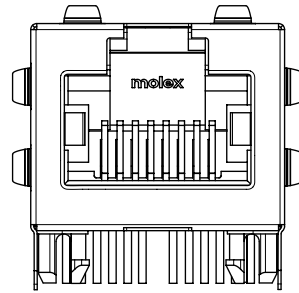
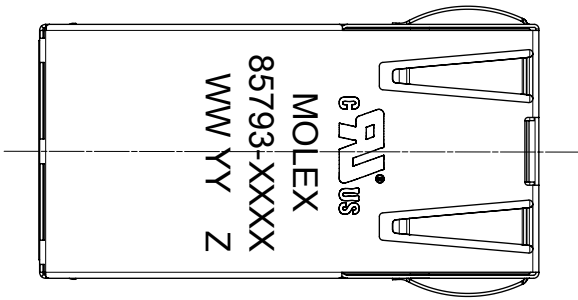
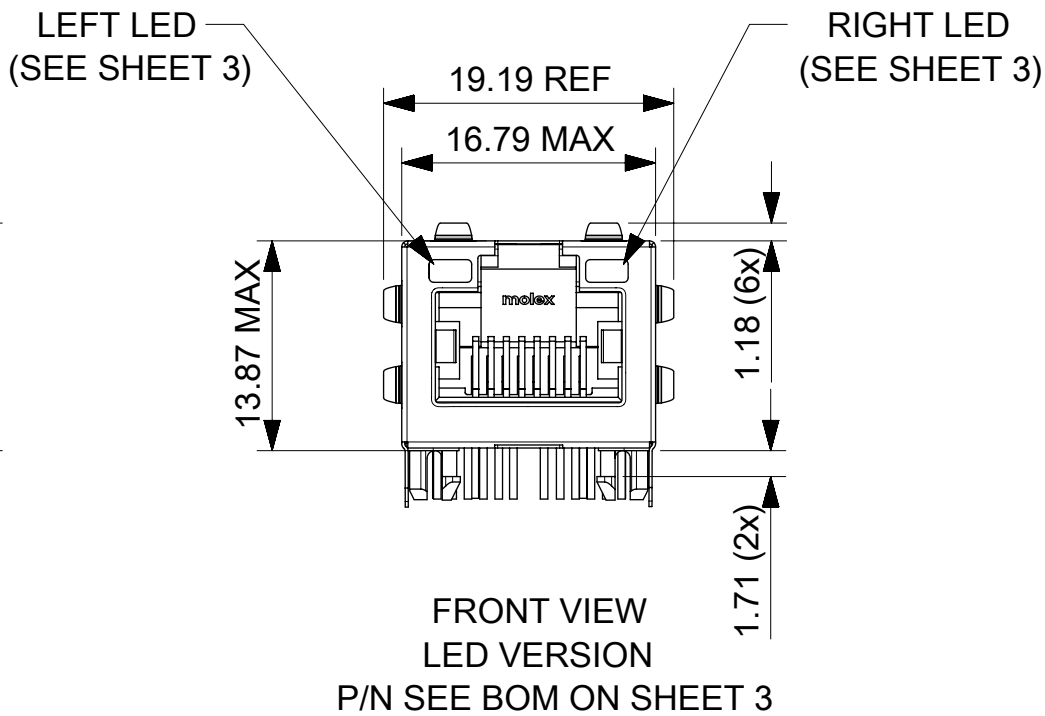
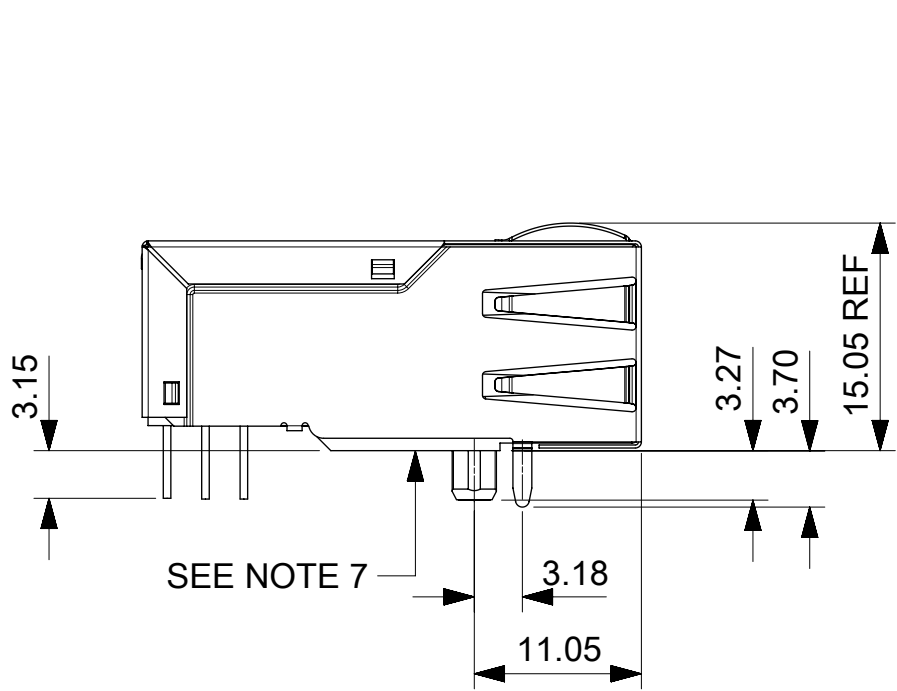


