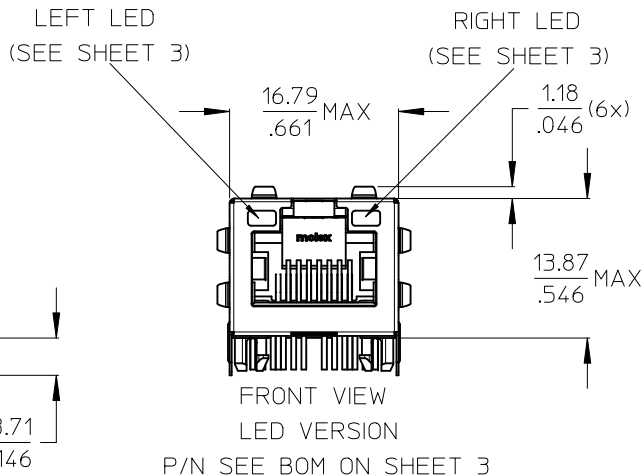
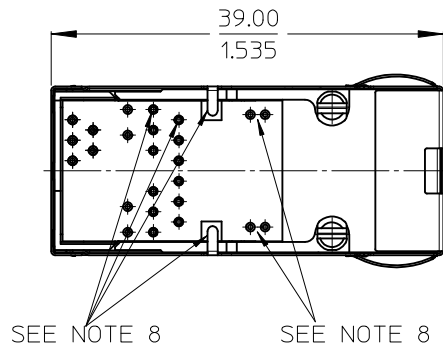
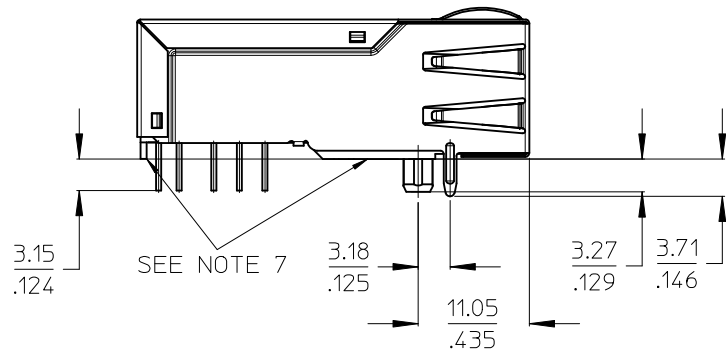
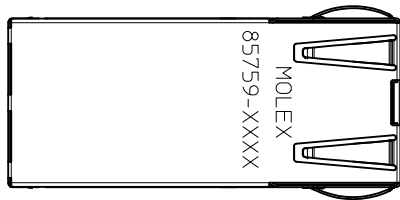
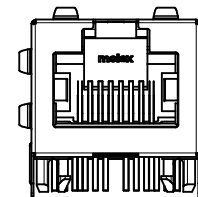


GIGABIT SINGLE PORT MAGNETIC JACK WITH OR WITHOUT LEDs AND
INTEGRATED POWER OVER ETHERNET PLUS CONTROL CIRCUITRY
ACCORDING TO IEEE802.3at

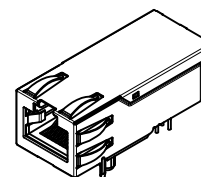


NOTES:

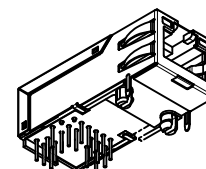
- 1 - SHIELD MATERIAL: STAINLESS STEEL
(GROUND PINS ARE SOLDER DIPPED)
- 2 - PLASTIC MATERIAL: PBT, BLACK, UL 94V-0
- 3 - TERMINALS MATERIAL: PHOSPHOR BRONZE
RJ45 CONTACT PLATING: 0.76 MICROMETER GOLD
OVER 1.9 MICROMETER NICKEL ON MATING AREA
SOLDER TERMINALS: 3 MICROMETER TIN
- 4 - JACK TO BE MATED WITH FCC 68.5 PLUGS /
IEC 60603-7 PLUGS
- 5 - PRODUCT SPECIFICATION: PS-85759-001
- 6 - PACKAGING SPECIFICATION: PK-85759-001
- 7 - STAND OFF TO SYSTEM BOARD
- 8 - STUB PINS AND SHIELD LATCHES: AVOID TO ROUTE
TRACES OR TO PLACE ANY VIAS
OR PADS BELOW THESE PINS



