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Part Number: [0480251090](#)
Status: **Active**
Overview: [magnetic modular jacks](#)
Description: Modular Jack, Right Angle, 10/100, with Integrated Magnetic and LED, 8/8, 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

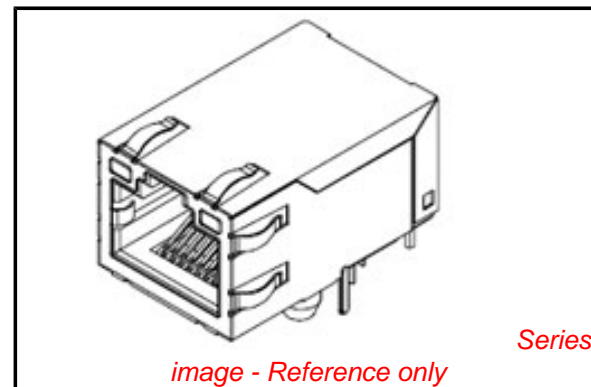
Product Family Modular Jacks/Plugs
 Series [48025](#)
 Comments With LED
 Component Type PCB Jack
 Magnetic Yes
 Overview [magnetic modular jacks](#)
 Performance Category 5
 Power over Ethernet (PoE) Non-PoE
 Product Name Magnetic Jack

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

Current - Maximum per Contact 1.5A



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

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-48025-009
Test Summary	TS-48025-009

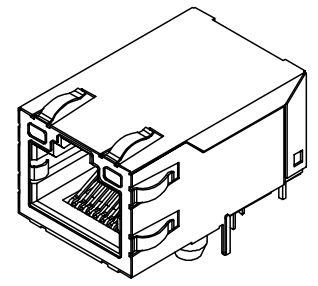
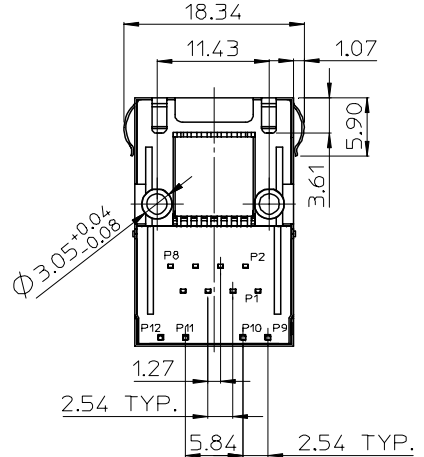
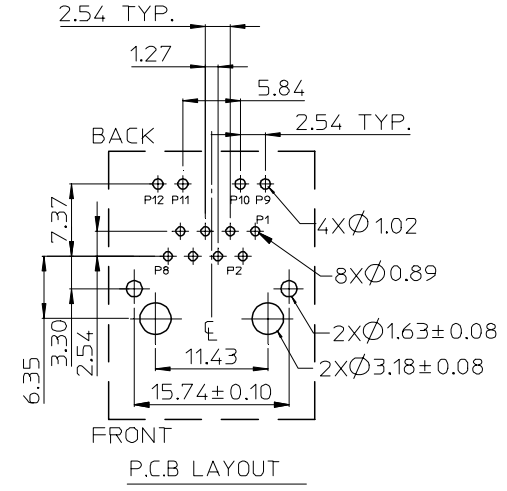
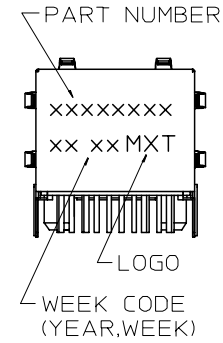
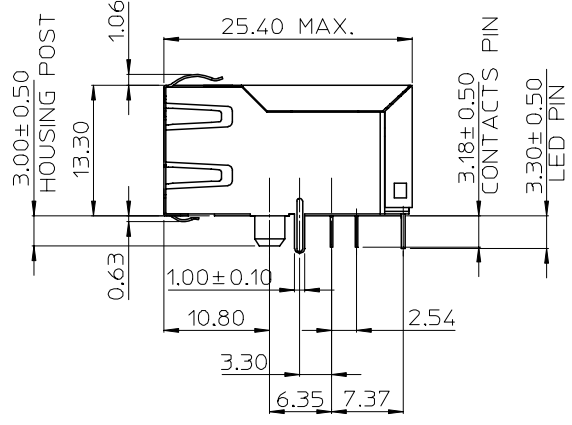
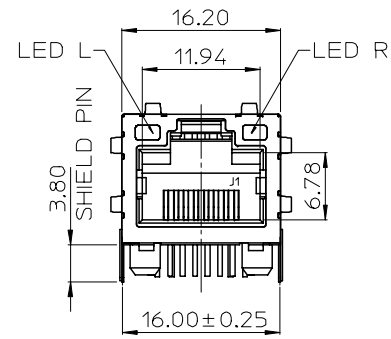
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- NOTES:
- MATERIAL:
METAL SHELL: BRASS
HOUSING: POLYAMIDE, GLASS FIBER FILLED, UL94-0.COLOR BLACK
INSERT: POLYAMIDE, GLASS FIBER FILLED, UL94-0.COLOR BLACK
TERMINAL: PHOSPHOR BRONZE
 - PLATING:
TERMINAL:
CONTACT AREA: GOLD(Au), THICKNESS=50 MICROINCH/1.27 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-48025-009
 - PACKAGING SPECIFICATION REFER TO PK-48025-001
 - LEAD FREE AND RoHS COMPLIANT PRODUCT.