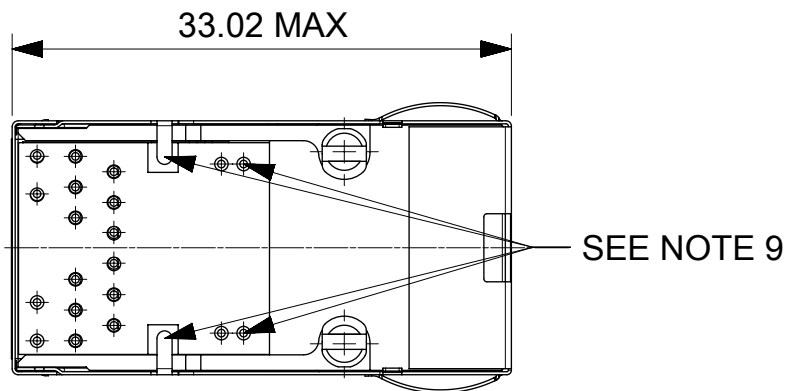
GIGABIT MAGNETIC JACK 1x1 LED



FRONT VIEW
NON LED VERSION
P/N 85793-1020

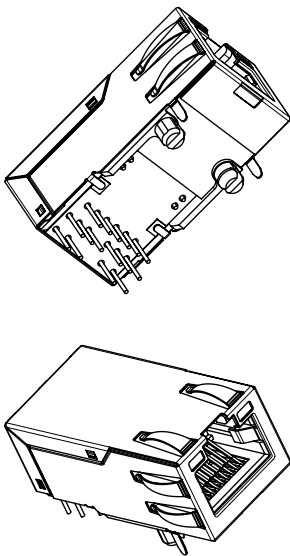


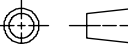
FRONT VIEW
LED VERSION
P/N SEE BOM ON SHEET 3