FRONT VIEW
NON LED VERSION
P/N 857591020

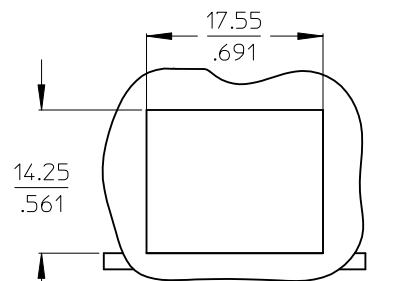
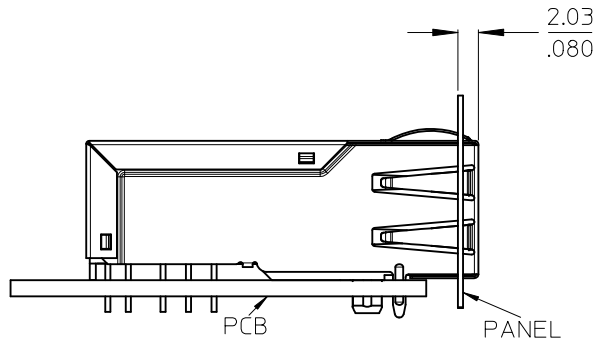


NON LED VERSION
SCALE 1:1



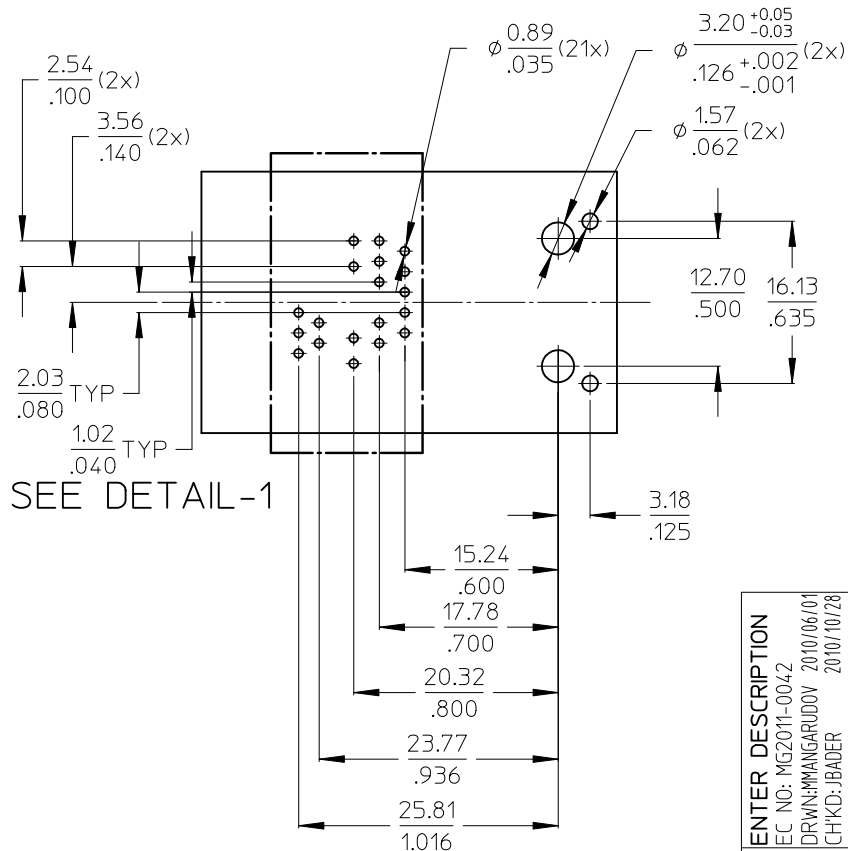
LED VERSION
SCALE 1:1

ENTER DESCRIPTION EC NO: MG2011-0042 DRWN:MMANGARUDOV 2010/06/01 CHKD:JBADER 2010/10/28 APPR:SSTEINKE 2010/12/22	DESCRIPTION	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 2:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION				
			mm	INCH	DRAWN BY JBADER	DATE 2009/11/13	TITLE HYPERJACK POE PLUS PSE ICM 1X1						
			4 PLACES	± ---	± ---	CHECKED BY MMANGARUDOV						DATE 2010/01/08	
			3 PLACES	± ---	± ---	APPROVED BY SSTEINKE		DATE 2010/03/09	molex MOLEX INCORPORATED				
			2 PLACES	± 0.05	± ---	MATERIAL NO.		DOCUMENT NO.					
			1 PLACE	± 0.10	± ---	SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					
