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Part Number: [0857891001](#)
Status: **Active**
Description: PoE PLUS ENABLED ICM 1x1 LEDs: GREEN - GREEN

Documents:

[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

General

Product Family	Modular Jacks/Plugs
Series	85789
Component Type	PCB Jack
Magnetic	Yes
Performance Category	5
Power over Ethernet (PoE)	PoE+
Product Name	HyperJack™PoE

Physical

Durability (mating cycles max)	750
Inverted / Top Latch	Yes
Keying to Mating Part	Yes
Lightpipes/LEDs	LEDs
Orientation	Right Angle (Side Entry)
PCB Retention	None
Packaging Type	Tray
Panel Mount	No
Ports	1
Positions / Loaded Contacts	8/8
Surface Mount Compatible (SMC)	Yes
Temperature Range - Operating	-40°C to +80°C
Termination Interface: Style	Through Hole
Wire/Cable Type	N/A

Electrical

Current - Maximum per Contact	1.5A
Grounding to PCB	Yes
Shielded	Yes
Voltage - Maximum	57V

Material Info

Reference - Drawing Numbers

Sales Drawing	SD-85789-001
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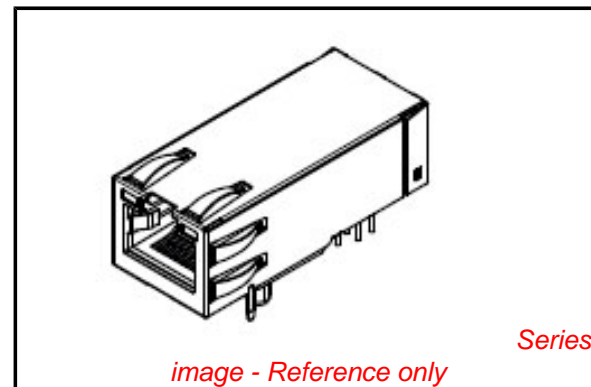


image - Reference only

EU RoHS

**ELV and RoHS
Compliant**
**REACH SVHC
Not Reviewed**
**Halogen-Free
Status
Not Reviewed**

China RoHS



**Need more information on product
environmental compliance?**

Email productcompliance@molex.com
 For a multiple part number RoHS Certificate of
 Compliance, [click here](#)

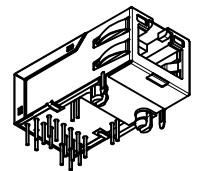
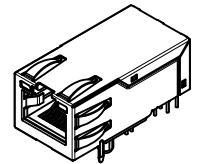
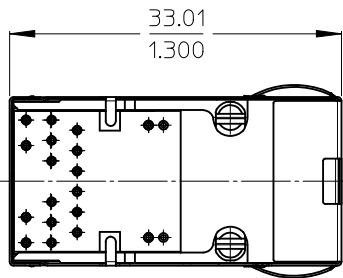
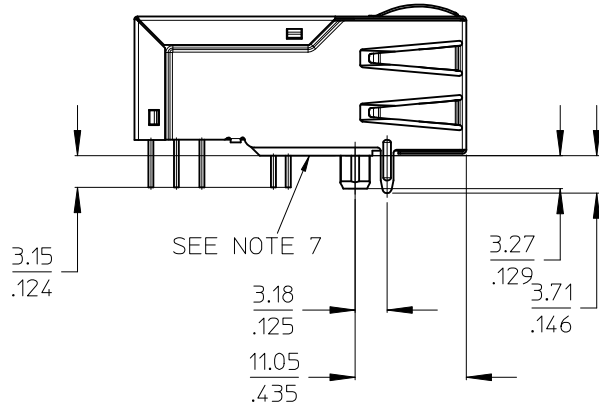
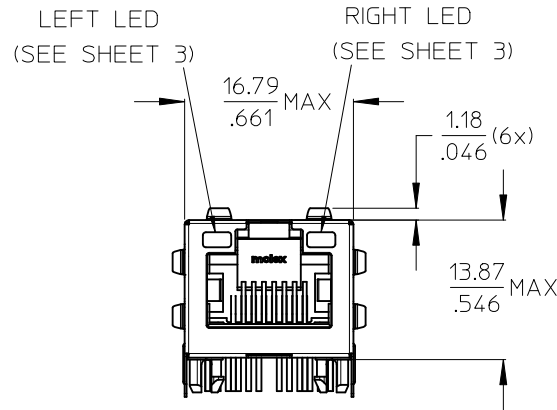
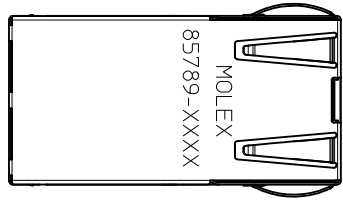
Please visit the [Contact Us](#) section for any
 non-product compliance questions.

