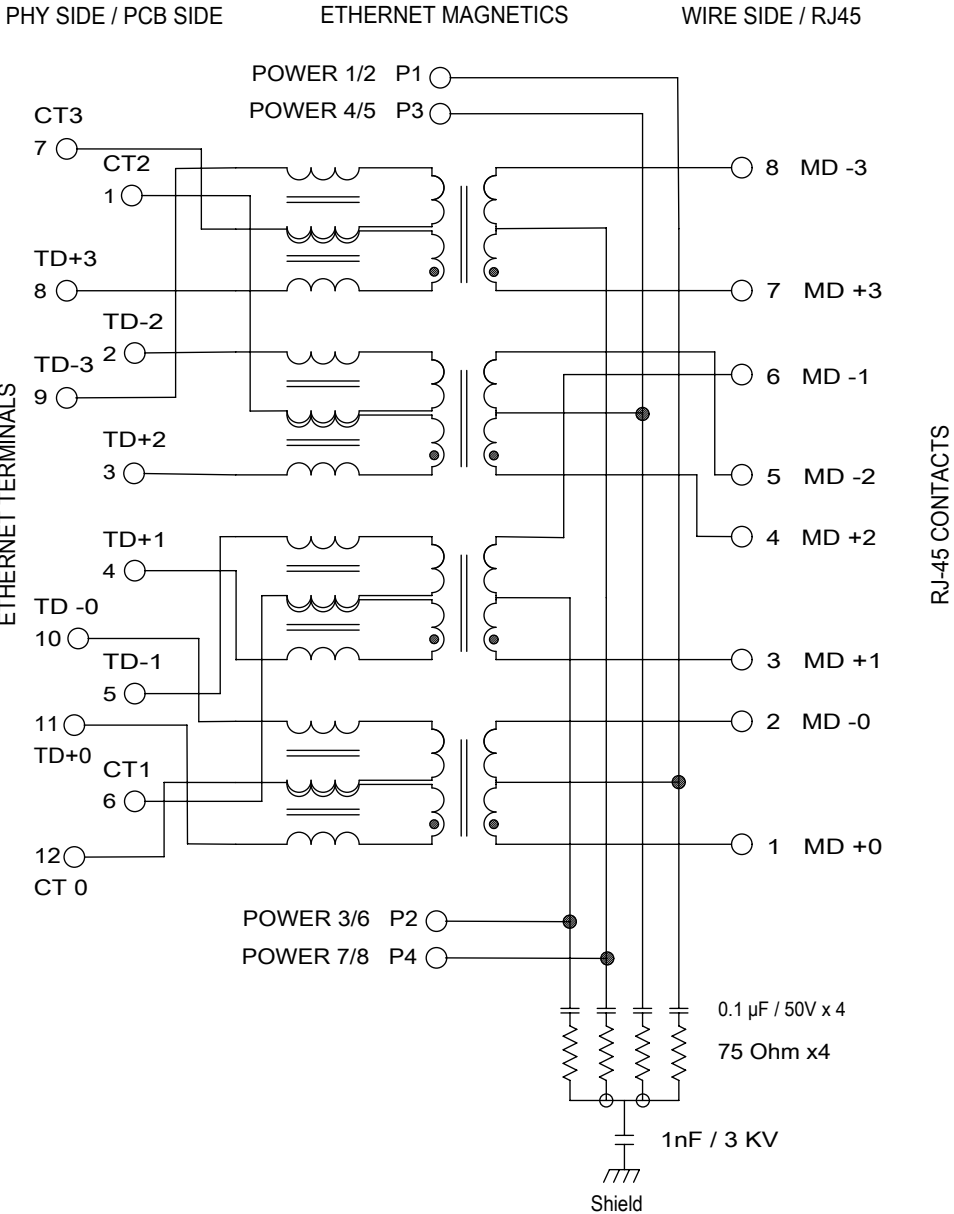


SUGGESTED BOARD LAYOUT- COMPONENT SIDE



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	2015/09/28 2016/02/23 2016/02/23	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED) ANGULAR TOL ± 0.5 °		DIMENSION UNITS	SCALE	molex GIGABIT MAGNETIC JACK POE PLUS ENABLED								
					mm	2:1									
					DRWN BY								DATE		
					MFURKEL		2015/06/15								
			4 PLACES		±	CHK'D BY		DATE		PRODUCT CUSTOMER DRAWING					
			3 PLACES		±	APPR BY		DATE							
			2 PLACES		± 0.25	RSILLER		2016/02/23							
			1 PLACE		± 0.5	DRAWING SIZE		THIRD ANGLE PROJECTION		SERIES	MATERIAL NUMBER		CUSTOMER		
			0 PLACES		±	A3				85789	SEE BOM/SHEET 3/4				
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS								DOCUMENT NUMBER		DOC TYPE	DOC PART	SHEET NUMBER
								857891001		PSD	000	2 OF 4			

