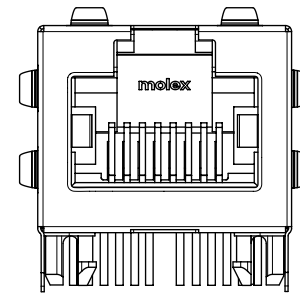
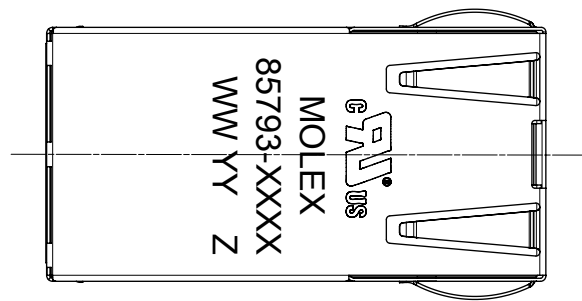
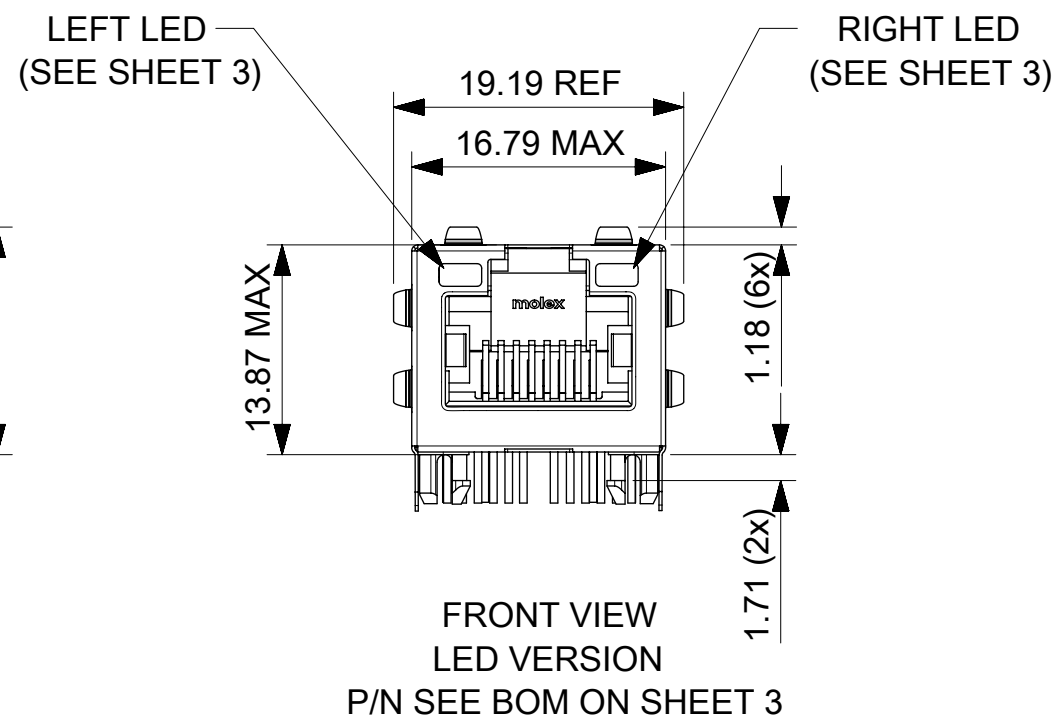
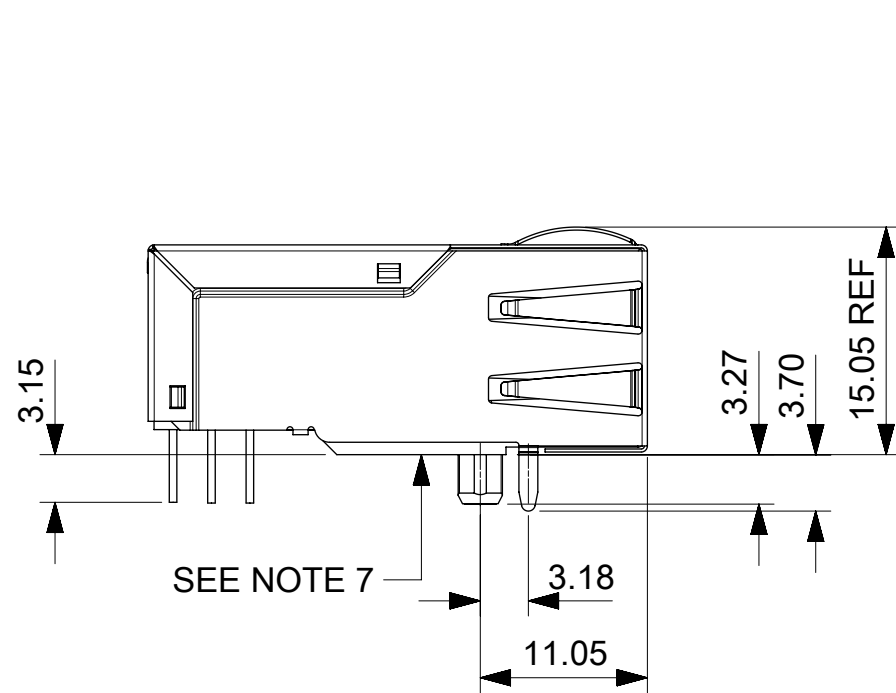