Search Parts in this Series
[85789Series](#)

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

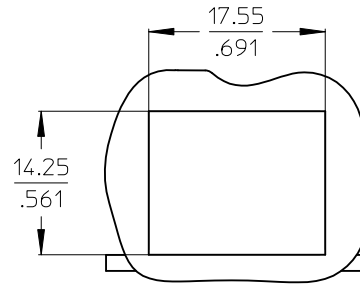
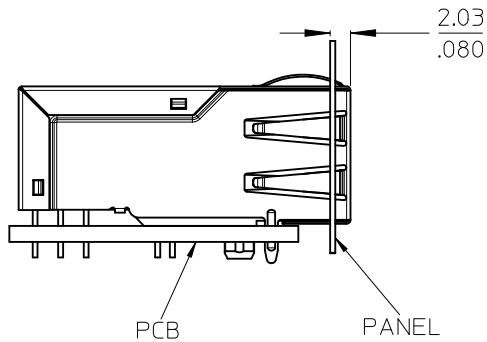
NOTES:

- 1 - SHIELD MATERIAL: STAINLESS STEEL
(GROUND PINS ARE SOLDER DIPPED)
- 2 - PLASTIC MATERIAL: PBT, BLACK, UL 94V-0
- 3 - TERMINALS MATERIAL: PHOSPOR BRONZE CuSn8
RJ45 CONTACTS PLATING: 1.27µm GOLD OVER
1.9µm Ni ON MATING AREA
SOLDER TERMINALS: 3µm Sn
- 4 - JACK TO BE MATED WITH FCC 68.5 PLUGS /
IEC 60603-7 PLUGS
- 5 - PRODUCT SPECIFICATION: PS-85789-001
- 6 - PACKAGING SPECIFICATION: PK-85759-001
- 7 - STAND OFF TO SYSTEM BOARD



