

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0857891003](#)
Status: **Active**
Description: PoE PLUS ENABLED ICM 1x1 LEDs: GREEN - GREEN/ORANGE

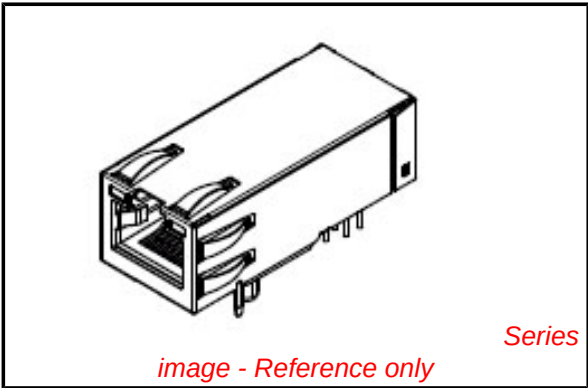
Documents:
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

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



EU RoHS ELV and RoHS Compliant REACH SVHC Not Reviewed Halogen-Free Status Not Reviewed	China RoHS
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Need more information on product environmental compliance?

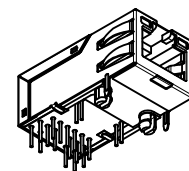
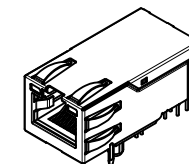
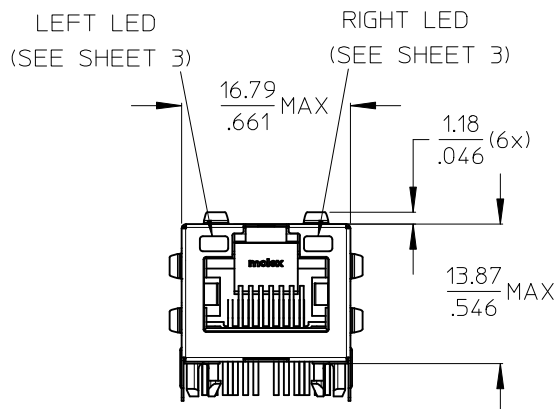
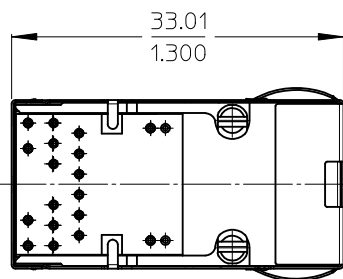
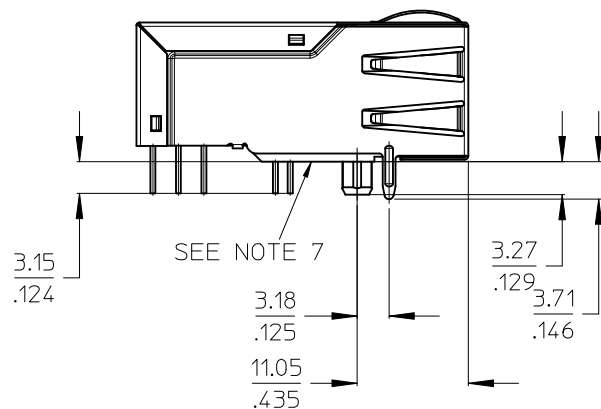
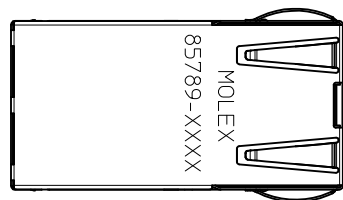
Email productcompliance@molex.com
For a multiple part number RoHS Certificate of Compliance, [click here](#)