GIGABIT MAGNETIC JACK 1x1 LED

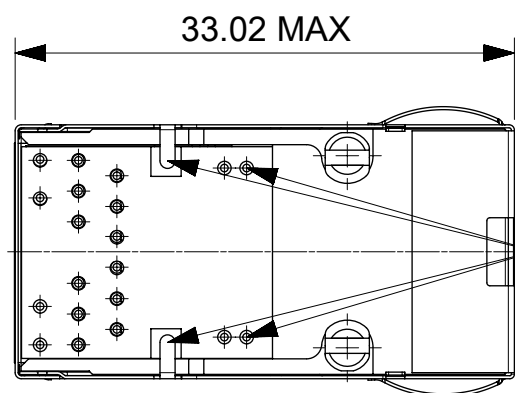
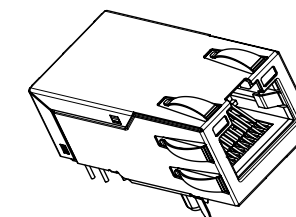
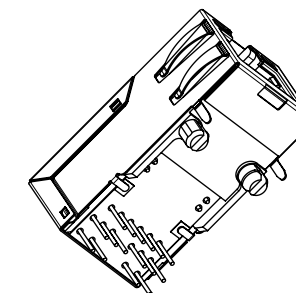
- NOTES:
- 1 - SHIELD MATERIAL: STAINLESS STEEL
(GROUND PINS ARE SOLDER DIPPED)
 - 2 - PLASTIC MATERIAL: PBT, BLACK, UL 94V-0
 - 3 - RJ45 TERMINALS MATERIAL: COPPER ALLOY
CONTACT PLATING: 0.76 MICROMETER GOLD
OVER 1.9 MICROMETER NICKEL
PHY TERMINALS: TIN PLATED
 - 4 - MATING INTERFACE ACCORDING TO IEC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