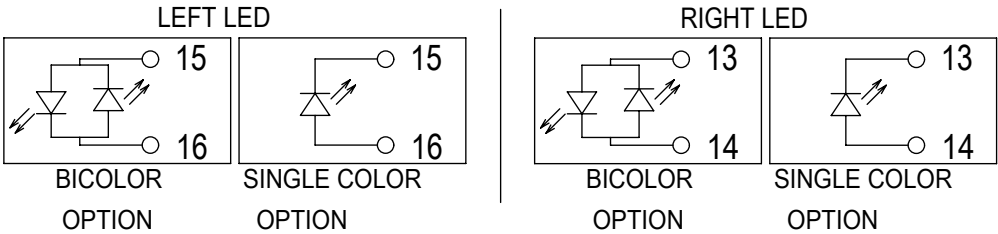
Electrical Specifications @25°C		
Operating temperature (0°C to +70°C)		
Description	VALUE	
OCL POE+TRANSF. 20mA bias (0°C to +70°C)	350µH min.	
OCL NONPOE TRANSF. 8mA bias (0°C to +70°C)	350µH min.	
Turns Ratio	1CT:1CT	
Insertion Loss		
Frequency (MHz)	Limits (dB max.)	Typical Values (dB max.)
1.0-9.9 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
	+	-	ORG			
857891012	-	+	YW	-	+	GRN
	+	-	GRN			
857891013	-	+	YW	-	+	YW
	+	-	GRN	+	-	GRN
857891014	-	+	YW	-	+	GRN
857891015	-	+	YW	-	+	GRN
	+	-	GRN			
857891017	-	+	GRN	-	+	YW
	+	-	ORG			
857891020	NON LED					