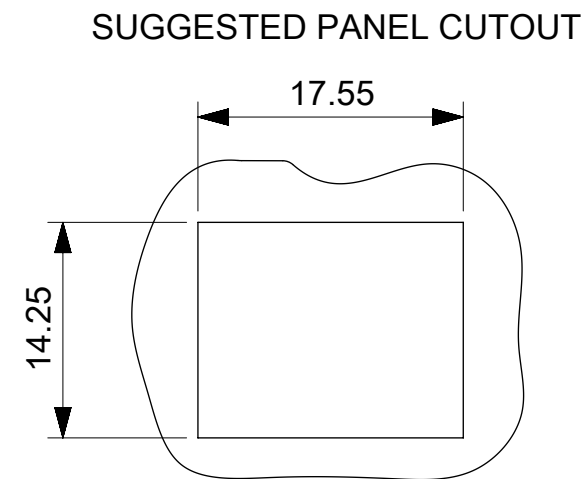
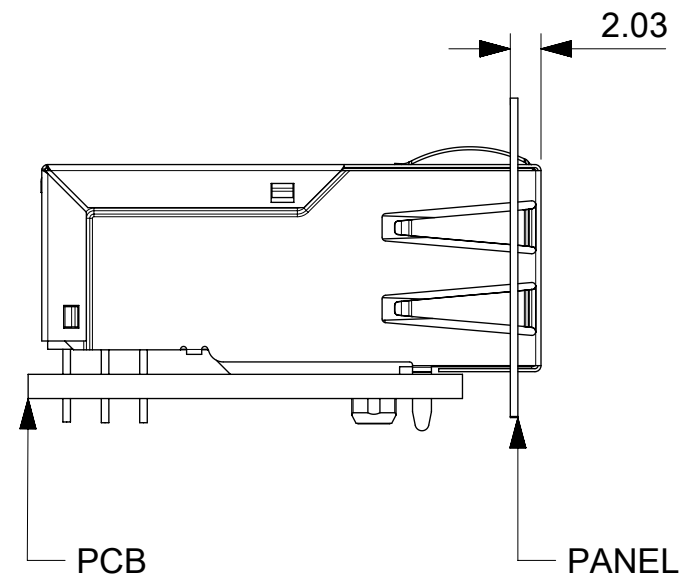


- NOTES:
- 1 - SHIELD MATERIAL: STAINLESS STEEL
(GROUND PINS ARE SOLDER DIPPED)
 - 2 - PLASTIC MATERIAL: PBT, BLACK, UL 94V-0
 - 3 - RJ45 TERMINALS MATERIAL: COPPER ALLOY
CONTACT PLATING: 0.76 MICROMETER GOLD
OVER 1.9 MICROMETER NICKEL
PHY TERMINALS: TIN PLATED
 - 4 - MATING INTERFACE ACCORDING TO IEC 60603-7
 - 5 - PRODUCT SPECIFICATION: PS-85793-001
 - 6 - PACKAGING SPECIFICATION: PK-85759-001
 - 7 - STAND OFF TO SYSTEM BOARD
 - 8 - RECOMMENDED PCB THICKNESS: 1.6mm
 - 9 - SHIELD LATCHES: AVOID TO ROUTE
TRACES OR TO PLACE ANY VIAS OR PADS
BELOW THESE LATCHES
 - 10 - INSCRIPTION MARKED BY LASER:
UL LOGO
1st : MOLEX
2st : P/N (SEE BOM)
3rd : DATE CODE(WEEK/YEAR)