FRONT VIEW
NON LED VERSION
P/N 85793-1020



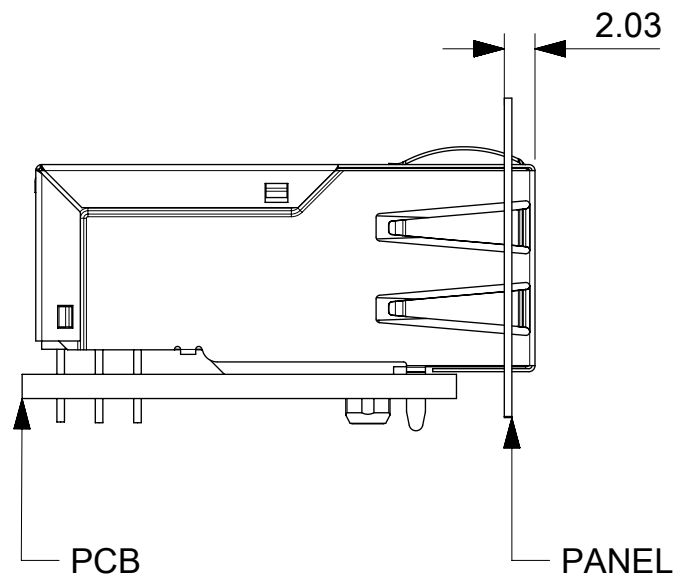
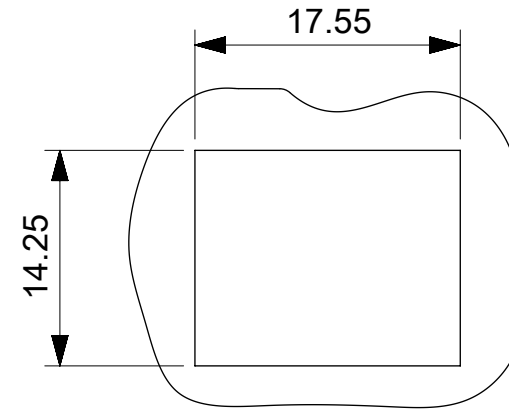
SCALE 1:1



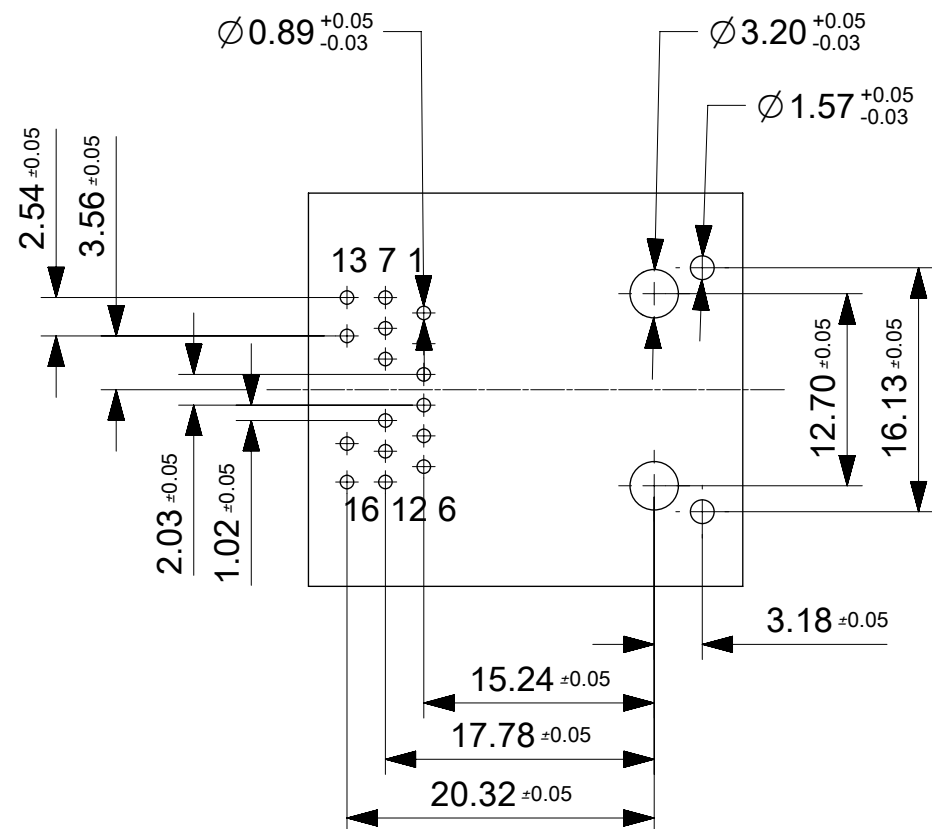
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

