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Part Number: [0480250091](#)
Status: **Active**
Overview: [magnetic modular jacks](#)
Description: Modular Jack, Right Angle, 10/100, with Integrated Magnetic and LED, 8/8, Tail Length 3.18mm (.125") for IR Reflow, Lead free

Documents:

[3D Model](#) [Product Specification PS-48025-005 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

CSA LR19980
 UL E107635

General

Product Family Modular Jacks/Plugs
 Series [48025](#)
 Comments With LED
 Component Type PCB Jack
 Magnetic Yes
 Overview [magnetic modular jacks](#)
 Performance Category 5
 Power over Ethernet (PoE) Non-PoE
 Product Name Magnetic Jack

Physical

Boot Color N/A
 Color - Resin Black
 Durability (mating cycles max) 750
 Flammability 94V-0
 Inverted / Top Latch Yes
 Keying to Mating Part Yes
 Lightpipes/LEDs LEDs
 Material - Metal Brass, Phosphor Bronze
 Material - Plating Mating Gold
 Material - Plating Termination Tin
 Material - Resin Nylon
 Orientation Right Angle (Side Entry)
 PCB Locator Yes
 PCB Retention Yes
 PCB Thickness Recommended (in) 0.063 In
 PCB Thickness Recommended (mm) 1.60 mm
 Packaging Type Tray
 Pitch - Mating Interface (in) 0.050 In
 Pitch - Mating Interface (mm) 1.27 mm
 Pitch - Term. Interface (in) 0.050 In
 Pitch - Term. Interface (mm) 1.27 mm
 Ports 1
 Positions / Loaded Contacts 8/8
 Surface Mount Compatible (SMC) No
 Temperature Range - Operating -40°C to +70°C
 Termination Interface: Style Through Hole
 Waterproof / Dustproof No
 Wire/Cable Type N/A

Electrical

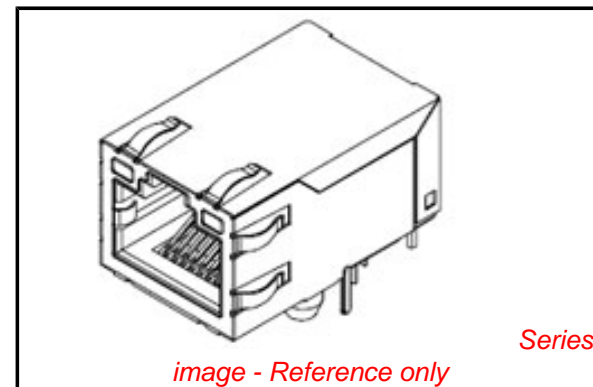


image - Reference only

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

[48025Series](#)

Mates With

FCC 68 Plugs

Current - Maximum per Contact	1.5A
Grounding to PCB	Yes
Grounding to Panel	Panel Ground Tab
Shielded	Yes
Voltage - Maximum	150V AC (RMS)