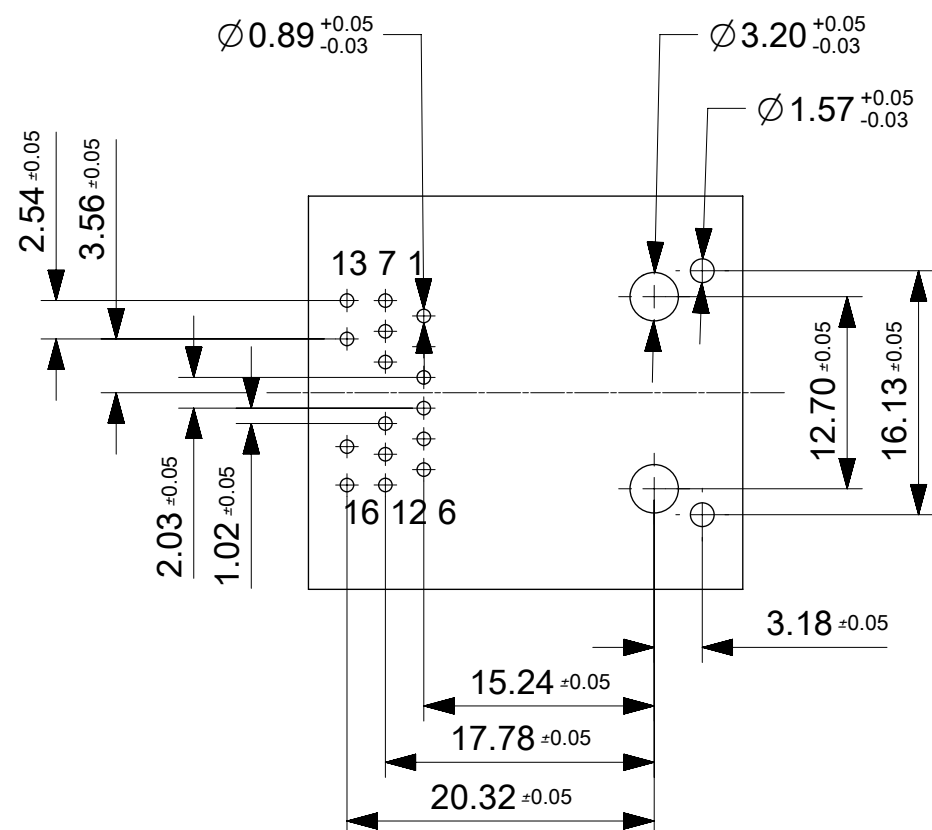
SCALE 1:1



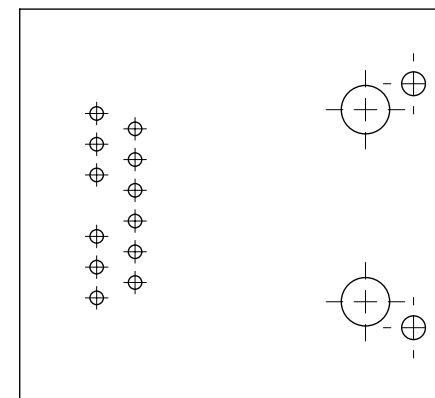
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																		
EC DESCRIPTION EC NO: 101432 DRWN: MFURKEL CHK'D: RSILLER APPR: RSILLER		QUALITY SYMBOLS ▽ = 0 ▽ = 0 ▽ = 0 ▼ = 0 ▽ = 0 ☒ = 0 ■ = 0 ▽ = 0		GENERAL TOLERANCES (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		SCALE		molex								
						mm		2:1										
						DRWN BY MFURKEL				DATE 2015/06/15				GIGABIT MAGNETIC JACK 1X1 LED				
						CHK'D BY				DATE				PRODUCT CUSTOMER DRAWING				
						APPR BY RSILLER				DATE 2015/07/02				SERIES 85793				
						DRAWING SIZE A3				THIRD ANGLE PROJECTION 				MATERIAL NUMBER SEE BOM/ SHEET 3/4				
REV				DOCUMENT NUMBER 857931001				DOC TYPE PSD		DOC PART 000		SHEET NUMBER 1 OF 4						