P/N	LED COLOR	
	LEFT	RIGHT
48025-1090	GREEN	GREEN
48025-1190	GREEN	YELLOW

RoHS FOR 48025-1100
EC NO: SH2007-0129
DRAWN: ALLIN 2006/10/04
CHKD: 2006/10/04
APPR: WMSCHANG 2006/10/04

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
MM ONLY

DRAWN BY	DATE
LINDA	2006/08/08
CHECKED BY	DATE
ALLEN LIN	2006/08/10
APPROVED BY	DATE
ERICK LAN	2006/08/10

MATERIAL NO. SEE TABLE

SCALE DESIGN UNITS METRIC

THIRD ANGLE PROJECTION

TITLE
MODULAR JACK WITH INTEGRATED MAGNETICS WITH LED

MOLEX INCORPORATED

DOCUMENT NO. SD-48025-009 SHEET NO. 1 OF 2

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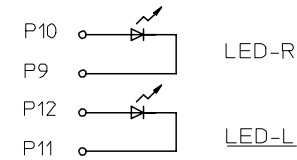
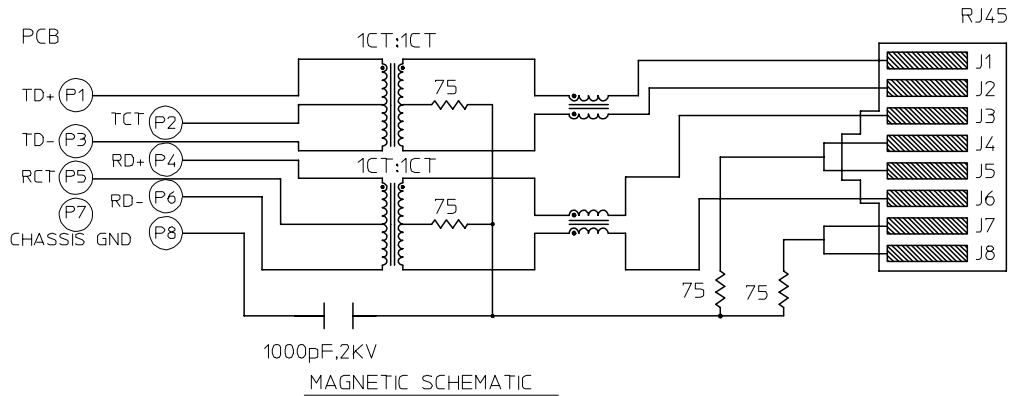
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MAGNETIC ELECTRICAL SPECIFICATIONS:

- 1.0 TURNS RATIO:(P4-P5-P6):(J3-J6):1CT:1CT
(P3-P2-P1):(J1-J2):1CT:1CT
- 2.0 INDUCTANCE:(P4-P6):350uH MIN. @0.1V,100KHz,8mA DC Bias.
(P3-P1):350uH MIN. @0.1V,100KHz,8mA DC Bias.
- 3.0 LEAKAGE INDUCTANCE:P6-P5-P4(WITH J6 AND J3 SHORT):0.3 MAX.@1MHz.
P3-P2-P1(WITH J2 AND J1 SHORT):0.3 MAX.@1MHz.
- 4.0 INTERWINDING CAPACITANCE:(P6,P5,P4) TO (J6,J3):30pf MAX @1MHz.
(P3,P2,P1) TO (J2,J1):30pf MAX @1MHz.
- 5.0 DC RESISTANCE:(J6-J3)=(J2-J1):1.3 ohms Max.
- 6.0 RETURN LOSS:(P4-P6)(P1-P3)
1MHz TO 30MHz:18dB min.
30MHz TO 80MHz:12dB min.
NOTE:100 OHMS CONNECTED TO (J2-J1) OR (J3-J6).
- 7.0 HI-POT:(J1,J2) TO (P1,P3):1500 VAC OR 2250 VDC.
(J3,J6) TO (P4,P6):1500 VAC OR 2250 VDC.
- 8.0 INSERTION LOSS:1.1 dB MAX.
100KHz TO 100MHz.
- 9.0 CROSS TALK:1-100 MHz:30 dB MIN.
- 10.0 COMMON TO COMMON MODE REJECTION:1MHz TO 100MHz:35 dB MIN.

LED ELECTRICAL SPECIFICATION

PARAMETER	YELLOW (TYP.)	GREEN (TYP.)	UNITS	TEST CONDITIONS
POWER DISSIPATION	105	105	mW	
REVERSE VOLTAGE	5	5	V	
PEAK WAVELENGTH	585	565	nm	I _F =20mA
FORWARD VOLTAGE	2.1 MAX.=2.5	2.2 MAX.=2.5	V	I _F =20mA



LED SCHEMATIC

SEE SHEET 1 EC NO: SH2007-0129 DRWN:ALLIN CHKD: APPR:WMSCHANG 2006/10/04 2006/10/04 2006/10/04	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <tr> <td></td> <td>mm</td> <td>INCH</td> </tr> <tr> <td>4 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>3 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.25</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± 0.25</td> <td>± ---</td> </tr> </table>		mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± 0.25	± ---	1 PLACE	± 0.25	± ---	DIMENSION STYLE MM ONLY	SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
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DRAWN BY LINDA	DATE 2006/08/08	TITLE MODULAR JACK WITH INTEGRATED MAGNETICS WITH LED																			
CHECKED BY ALLEN LIN	DATE 2006/08/10	MOLEX INCORPORATED																			
APPROVED BY ERICK LAN	DATE 2006/08/10	MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-48025-009	SHEET NO. 2 OF 2																	