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Part Number: [0480251190](#)
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

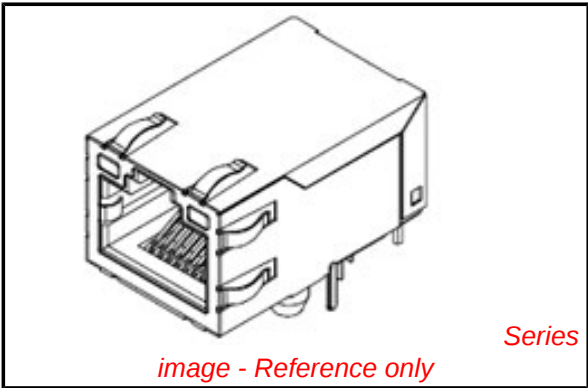
Product Family	Modular Jacks/Plugs
Series	48025
Comments	With LED
Component Type	PCB Jack
Magnetic	Yes
Overview	magnetic_modular_jacks
Performance Category	5
Power over Ethernet (PoE)	Non-PoE
Product Name	Magnetic Jack

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
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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

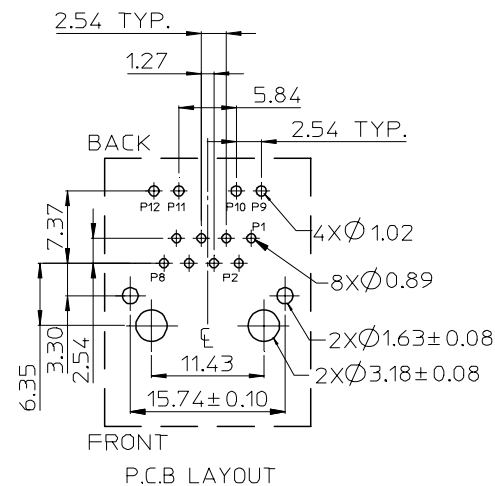
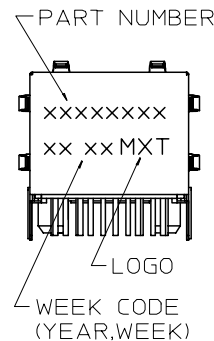
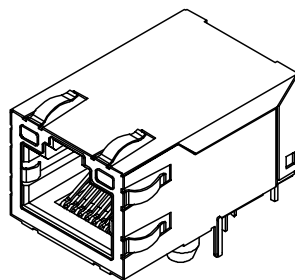
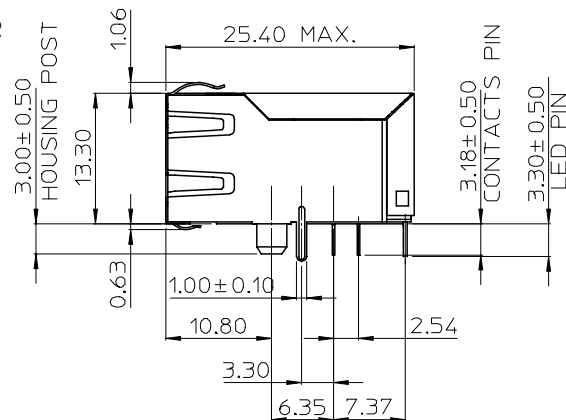
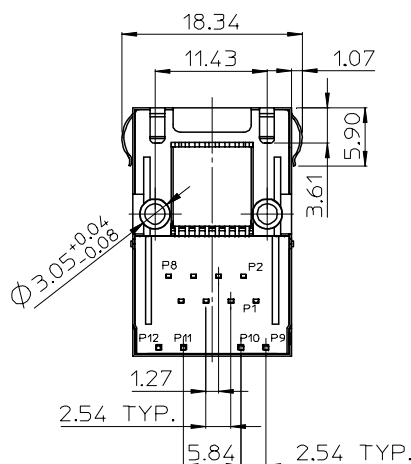
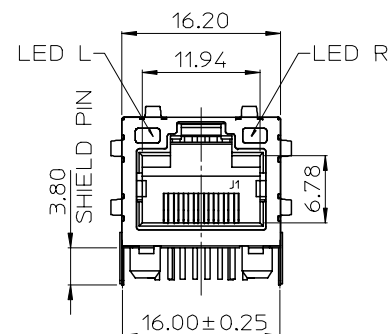
Reference - Drawing Numbers

Packaging Specification	PK-48025-001
Product Specification	PS-48025-005
Sales Drawing	SD-48025-009
Test Summary	TS-48025-009

This document was generated on 05/26/2010

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NOTES:

1.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

2.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.

3.RECOMMENDED PCB THICKNESS: 1.60±0.05

4.PRODUCT SPECIFICATION REFER TO PS-48025-005

5.TEST SUMMARY REFER TO TS-48025-009

6.PACKAGING SPECIFICATION REFER TO PK-48025-001

7.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	2006/10/04
DRW:ALLIN	2006/10/04
CHKD:	2006/10/04
APPR:WWSCHANG	2006/10/04

QUALITY SYMBOLS	DESCRIPTION
▽=0	
▽=0	

GENERAL TOLERANCES (UNLESS SPECIFIED)	
	mm
4 PLACES	± 0.25
3 PLACES	± 0.25
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	
SIZE A3	

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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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	IF=20mA
FORWARD VOLTAGE	2.1 MAX.=2.5	2.2 MAX.=2.5	V	IF=20mA

PCB

1CT:1CT

75

1CT:1CT

75

75

75

1000pF,2KV

MAGNETIC SCHEMATIC

RJ45

J1

J2

J3

J4

J5

J6

J7

J8

P10

P9

P12

P11

LED-R

LED-L

LED SCHEMATIC

SEE SHEET 1

EC NO: SH2007-0129

DRWN:ALLIN

CHKD:

APPR:WMSCHANG

REV

QUALITY SYMBOLS

▽=0

▽=0

DESCRIPTION

2006/10/04

2006/10/04

2006/10/04

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

CHECKED BY

DATE

APPROVED BY

DATE

MATERIAL NO.

SEE TABLE

SIZE

A3

SCALE

1:1

DESIGN UNITS

METRIC

THIRD ANGLE PROJECTION

TITLE

MODULAR JACK WITH
INTEGRATED MAGNETICS
WITH LED

MOLEX INCORPORATED

DOCUMENT NO.

SD-48025-009

SHEET NO.

2 OF 2

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fb_frame_A3_P_AM_T

Rev. D 2004/06/28

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