			ANGULAR ± .5 °		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SHEET NO. 1 OF 3						

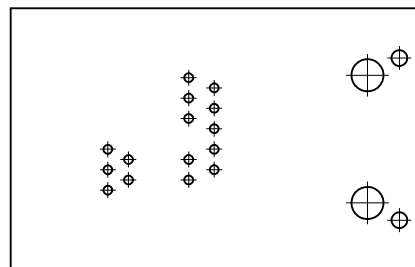


SUGGESTED PANEL CUTOUT

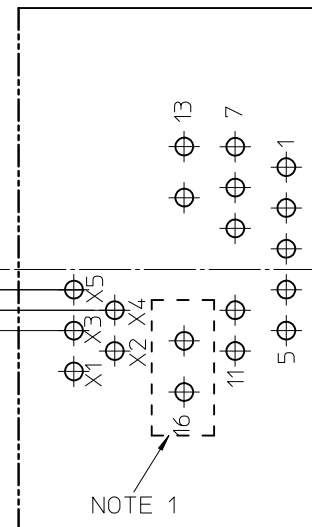
SUGGESTED BOARD LAYOUT - COMPONENT SIDE



SUGGESTED BOARD LAYOUT
FOR NON LED VERSION



PIN CONFIGURATION



DETAIL-1
SCALE 4:1

2.03
.080 TYP
1.02
.040 (2x)
2.03
.080

NOTE:

1 - PINS 15 AND 16 NOT PRESENT ON VERSION
WITH INTEGRATED POWER INDICATION LED

ENTER DESCRIPTION	REV
EC NO: MG2011-0042	4
DRWN: MMANGARUDOV 2010/06/01	
CHKD: JBADER 2010/10/28	
APPR: SSTEINKE 2010/12/22	

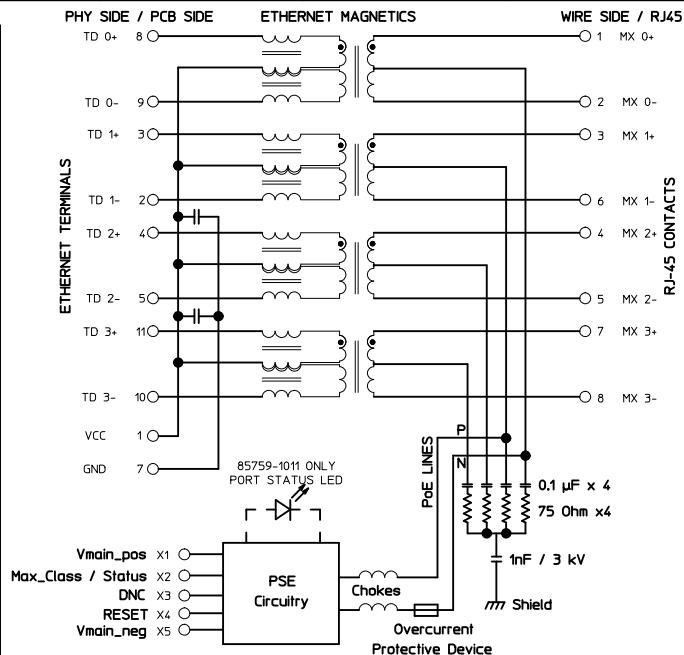
QUALITY SYMBOLS	DESCRIPTION
▽=0	
◻=0	

GENERAL TOLERANCES (UNLESS SPECIFIED)	
	mm
4 PLACES	± ---
3 PLACES	± ---
2 PLACES	± 0.05
1 PLACE	± 0.10
ANGULAR ± .5 °	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