SUGGESTED BOARD LAYOUT- COMPONENT SIDE



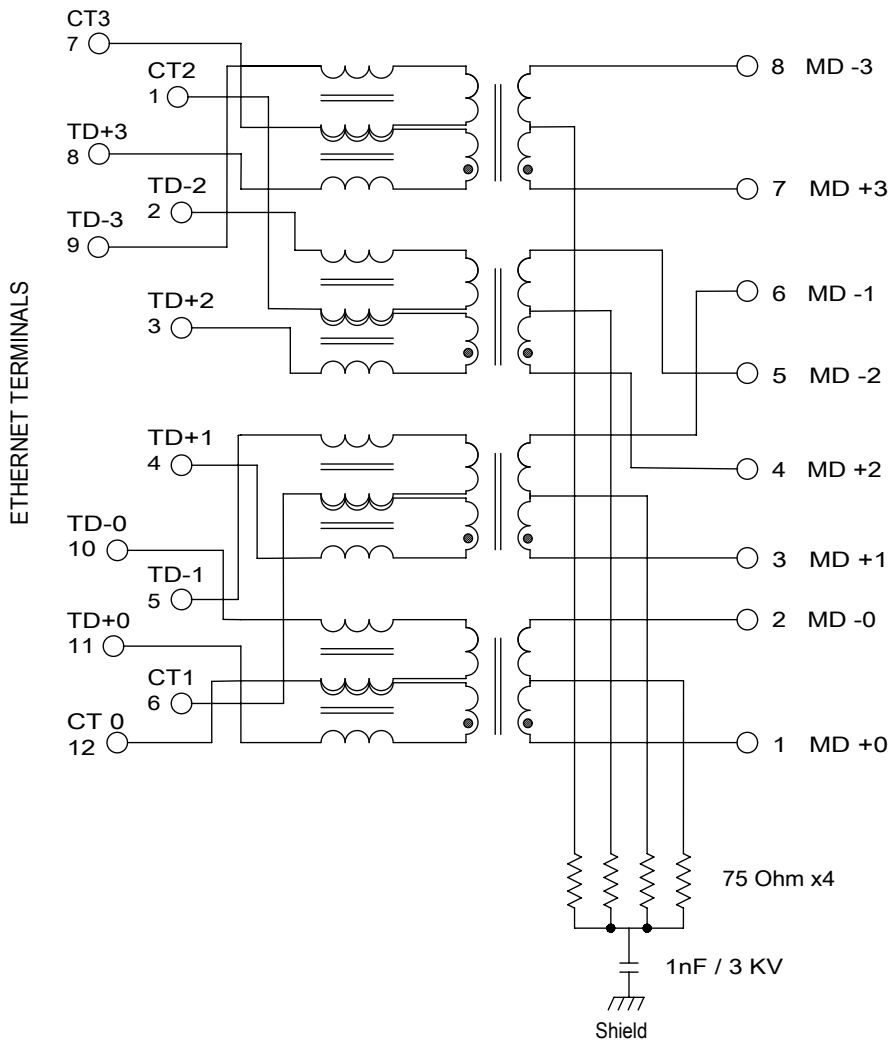
SUGGESTED BOARD LAYOUT
FOR NON LED VERSION



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EC DESCRIPTION EC NO: 101432 DRWN: MFURKEL CHK'D: RSILLER APPR: RSILLER		2015/09/24 2016/02/15 2016/02/15	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											
						MFURKEL				DRWN BY		DATE		GIGABIT MAGNETIC JACK 1X1 LED					
										2015/06/15									
										2015/06/15									
						RSILLER				CHK'D BY		DATE		PRODUCT CUSTOMER DRAWING					
										2015/07/02									
										2015/07/02									
						A3				APPR BY		DATE		SERIES		MATERIAL NUMBER		CUSTOMER	
										2015/07/02				85793		SEE BOM/ SHEET 3/4			
2015/07/02				85793						SEE BOM/ SHEET 3/4									
D		REV			DRAWING SIZE		THIRD ANGLE PROJECTION		DOCUMENT NUMBER		DOC TYPE		DOC PART		SHEET NUMBER				
					A3				857931001		PSD		000		2 OF 4				

Electrical Specifications @25°C		
Operating temperature (0°C to +70°C)		
Description	VALUE	
OCL 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	