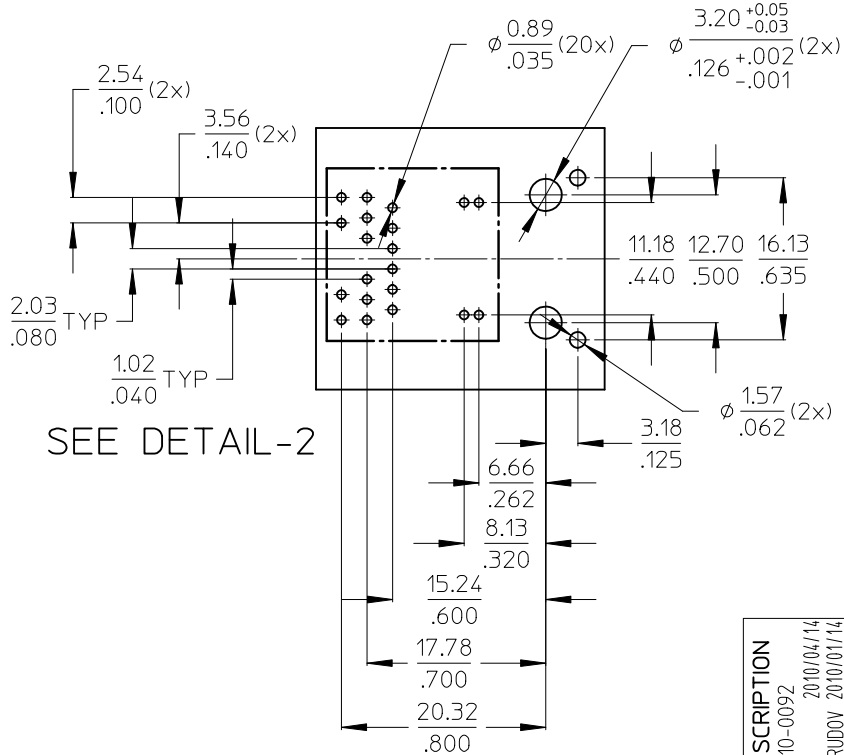
SCALE 1:1

ENTER DESCRIPTION EC NO: MG2010-0092 DRWN: JBADER 2010/04/14 CH'KD: MMANGARUDOV 2010/01/14 APPR: SSIE INKE 2010/05/25	REV DESCRIPTION 2	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
		▽=0 ▽=0	mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.05 ± --- 1 PLACE ± 0.10 ± --- ANGULAR ± .5 °	MM ONLY	2:1	METRIC		
				DRAWN BY: JBADER DATE: 2010/01/14 CHECKED BY: MMANGARUDOV DATE: 2010/01/14 APPROVED BY: SSIE INKE DATE: 2010/03/09	TITLE	HYPERJACK POE PLUS ENABLED 1X1 4P		
				MATERIAL NO. DOCUMENT NO.	MOLEX INCORPORATED		SD-85789-001	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SEE SHEET 3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			SHEET NO. 1 OF 3	



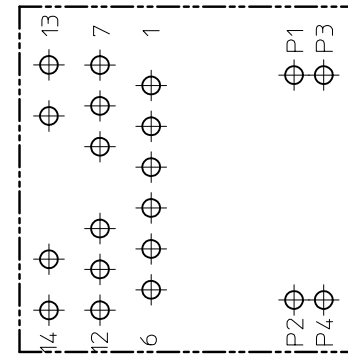
SUGGESTED PANEL CUTOUT

SUGGESTED BOARD LAYOUT - COMPONENT SIDE



SEE DETAIL-2

PIN CONFIGURATION

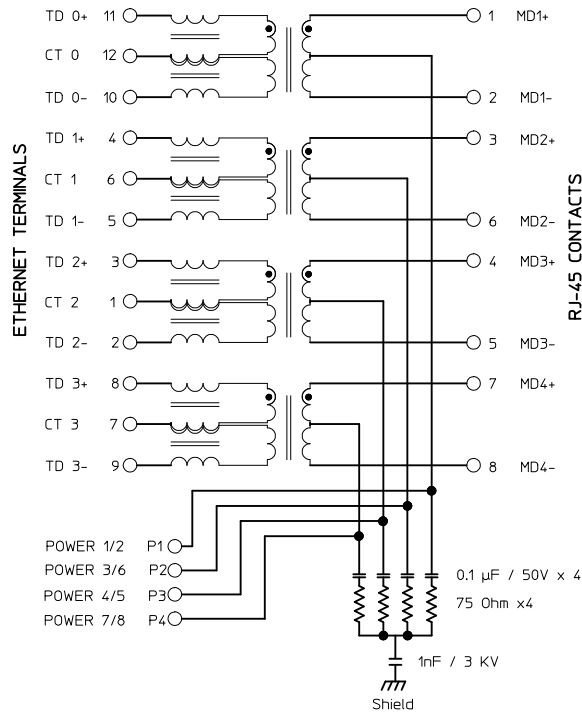


DETAIL-2
SCALE 4:1

ENTER DESCRIPTION EC NO: MG2010-0092 2010/04/14 DRWN: JBADER 2010/01/14 CHKD: MMANGARUDOV 2010/01/14 APPR: SSTEINKE 2010/05/25	QUALITY SYMBOLS 	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 2:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.05 ± --- 1 PLACE ± 0.10 ± --- ANGULAR ± .5 °	mm INCH ± --- ± --- ± 0.05 ± --- ± 0.10 ± ---	DRAWN BY JBADER	DATE 2010/01/14	TITLE HYPERJACK POE PLUS ENABLED 1X1 4P		
REV 2	DESCRIPTION SSTEINKE	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPROVED BY SSTEINKE		DATE 2010/03/09	MOLEX INCORPORATED	
		SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				DOCUMENT NO. SD-85789-001

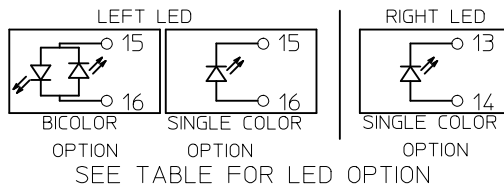
Electrical Specifications @25°C		
Operating temperature (0°C to +70°C)		
Description	Value	
OCL POE+TRANSF. 24mA bias (0°C to +70°C)	350µH min.	
OCL NONPOE TRANSF. 8mA bias (0°C to +70°C)	350µH min.	
Turns Ratio	1CT:1CT	
Insertion Loss	Limits (dB max.)	Typical Values (dB max.)
Frequency (MHz)		
1.0-9.9 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	Limits (dB min.)	TYPICAL Values (dB min.)
Frequency (MHz)		
1-9.9 MHz	27dB min.	27 @ 10MHz
10-100 MHz	27-17*log(F/10)	10 @ 100MHz
CMR	Limits (dB min.)	TYPICAL Values (dB min.)
Frequency (MHz)		
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	Limits (dB min.)	TYPICAL Values (dB min.)
Frequency (MHz)		
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