EC DESCRIPTION EC NO: 101432 DRWN: MFURKEL CHK'D: RSILLER APPR: RSILLER	2015/09/24 2016/02/15 2016/02/15	QUALITY SYMBOLS ▽ = 0 ▽ = 0 ▽ = 0 ▼ = 0 ▽ = 0 ⊠ = 0 ■ = 0 ▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION UNITS mm		SCALE 2:1						
	ANGULAR TOL ± 0.5 °		4 PLACES ±		DRWN BY MFURKEL		DATE 2015/06/15						GIGABIT MAGNETIC JACK 1X1 LED
	3 PLACES ±		2 PLACES ± 0.25		CHK'D BY RSILLER		DATE 2015/07/02		PRODUCT CUSTOMER DRAWING				
	1 PLACE ± 0.5		0 PLACES ±		APPR BY RSILLER		DATE 2015/07/02						SERIES: 85793 MATERIAL NUMBER: SEE BOM/ SHEET 3/4 CUSTOMER:
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DIMENSION UNITS A3		THIRD ANGLE PROJECTION		DRAWING SIZE A3		DOCUMENT NUMBER: 857931001 DOC TYPE: PSD DOC PART: 000 SHEET NUMBER: 1 OF 4					

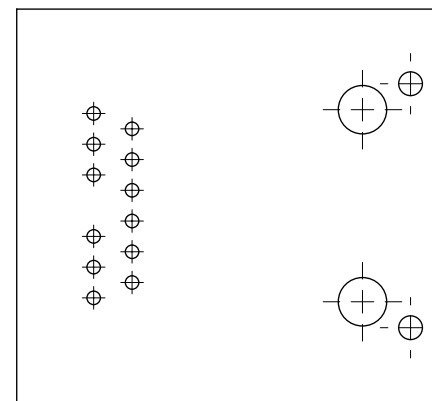
SUGGESTED PANEL CUTOUT



SUGGESTED BOARD LAYOUT- COMPONENT SIDE



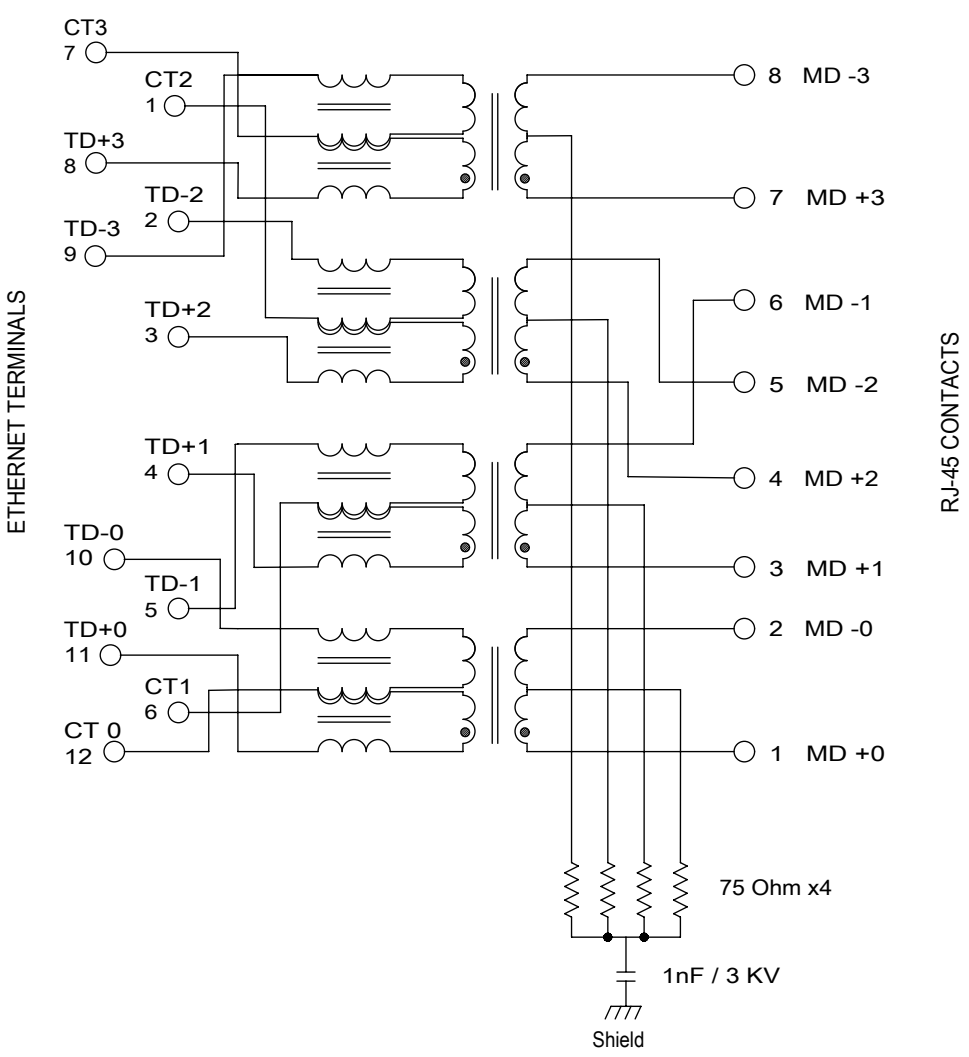
SUGGESTED BOARD LAYOUT FOR NON LED VERSION