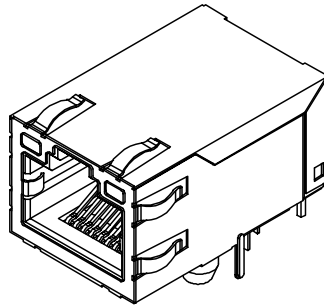
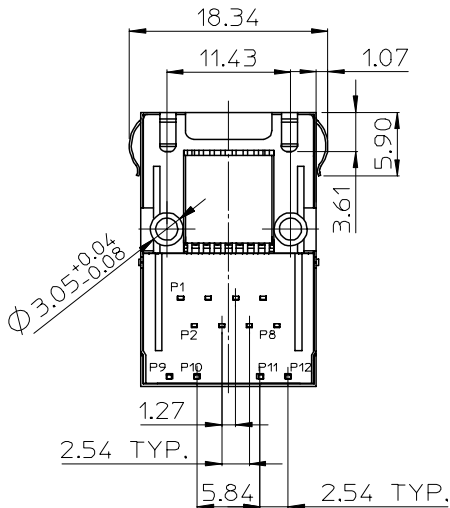
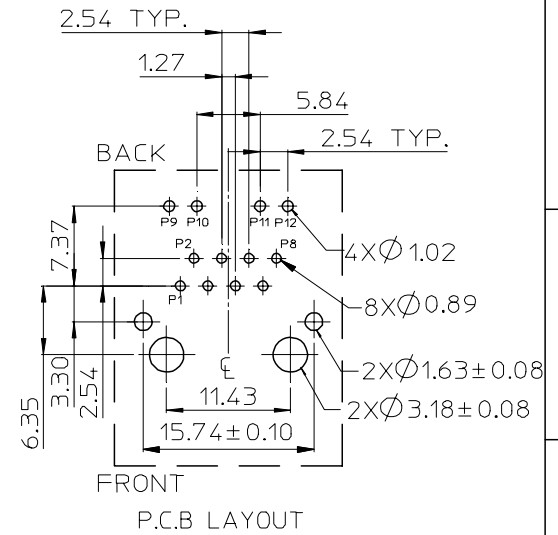
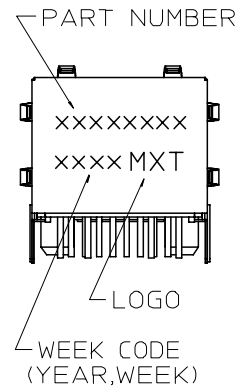
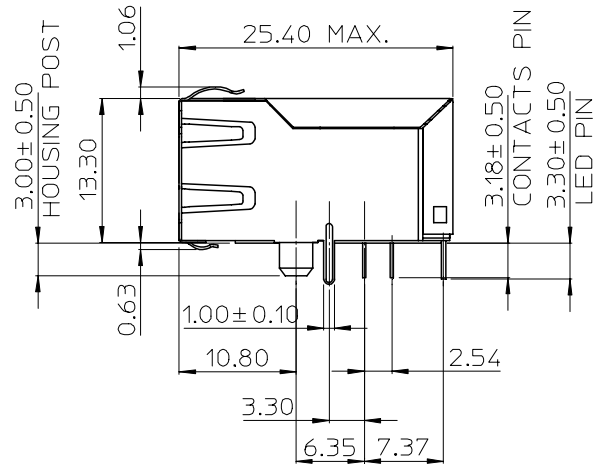
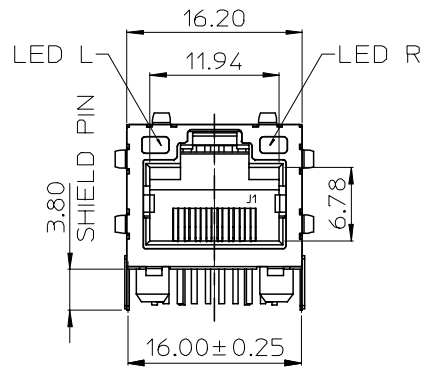
Material Info

Reference - Drawing Numbers

Packaging Specification	PK-48025-001
Product Specification	PS-48025-005
Sales Drawing	SD-48025-007
Test Summary	TS-48025-007

This document was generated on 05/26/2010

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NOTES:

- MATERIAL:
METAL SHELL: BRASS
HOUSING: POLYAMIDE, GLASS FIBER FILLED, UL94-0,COLOR BLACK
INSERT: POLYAMIDE, GLASS FIBER FILLED, UL94-0,COLOR BLACK
TERMINAL: PHOSPHOR BRONZE
- PLATING:
TERMINAL:
CONTACT AREA: GOLD(Au),THICKNESS=50 MICROINCH/1.27 MICROMETER
SOLDER TAIL: TIN(Sn),THICKNESS=100 MICROINCH MINIMUM
UNDER PLATE: NICKEL (Ni).
- METAL SHELL:
SOLDER TAIL: TIN(Sn),THICKNESS=100 MICROINCH MINIMUM
UNDER PLATE: NICKEL (Ni),(SOLDERING AVAILABLE)
SURFACE APPEARANCE: BRIGHT.
- RECOMMENDED PCB THICKNESS: 1.60±0.05
- PRODUCT SPECIFICATION REFER TO PS-48025-005
- TEST SUMMARY REFER TO TS-48025-007
- PACKAGING SPECIFICATION REFER TO PK-48025-001
- LEAD FREE AND RoHS COMPLIANT PRODUCT.

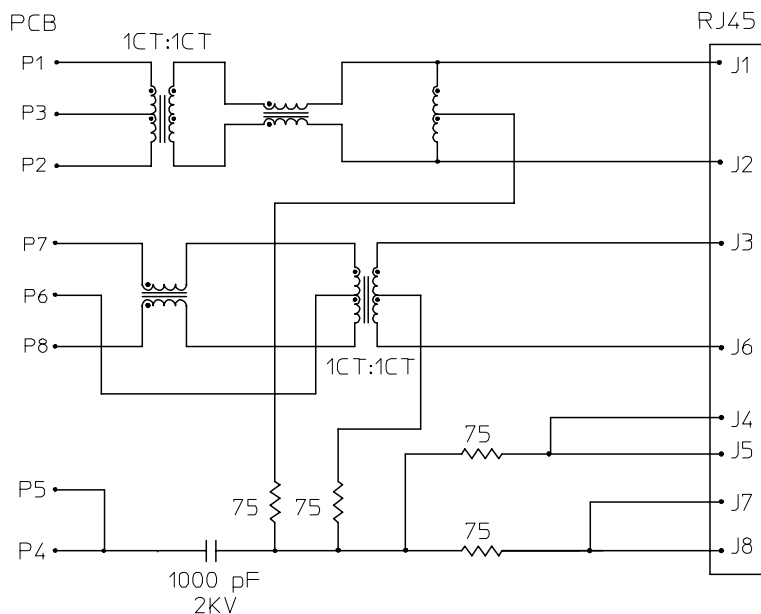
ROHS FOR 48025-0001	2006/10/04	DRWN:ALLIN	2006/10/04
EC NO: SH2007-0129	2006/10/04	CHKD:	2006/10/04
		APPR:WMSCHANG	2006/10/04
REV	DESCRIPTION		