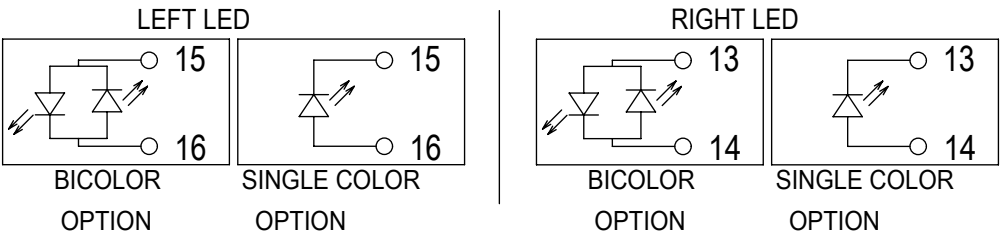
PHY SIDE / PCB SIDE ETHERNET MAGNETICS WIRE SIDE / RJ45



STANDARD VERSION

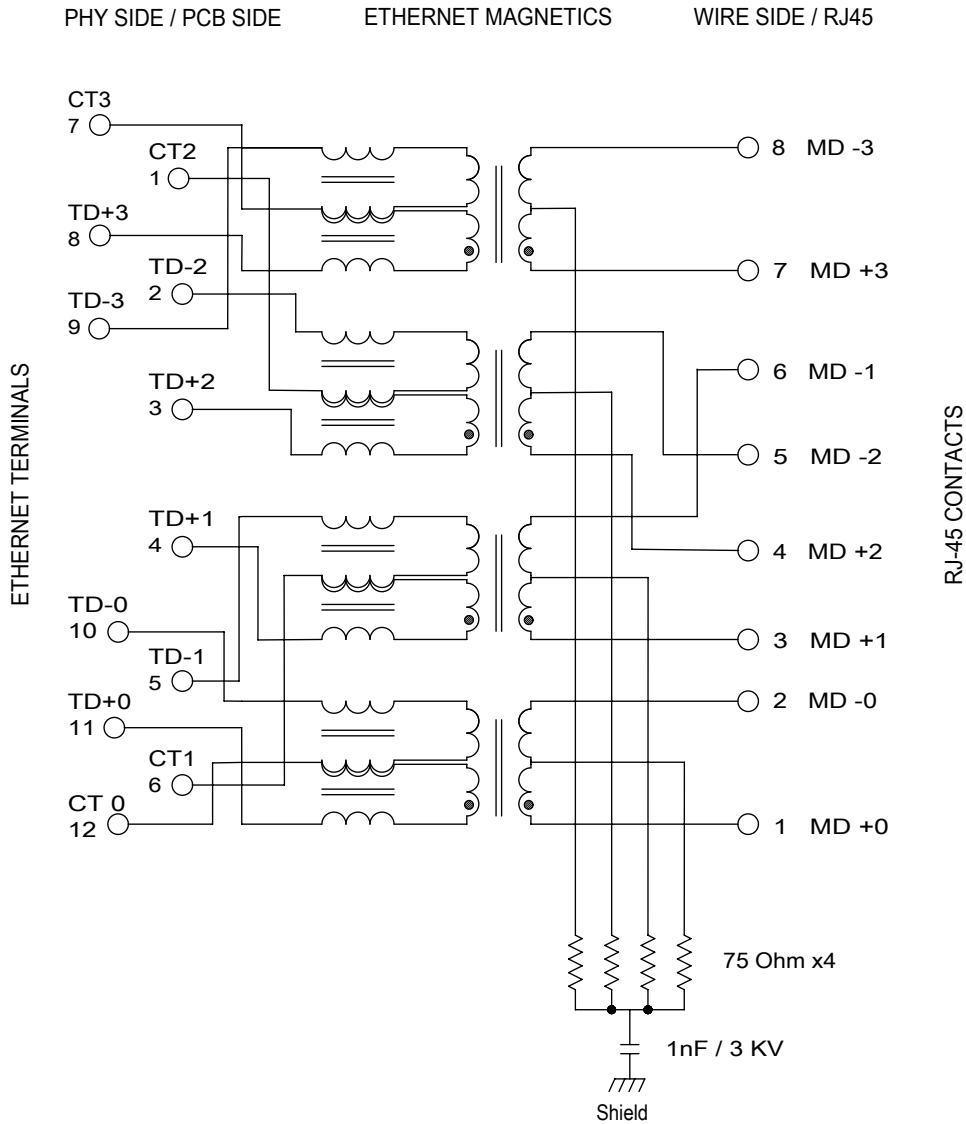
PART NUMBER	LED1 POLARITY			LED2 POLARITY		
	LEFT LED			RIGHT LED		
	PIN15	PIN16	COLOR	PIN13	PIN14	COLOR
857931001	-	+	GRN	-	+	GRN
0°C~+70°C						
857931003	-	+	GRN	-	+	GRN
0°C~+70°C	+	-	ORG			
857931006	-	+	GRN	-	+	YW
0°C~+70°C						
857931007	-	+	GRN	-	+	GRN
0°C~+70°C	+	-	YW			
857931010	-	+	GRN	-	+	YW
0°C~+70°C	+	-	YW	+	-	GRN
857931012	-	+	YW	-	+	GRN
0°C~+70°C	+	-	GRN			
857931013	-	+	YW	-	+	YW
0°C~+70°C	+	-	GRN	+	-	GRN
857931014	-	+	YW	-	+	GRN
0°C~+70°C						
857931020	NON LED					
0°C~+70°C						