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	REV D	QUALITY SYMBOLS ▽ = 0 ▽ = 0 ▽ = 0 ▼ = 0 ▽ = 0 ☒ = 0 ■ = 0 ▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION UNITS	SCALE	molex				
			ANGULAR TOL ± 0.5 °		mm	2:1					
			4 PLACES ±		DRWN BY	DATE	GIGABIT MAGNETIC JACK 1X1 LED				
			3 PLACES ±		MFURKEL	2015/06/15					
2 PLACES ± 0.25		CHK'D BY	DATE	PRODUCT CUSTOMER DRAWING							
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	SHEET NUMBER				
				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	

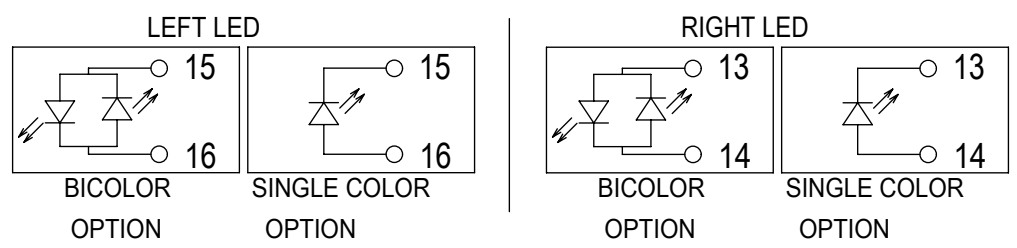
PHY SIDE / PCB SIDE ETHERNET MAGNETICS WIRE SIDE / RJ45