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

Search Parts in this Series
85789Series

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

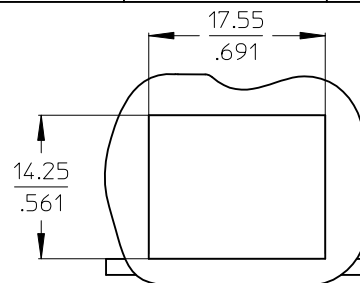
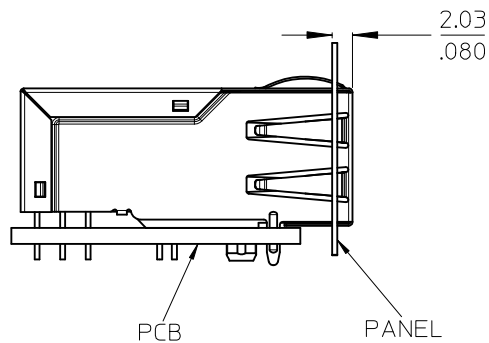


SCALE 1:1

NOTES:

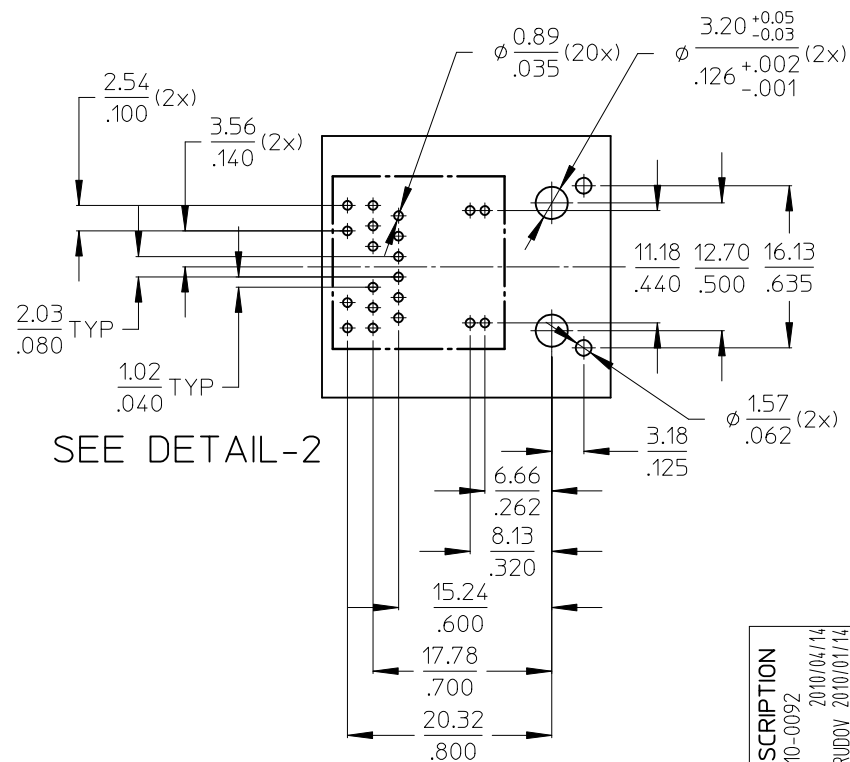
- 1 - SHIELD MATERIAL: STAINLESS STEEL
(GROUND PINS ARE SOLDER DIPPED)
- 2 - PLASTIC MATERIAL: PBT, BLACK, UL 94V-0
- 3 - TERMINALS MATERIAL: PHOSPOR BRONZE CuSn8
RJ45 CONTACTS PLATING: 1.27μm GOLD OVER
1.9μm Ni ON MATING AREA
SOLDER TERMINALS: 3μm Sn
- 4 - JACK TO BE MATED WITH FCC 68.5 PLUGS /
IEC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

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

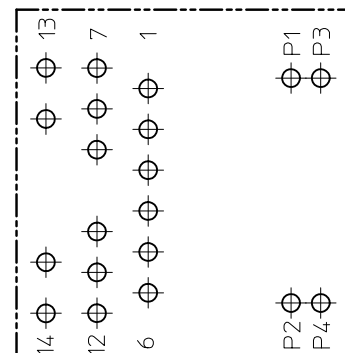


SUGGESTED PANEL CUTOUT

SUGGESTED BOARD LAYOUT - COMPONENT SIDE



PIN CONFIGURATION



DETAIL-2
SCALE 4:1

ENTER DESCRIPTION
EC NO: MG2010-0092
DRWN: JBADER 2010/04/14
CHKD: MMANGARUDOV 2010/01/14
APPR: SSTE INKE 2010/05/25
REV
2