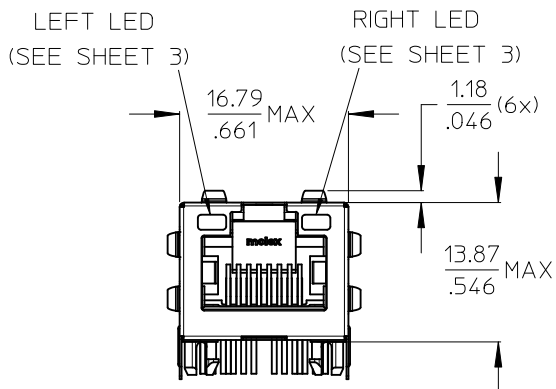
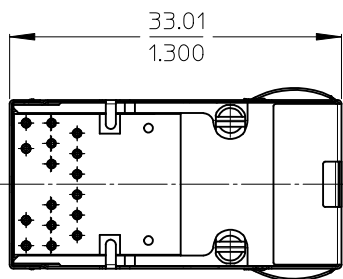
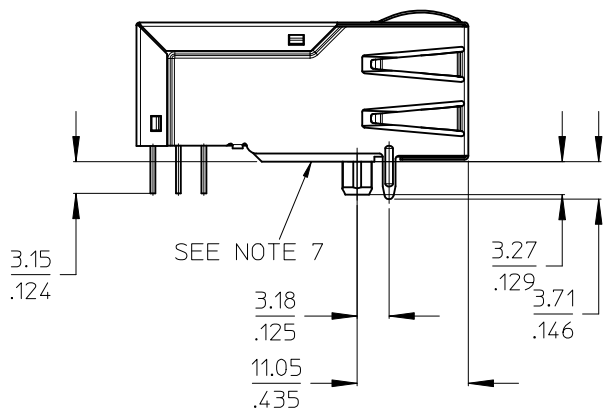
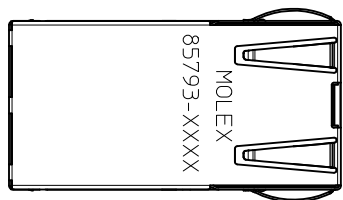
PART NUMBER	LED1 POLARITY			LED2 POLARITY		
	LEFT LED		COLOUR	RIGHT LED		COLOUR
	PIN15	PIN16		PIN13	PIN14	
85789-1001	-	+	GREEN	-	+	GREEN
85789-1003	-	+	GREEN	-	+	GREEN
85789-1006	+	-	ORANGE	-	+	YELLOW
	-	+	GREEN	-	+	YELLOW

ADDITIONAL LED COLORS AND CONFIGURATIONS AVAILABLE ON REQUEST



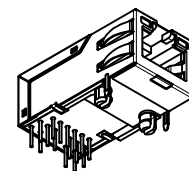
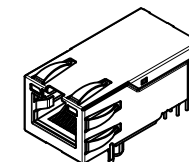
ENTER DESCRIPTION EC NO: MG2010-0092 DRWN: JBADER CHKD: MMANGARUDOV APPR: SSTE INKE	2010/04/14 2010/01/14 2010/05/25	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE 5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	REV 2		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.05 ± --- 1 PLACE ± 0.10 ± --- ANGULAR ± .5 °	mm INCH	DRAWN BY: JBADER DATE: 2010/01/14	TITLE: HYPERJACK POE PLUS ENABLED 1X1 4P		
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPROVED BY: SSTE INKE DATE: 2010/03/09	MATERIAL NO.	MOLEX MOLEX INCORPORATED	DOCUMENT NO. SD-85789-001		
	SIZE: A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	SHEET NO. 3 OF 3				