DIMENSION STYLE	
MM ONLY	
DRAWN BY	DATE
JBADER	2009/11/13
CHECKED BY	DATE
MMANGARUDOV	2010/01/08
APPROVED BY	DATE
SSTEINKE	2010/03/09
MATERIAL NO.	
SEE SHEET 3	

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
2:1	METRIC	
TITLE		
HYPERJACK POE PLUS PSE ICM 1X1		
MOLEX INCORPORATED		
DOCUMENT NO.	SHEET NO.	
SD-85759-001	2 OF 3	

Electrical Specifications @25°C		
Operating temperature (0°C to +70°C)		
Description	Value	
OCL POE+TRANSF. 24mA bias (0°C to +70°C)	350mA min.	
OCL NONPOE TRANSF. 8mA bias (0°C to +70°C)	350mA 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	

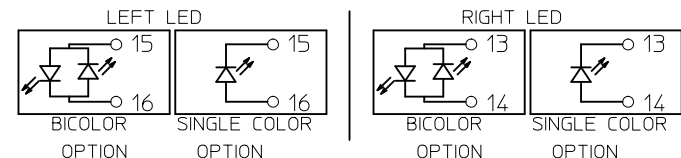


PART NUMBER	LEFT LED			RIGHT LED			
	PIN15	PIN16	COLOR	PIN13	PIN14	COLOR	
85759-1001	-	+	GREEN	-	+	GREEN	COLOR 1
							COLOR 2
85759-1003	-	+	GREEN	-	+	GREEN	COLOR 1
							COLOR 2
85759-1006	+	-	ORANGE	-	+	GREEN	COLOR 1
							COLOR 2
85759-1015	-	+	GREEN	-	+	GREEN	COLOR 1
							COLOR 2
85759-1013	+	-	ORANGE	-	+	GREEN	COLOR 1
							COLOR 2
85759-1014	-	+	GREEN	-	+	GREEN	COLOR 1
							COLOR 2
85759-1020	NON LED						

VERSION WITH INTEGRATED PoE POWER INDICATION LED

PART NUMBER	POWER INDICATION					
	PIN15	PIN16	COLOR	PIN13	PIN14	COLOR 1
85759-1012	NOT PRESENT	GREEN	-	+	ORANGE	

ADDITIONAL LED COLORS AND CONFIGURATIONS AVAILABLE ON REQUEST



SEE TABLE FOR LED OPTION

PIN	NAME	FUNCTION	PARAMETERS
X1	Vmain_pos	Vmain 51 to 56V DC IN	min. 470mA (Class0-3), min. 1000mA (Class 4)
X2	Max_Class / Port Status	INPUT (power up): Set Max Class	To be set by resistors to Vmain_neg
		Class 1 only	10k
		Class 1 or 2 only	20k
		All except class 4	30k
		All classes including class 4	Open
		OUTPUT (powered): Power indication	high if PD is powered up by 1x1 PSE
X3	DNC	reserved	remain floating
X4	Reset	Reset	Reset or to disable PSE
X5	Vmain_neg	Vmain Reference	

ENTER DESCRIPTION
EC NO: MG2011-0042
DRWN:MMANGARUDOV 2010/06/01
CHKD:JBADER 2010/10/28
APPR:SSTEINKE 2010/12/22

QUALITY SYMBOLS
=0
=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.05	± ---
1 PLACE	± 0.10	± ---

ANGULAR ± .5 °

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE
MM ONLY

DRAWN BY
JBADER

DATE
2009/11/13

CHECKED BY
MMANGARUDOV

DATE
2010/01/08

APPROVED BY
SSTEINKE

DATE
2010/03/09

MATERIAL NO.

SEE BOM

SIZE
A3

SCALE
5:1

DESIGN UNITS
METRIC

THIRD ANGLE PROJECTION

TITLE
HYPERJACK POE PLUS
PSE ICM 1X1

MOLEX INCORPORATED

DOCUMENT NO.
SD-85759-001

SHEET NO.
3 OF 3

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Mouser Electronics

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85759-1012