QUALITY SYMBOLS
$\nabla = 0$
$\nabla C = 0$

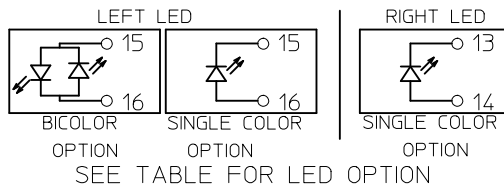
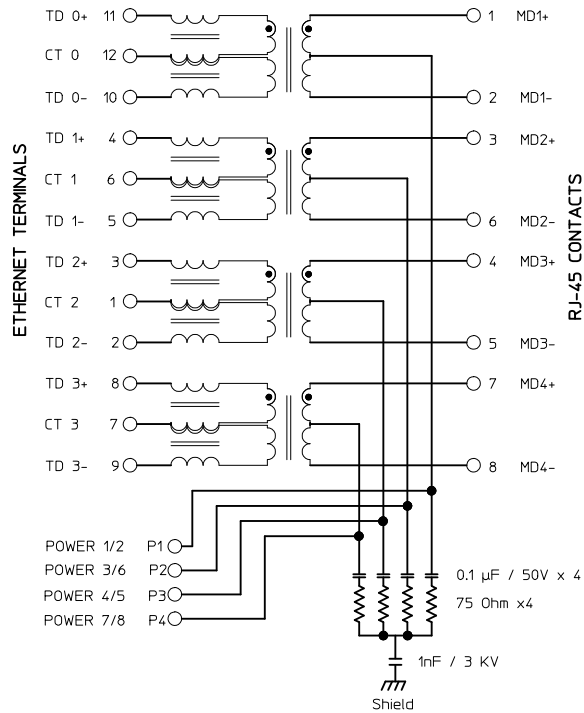
GENERAL TOLERANCES (UNLESS SPECIFIED)		
	mm	INCH
4 PLACES	$\pm .005$	$\pm .0004$
3 PLACES	$\pm .008$	$\pm .0006$
2 PLACES	$\pm .015$	$\pm .0010$
1 PLACE	$\pm .030$	$\pm .0020$
ANGULAR $\pm .5^\circ$		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		

DIMENSION STYLE	
MM ONLY	
DRAWN BY	DATE
JBADER	2010/01/14
CHECKED BY	DATE
MMANGARUDOV	2010/01/14
APPROVED BY	DATE
SSTE INKE	2010/03/09
MATERIAL NO.	
SEE SHEET 3	

SCALE 2:1	DESIGN UNITS METRIC		THIRD ANGLE PROJECTION
TITLE			
HYPERJACK POE PLUS ENABLED 1X1 4P			
MOLEX INCORPORATED			
DOCUMENT NO. SD-85789-001			SHEET NO. 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)	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	