GIGABIT SINGLE PORT MAGNETIC JACK WITH LEDs



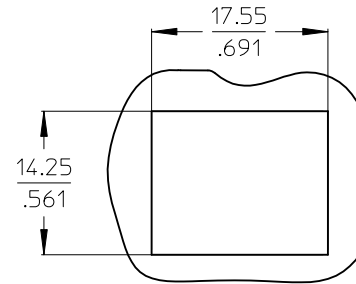
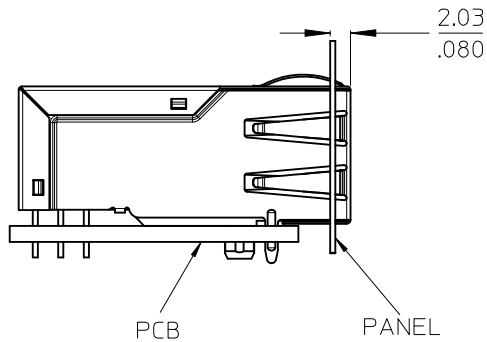
NOTES:

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(GROUND PINS ARE SOLDER DIPPED)
- 2 - PLASTIC MATERIAL: PBT, BLACK, UL 94V-0
- 3 - TERMINALS MATERIAL: PHOSPOR BRONZE CuSn8
RJ45 CONTACTS PLATING: 1.27µm GOLD OVER
1.9µm Ni ON MATING AREA
SOLDER TERMINALS: 3µm Sn
- 4 - JACK TO BE MATED WITH FCC 68.5 PLUGS /
IEC 60603-7 PLUGS
- 5 - PRODUCT SPECIFICATION: PS-85793-001
- 6 - PACKAGING SPECIFICATION: PK-85759-001
- 7 - STAND OFF TO SYSTEM BOARD



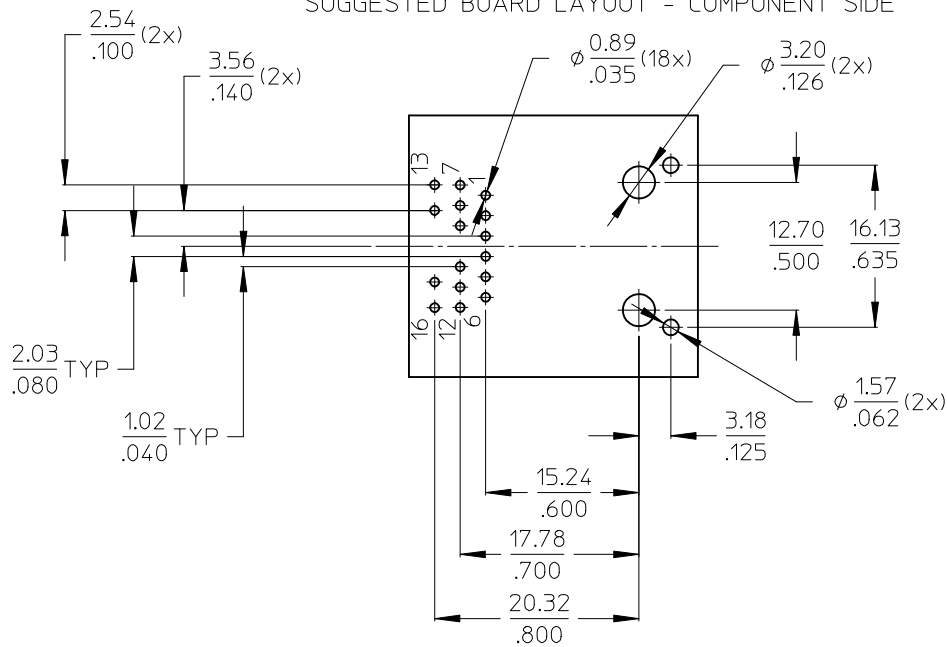
SCALE 1:1

ENTER DESCRIPTION EC NO: MG2010-0092 DRWN: JBADER 2010/04/16 CHKD: MMANGARUDOV 2010/04/16 APPR: SSIE INKE 2010/05/25	QUALITY SYMBOLS ▽=0 ◁=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE 2:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		4 PLACES ± --- ± ---	3 PLACES ± --- ± ---	2 PLACES ± 0.05 ± ---	1 PLACE ± 0.10 ± ---	ANGULAR ± .5 °	DRAWN BY: JBADER DATE: 2010/04/16 CHECKED BY: MMANGARUDOV DATE: 2010/04/16 APPROVED BY: SSTEINKE DATE: 2010/05/25	
1	REV	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE SHEET 3	MATERIAL NO. / DOCUMENT NO.			TITLE HYPERJACK 1000 BASE-T 1X1
				SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			MATERIAL NO. / DOCUMENT NO. SD-85793-101
							SHEET NO. 1 OF 3	