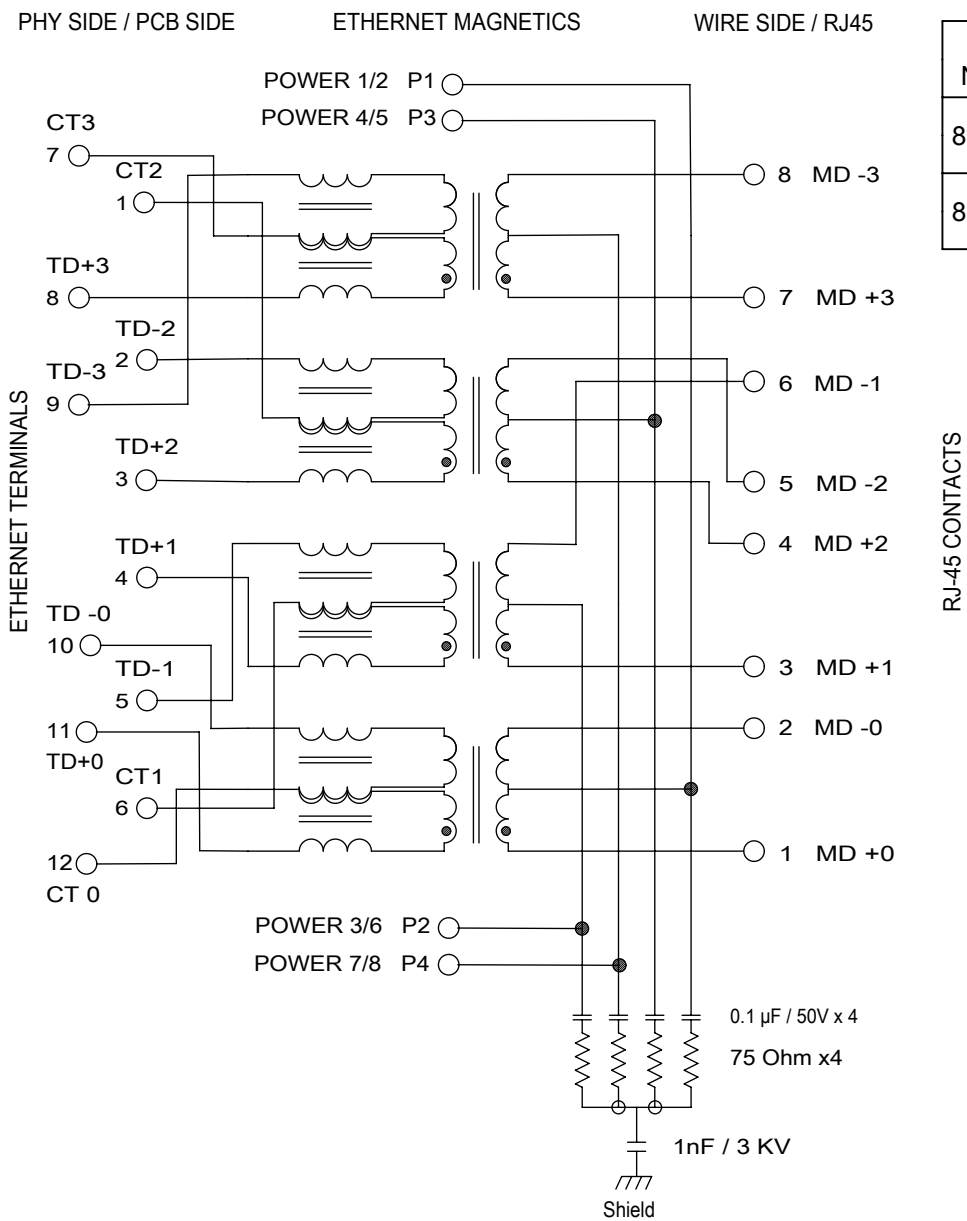
ADDITIONAL LED COLORS AND CONFIGURATIONS
ARE AVAILABLE ON REQUEST

SEE TABLE FOR
LED OPTIONS



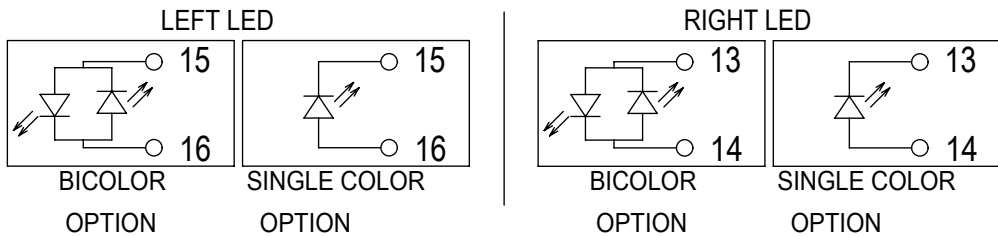
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EC DESCRIPTION EC NO: 102890 DRWN: MFURKEL CHK'D: RSILLER APPR: RSILLER		QUALITY SYMBOLS ▽ = 0 ▽ = 0 ▽ = 0 ▼ = 0 ▽ = 0 ☒ = 0 ■ = 0 ▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED) ANGULAR TOL ± 0.5 ° 4 PLACES ± 3 PLACES ± 2 PLACES ± 0.25 1 PLACE ± 0.5 0 PLACES ± DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DIMENSION UNITS mm	SCALE 5:1	molex GIGABIT MAGNETIC JACK POE PLUS ENABLED									
				DRWN BY MFURKEL										DATE 2015/06/15	
				CHK'D BY		DATE		PRODUCT CUSTOMER DRAWING							
				APPR BY RSILLER		DATE 2016/02/23									
				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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80-100 MHz	1.3+3*log(F/100)	1.3 @ 100MHz
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400-1000 MHz	10	10 @ 1000MHz
NEXT		
Frequency (MHz)	Limits (dB min.)	TYPICAL Values (dB min.)
1-5.9 MHz	50	50 @ 6MHz
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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
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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			= 0		mm	5:1							
			= 0		DRWN BY								
			= 0		MFURKEL		2015/06/15						
			= 0		CHK'D BY		DATE						
			= 0	APPR BY		DATE	GIGABIT MAGNETIC JACK POE PLUS ENABLED						
			= 0	RSILLER		2016/02/23							
			= 0	DRAWING SIZE		THIRD ANGLE PROJECTION		SERIES	MATERIAL NUMBER		CUSTOMER		
			= 0	A3				85789	SEE BOM/SHEET 3/4				
			= 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS					DOCUMENT NUMBER		DOC TYPE	DOC PART	SHEET NUMBER
857891001		PSD	000						4 OF 4				