PHY SIDE / PCB SIDE ETHERNET MAGNETICS WIRE SIDE / RJ45

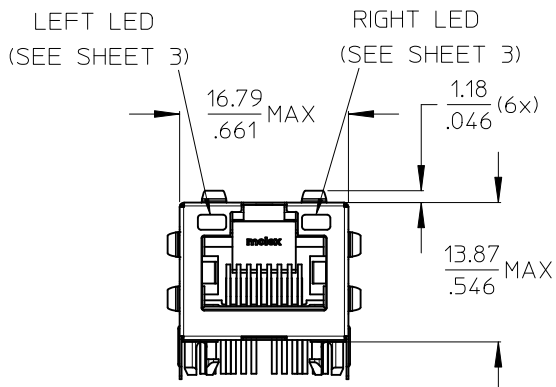
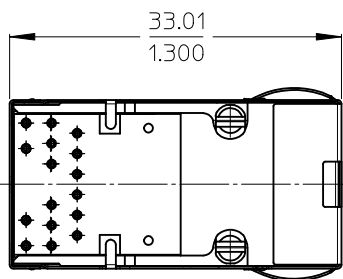
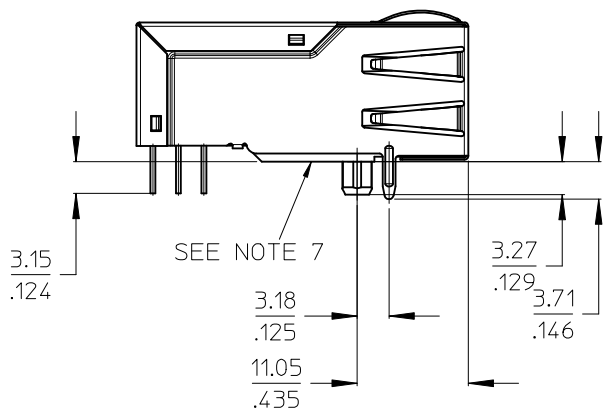
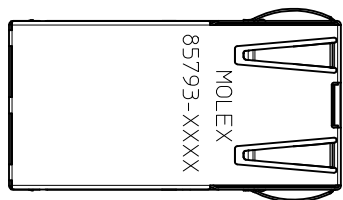


PART NUMBER	LED1 POLARITY			LED2 POLARITY		
	LEFT LED			RIGHT LED		
	PIN15	PIN16	COLOUR	PIN13	PIN14	COLOUR
85789-1001	-	+	GREEN	-	+	GREEN
85789-1003	-	+	GREEN	-	+	GREEN
85789-1006	-	+	GREEN	-	+	YELLOW

ADDITIONAL LED COLORS AND CONFIGURATIONS AVAILABLE ON REQUEST

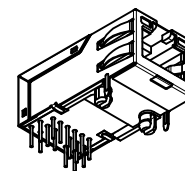
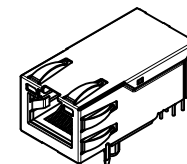
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					mm	INCH	DRAWN BY JBADER	DATE 2010/01/14	TITLE HYPERJACK POE PLUS ENABLED 1X1 4P						
2		REV		4 PLACES	± ---	± ---	CHECKED BY	DATE					MOLEX INCORPORATED  SD-85789-001		
				3 PLACES	± ---	± ---	MMANGARUDOV	2010/01/14							
				2 PLACES	± 0.05	± ---	APPROVED BY	DATE	DOCUMENT NO.		SHEET NO.				
				1 PLACE	± 0.10	± ---	SSTE INKE	2010/03/09	SD-85789-001		3 OF 3				
				ANGULAR ± .5 °		MATERIAL NO.									
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				SEE BOM											
		SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION												

GIGABIT SINGLE PORT MAGNETIC JACK WITH LEDs



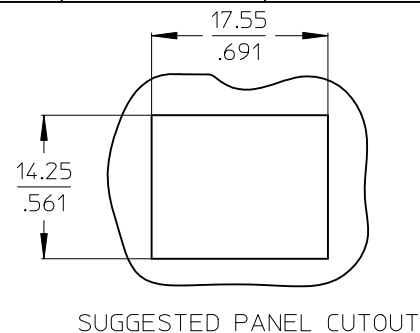
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- 4 - JACK TO BE MATED WITH FCC 68.5 PLUGS /
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- 5 - PRODUCT SPECIFICATION: PS-85793-001
- 6 - PACKAGING SPECIFICATION: PK-85759-001
- 7 - STAND OFF TO SYSTEM BOARD



SCALE 1:1

ENTER DESCRIPTION EC NO: MG2010-0092 DRWN:JBADER 2010/04/16 CHKD:MMANGARUDOV 2010/04/16 APPR:SSTE INKE 2010/05/25		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 2010/04/16	TITLE HYPERJACK 1000 BASE-T 1X1				
1	REV			4 PLACES	± ---	± ---	CHECKED BY MMANGARUDOV			DATE 2010/04/16	MOLEX INCORPORATED	
				3 PLACES	± ---	± ---	APPROVED BY SSTE INKE	DATE 2010/05/21				
				2 PLACES	± 0.05	± ---	MATERIAL NO. SEE SHEET 3		DOCUMENT NO. SD-85793-101	SHEET NO. 1 OF 3		
				1 PLACE	± 0.10	± ---						
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		ANGULAR ± .5 °						
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SUGGESTED BOARD LAYOUT - COMPONENT SIDE