QUALITY SYMBOLS	▽=0
	▽=0

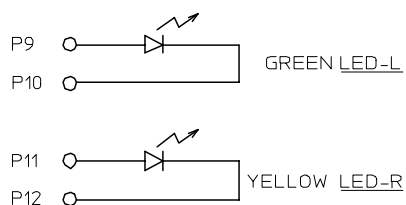
GENERAL TOLERANCES (UNLESS SPECIFIED)	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.25	± ---
1 PLACE	± 0.25	± ---
ANGULAR ± 3 °		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		

DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
MM ONLY			METRIC	
DRAWN BY	DATE	TITLE		
LINDA	2006/08/08	MODULAR JACK WITH INTEGRATED MAGNETICS WITH LED		
CHECKED BY	DATE			
ALLEN LIN	2006/08/10			
APPROVED BY	DATE			
ERICK LAN	2006/08/10			
MATERIAL NO.	DOCUMENT NO.			
48025-0091	SD-48025-007			
SIZE				
A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

MATERIAL NO.		DOCUMENT NO.	SHEET NO.
48025-0091		SD-48025-007	1 OF 2



MAGNETIC SCHEMATIC



LED SCHEMATIC

MAGNETIC ELECTRICAL SPECIFICATION

PARAMETER	SPECIFICATIONS		
INSERTION LOSS	100 KHz	1-125 MHz	
	1.2 dB MAX	0.2+0.002*f~1.4 dB MAX	
RETURN LOSS (Z OUT=100 OHM±15%)	1-30 MHz	30-60 MHz	60-80 MHz
	16 dB MIN	10-20*LOG ₁₀ (f/60 MHz) dB MIN.	10 dB MIN.
INDUCTANCE (OCL) (MEDIA SIDE, 0° +70° C)	350 uH MIN (MEASURED AT 100 KHz, 100 mVRMS AND WITH 8 mA DC BIAS)		
CROSSTALK, ADJACENT CHANNELS	1 MHz	10-100 MHz	
	50 dB MIN	50-17*LOG ₁₀ (f/10) dB MIN.	
COMMON MODE REJECTION RATIO	2 MHz	30-200 MHz	
	50 dB MIN	15-20*LOG ₁₀ (f/200) dB MIN.	
DC RESISTANCE 1/2 WINDING	0.60 OHMS MAX.		
DC RESISTANCE IMBALANCE	±0.065 OHMS MAX (CENTER TAP SYMMETRY)		
HI-POT ISOLATION	1500 VRMS AC		

NOTE: f IS FREQUENCY IN MHz.

LED ELECTRICAL SPECIFICATION

PARAMETER	YELLOW (TYP.)	GREEN (TYP.)	UNITS	TEST CONDITIONS
POWER DISSIPATION	105	105	mW	
REVERSE VOLTAGE	5	5	V	
PEAK WAVELENGTH	590	565	nm	I _F =20mA
FORWARD VOLTAGE	2.1 MAX.=2.5	2.2 MAX.=2.5	V	I _F =20mA

SEE SHEET 1 EC NO: SH2007-0129 DRWN: ALLIN 2006/10/04 CHKD: 2006/10/04 APPR: WMSCHANG 2006/10/04	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE MM ONLY	SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	▽=0 ◻=0	mm INCH	DRAWN BY LINDA	DATE 2006/08/08	TITLE MODULAR JACK WITH INTEGRATED MAGNETICS WITH LED		
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.25 ± --- 1 PLACE ± 0.25 ± ---	APPROVED BY ERICK LAN	DATE 2006/08/10	MATERIAL NO. 48025-0091		
		ANGULAR ± 3 °	APPROVED BY ERICK LAN	DATE 2006/08/10	DOCUMENT NO. SD-48025-007	SHEET NO. 2 OF 2	
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			