SUGGESTED PANEL CUTOUT

SUGGESTED BOARD LAYOUT - COMPONENT SIDE



REV	DESCRIPTION
1	ENTER DESCRIPTION EC NO: MG2010-0092 2010/04/16 DRWN: JBADER 2010/04/16 CHKD: MMANGARUDOV 2010/04/16 APPR: SSTE INKE 2010/05/25

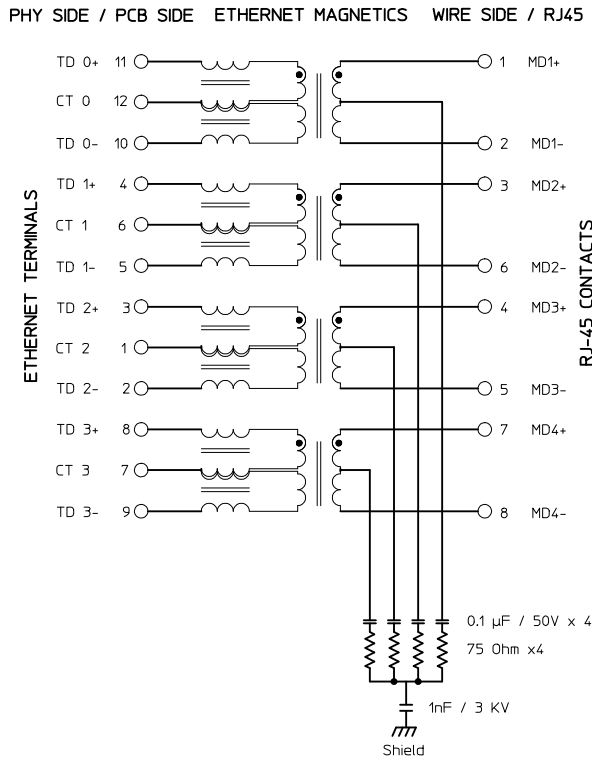
QUALITY SYMBOLS
$\nabla = 0$
$\nabla \square = 0$

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

DIMENSION STYLE	
MM ONLY	
DRAWN BY	DATE
JBADER	2010/04/16
CHECKED BY	DATE
MMANGARUDOV	2010/04/16
APPROVED BY	DATE
SSTE INKE	2010/05/21
MATERIAL NO.	
SEE SHEET 3	

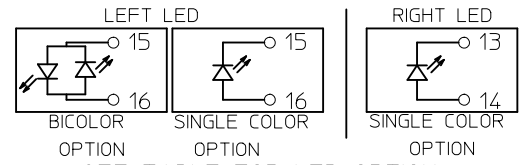
SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
2:1	METRIC	
TITLE		
HYPERJACK 1000 BASE-T 1X1		
MOLEX INCORPORATED		SHEET NO. 2 OF 3
DOCUMENT NO. SD-85793-101		
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Electrical Specifications @25°C		
Operating temperature (0°C to +70°C)		
Description	Value	
OCL POE+TRANSF. 24mA 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.)
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NEXT		
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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	COLOUR	PIN13	PIN14	COLOUR
85793-1001	-	+	GREEN	-	+	GREEN
85793-1003	-	+	GREEN	-	+	GREEN
85793-1006	+	-	ORANGE	-	+	YELLOW

ADDITIONAL LED COLORS AND CONFIGURATIONS AVAILABLE ON REQUEST



SEE TABLE FOR LED OPTION

ENTER DESCRIPTION EC NO: MG2010-0092 DRWN: JBADER 2010/04/16 CHKD: MMANGARUDOV 2010/04/16 APPR: SSTE INKE 2010/05/21	QUALITY SYMBOLS 	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE 5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.05 ± --- 1 PLACE ± 0.10 ± ---	mm INCH	DRAWN BY DATE JBADER 2010/04/16	TITLE HYPERJACK 1000 BASE-T 1X1		
		ANGULAR ± .5 °		CHECKED BY DATE MMANGARUDOV 2010/04/16	MOLEX INCORPORATED		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPROVED BY DATE SSTE INKE 2010/05/21	MATERIAL NO. SEE BOM	DOCUMENT NO. SD-85793-101	SHEET NO. 3 OF 3

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