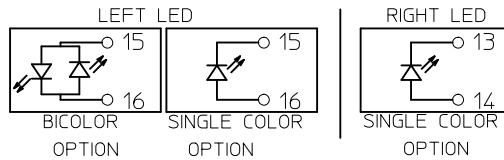
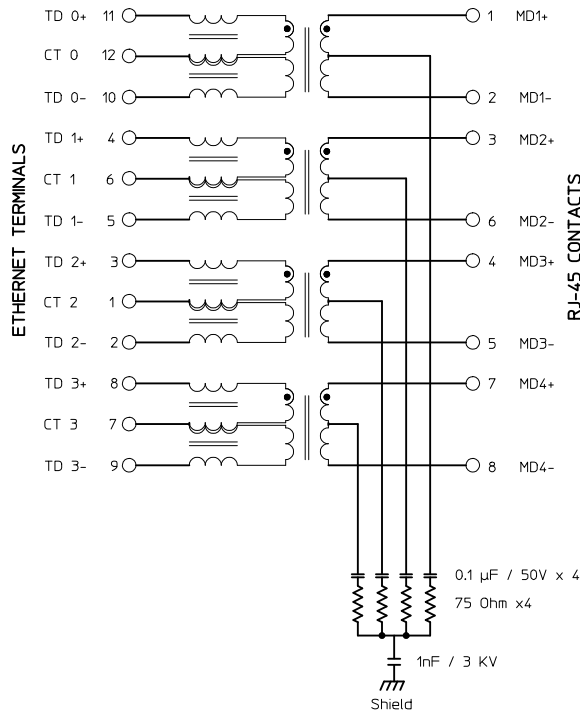
The diagram shows the component side of a PCB layout with various dimensions and hole specifications:

- Hole Specifications:**
 - $\phi \frac{0.89}{.035} (18x)$
 - $\phi \frac{3.20}{.126} (2x)$
 - $\phi \frac{1.57}{.062} (2x)$
- Dimensions:**
 - Top horizontal dimensions: $\frac{2.54}{.100} (2x)$, $\frac{3.56}{.140} (2x)$
 - Left vertical dimension: $\frac{2.03}{.080}$ TYP
 - Bottom left vertical dimension: $\frac{1.02}{.040}$ TYP
 - Right vertical dimensions: $\frac{12.70}{.500}$, $\frac{16.13}{.635}$
 - Horizontal dimensions from centerline: $\frac{15.24}{.600}$, $\frac{17.78}{.700}$, $\frac{20.32}{.800}$
 - Vertical distance between mounting holes: $\frac{3.18}{.125}$
- Other Features:**
 - A central rectangular area containing a grid of holes.
 - Labels 13, 7, 1, 16, 12, 6 indicating specific points or features.

fb_frame_A3_P_AM_T
Rev. E 2006/04/15

Electrical Specifications @25°C		
Operating temperature (0°C to +70°C)		
Description	Value	
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PHY SIDE / PCB SIDE ETHERNET MAGNETICS WIRE SIDE / RJ45



SEE TABLE FOR LED OPTION

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85793-1003	-	+	GREEN	-	+	GREEN
85793-1006	-	+	GREEN	-	+	YELLOW

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					mm	INCH	DRAWN BY JBADER	DATE 2010/04/16	TITLE HYPERJACK 1000 BASE-T 1X1		
1		REV		4 PLACES	± ---	± ---	CHECKED BY MMANGARUDOV	DATE 2010/04/16			
				3 PLACES	± ---	± ---	MOLEX MOLEX INCORPORATED				
				2 PLACES	± 0.05	± ---					
				1 PLACE	± 0.10	± ---					
							ANGULAR ± .5 °		APPROVED BY SSTE INKE		DATE 2010/05/21
					DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.		DOCUMENT NO.	SHEET NO.	
							SEE BOM		SD-85793-101		3 OF 3
							SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.