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						

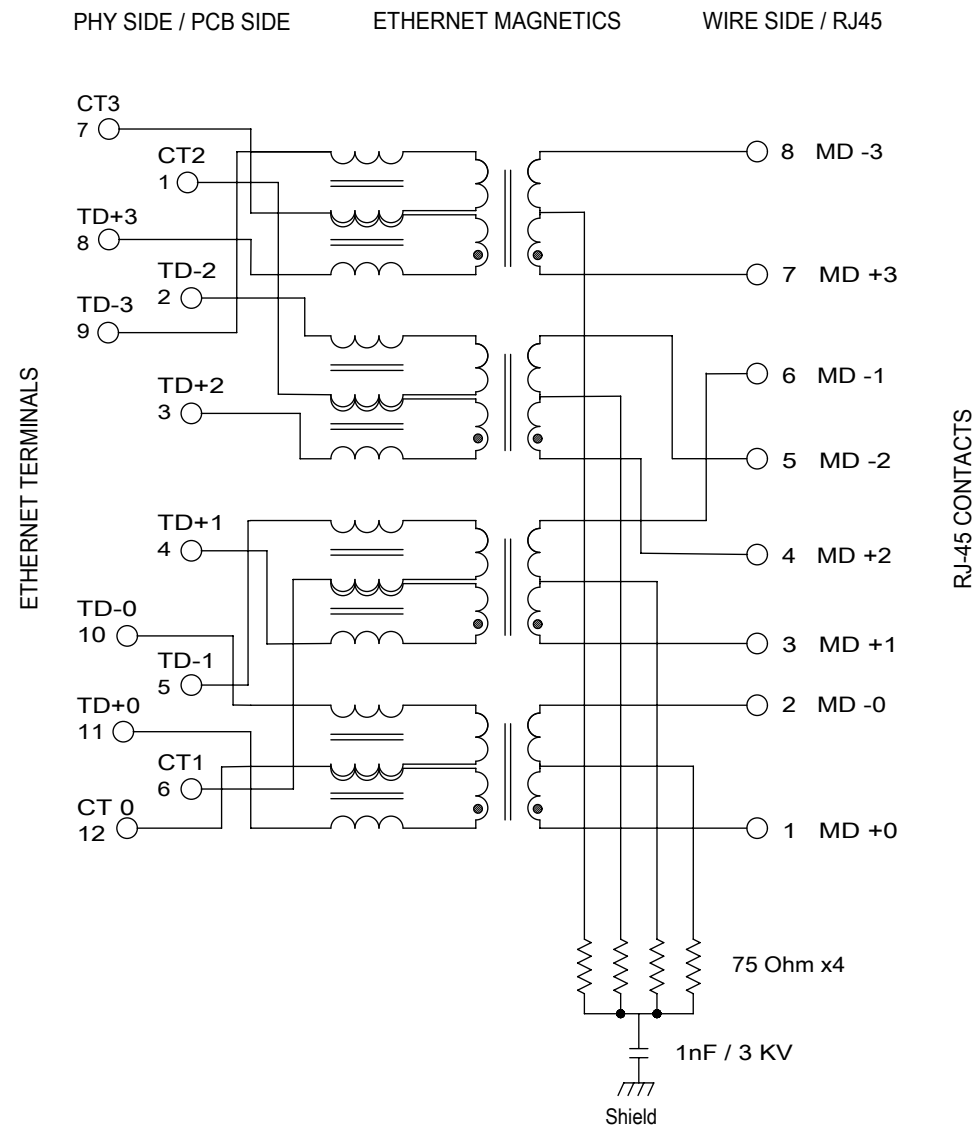
ADDITIONAL LED COLORS AND CONFIGURATIONS ARE AVAILABLE ON REQUEST



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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 mm	SCALE 5:1				
	DRWN BY MFURKEL	DATE 2015/06/15	CHK'D BY RSILLER	DATE 2015/07/02	APPR BY RSILLER				DATE 2015/07/02
	PRODUCT CUSTOMER DRAWING						SERIES 85793	MATERIAL NUMBER SEE BOM/ SHEET 3/4	CUSTOMER
	DOCUMENT NUMBER 857931001						DOC TYPE PSD	DOC PART 000	SHEET NUMBER 3 OF 4

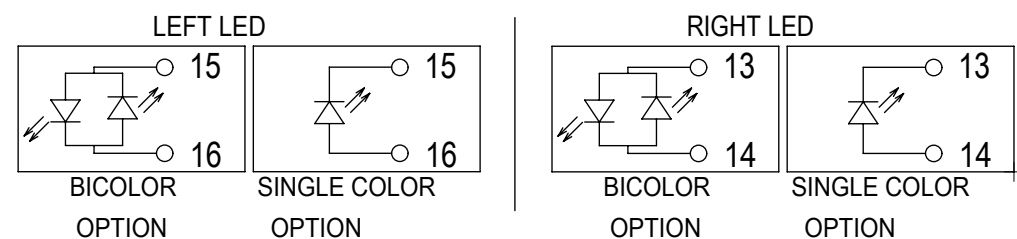
Electrical Specifications @25°C		
Operating temperature (-40°C to +85°C)		
Description	VALUE	
OCL 8mA bias (-40°C to +85°C)	350µH min.	
Turns Ratio	1CT:1CT	
Insertion Loss		
Frequency (MHz)	Limits (dB max.)	Typical Values (dB max.)
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50-100 MHz	25-30*log(F/100)	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			

ADDITIONAL LED COLORS AND CONFIGURATIONS ARE AVAILABLE ON REQUEST



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						mm	5:1				
						DRWN BY	DATE		MFURKEL	2015/06/15	
						CHK'D BY	DATE				
								PRODUCT CUSTOMER DRAWING			
								SERIES	MATERIAL NUMBER	CUSTOMER	
								85793	SEE BOM/ SHEET 3/4		
								DRAWING SIZE	THIRD ANGLE PROJECTION		
								A3			
								DOCUMENT NUMBER	DOC TYPE	DOC PART	SHEET NUMBER
								857931001	PSD	000	4 OF 4