ADDITIONAL LED COLORS AND CONFIGURATIONS
ARE AVAILABLE ON REQUEST



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					mm		5:1									
			ANGULAR TOL ± 0.5 °		DRWN BY		DATE		GIGABIT MAGNETIC JACK 1X1 LED							
					MFURKEL		2015/06/15									
			4 PLACES		±		CHK'D BY		DATE		PRODUCT CUSTOMER DRAWING					
			3 PLACES		±											
			2 PLACES		± 0.25											
			1 PLACE		± 0.5		APPR BY		DATE							
			0 PLACES		±		RSILLER		2015/07/02		SERIES		MATERIAL NUMBER		CUSTOMER	
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				DRAWING SIZE		THIRD ANGLE PROJECTION		85793		SEE BOM/ SHEET 3/4			
		A3					DOCUMENT NUMBER		DOC TYPE		DOC PART					
							857931001		PSD		000					
REV									SHEET NUMBER		3 OF 4					

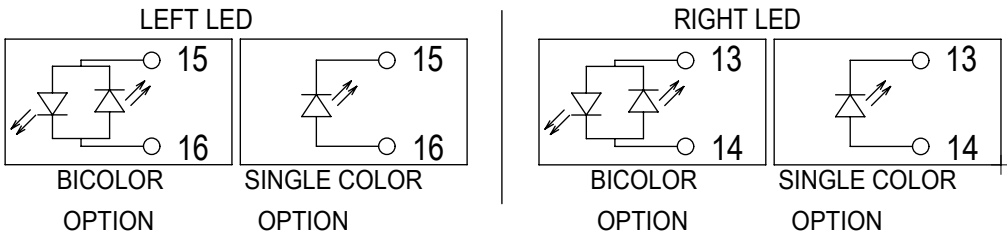
Electrical Specifications @25°C		
Operating temperature (-40°C to +85°C)		
Description	VALUE	
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Turns Ratio	1CT:1CT	
Insertion Loss		
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50-100 MHz	25-30*log(F/100)	25 @ 100MHz
Isolation PHY to Wire side	2.25kVDC/60sec	



INDUSTRIAL VERSION / HIGH TEMP

857933006	-	+	GRN	-	+	YW
-40°C~+85°C						
857933007	-	+	GRN	-	+	GRN
-40°C~+85°C	+	-	YW			

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					DRWN BY MFURKEL	DATE 2015/06/15					
					CHK'D BY	DATE	GIGABIT MAGNETIC JACK 1X1 LED				
					APPR BY RSILLER	DATE 2015/07/02					
					DRAWING SIZE A3	THIRD ANGLE PROJECTION	SERIES 85793	MATERIAL NUMBER SEE BOM/ SHEET 3/4	CUSTOMER		
D	REV						DOCUMENT NUMBER 857931001	DOC TYPE PSD	DOC PART 000	SHEET NUMBER 4 OF 4	

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