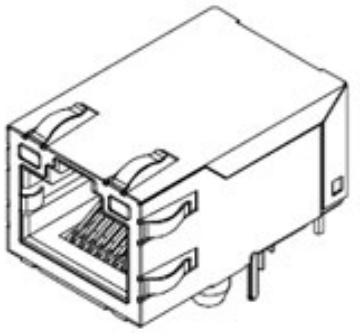
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Part Number: 0480250002
Status: Active
Overview: magnetic_modular_jacks
Description: Modular Jack, Right Angle, 10/100, with Integrated Magnetic and LED, 8/8, Tail Length 2.80mm (.110") for IR Reflow, Lead free



Series image - Reference only

Documents:

3D Model
Drawing (PDF)
Product Specification PS-48025-004 (PDF)
RoHS Certificate of Compliance (PDF)

Agency Certification

CSA	LR19980
UL	E107635

General

Product Family	Modular Jacks/Plugs
Series	48025
Comments	With Lightpipes|Tail Length: 2.80mm (.110")
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	High Temperature Thermoplastic
Orientation	Right Angle (Side Entry)
PCB Locator	Yes
PCB Retention	Yes
PCB Thickness Recommended (in)	0.062 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)	Yes
Temperature Range - Operating	-40°C to +70°C
Termination Interface: Style	Through Hole
Waterproof / Dustproof	No
Wire/Cable Type	N/A

Electrical

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)

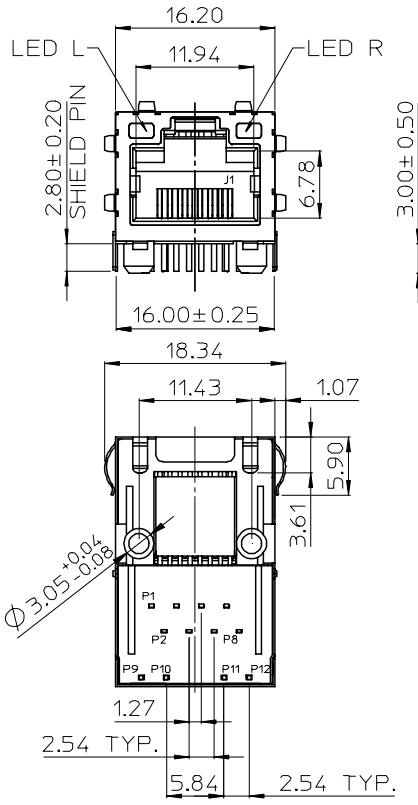
Material Info

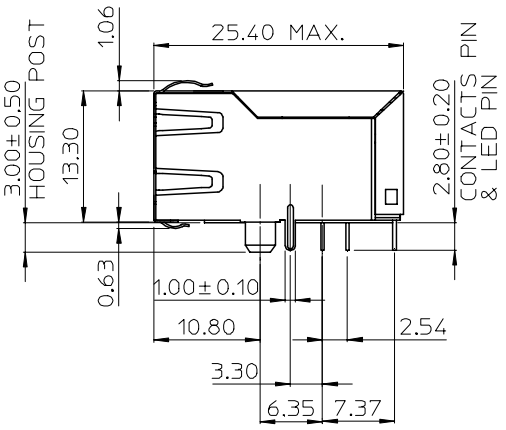
Reference - Drawing Numbers

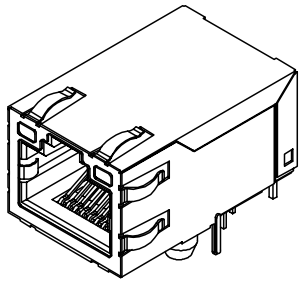
Packaging Specification	PK-48025-001
Product Specification	PS-48025-004
Sales Drawing	SD-48025-006
Test Summary	TS-48025-006

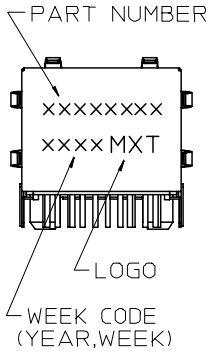
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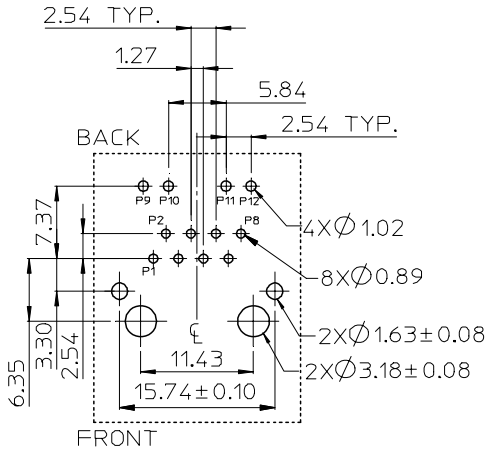
PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION











P.C.B LAYOUT

NOTES:

1.MATERIAL:
- METAL SHELL: BRASS.
- HOUSING: HIGH TEMP THERMOPLASTIC,GLASS FIBER FILLED, UL94V-0,COLOR:BLACK
- INSERT: HIGH TEMP THERMOPLASTIC,GLASS FIBER FILLED, UL94V-0,COLOR:BLACK
- TERMINAL: PHOSPHOR BRONZE.
- RESIN: UEP-700

2.PLATING:
- TERMINAL:
  - CONTACT AREA: GOLD(Au),THICKNESS=50 MICROINCH/1.27 MICROMETER MINIMUM.
  - SOLDER TAIL: TIN(Sn), THICKNESS=100 MICROINCH/2.54 MICROMETER 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-48025-004
5.TEST SUMMARY REFER TO TS-48025-006
6.PACKAGING SPECIFICATION REFER TO PK-48025-001
7.LEAD FREE AND ROHS COMPLIANCE PRODUCT
8.IR REFLOW APPLIFICATION PRODUCT

TOOLING RELEASED
EC NO: SH2006-0106 2005/10/07
DR:WN:ALLIN 2005/10/12
CH'KD: 2005/10/13
APPR:WMSCHANG
DESCRIPTION
A
REV

QUALITY SYMBOLS
▼=0
Ⓒ=0

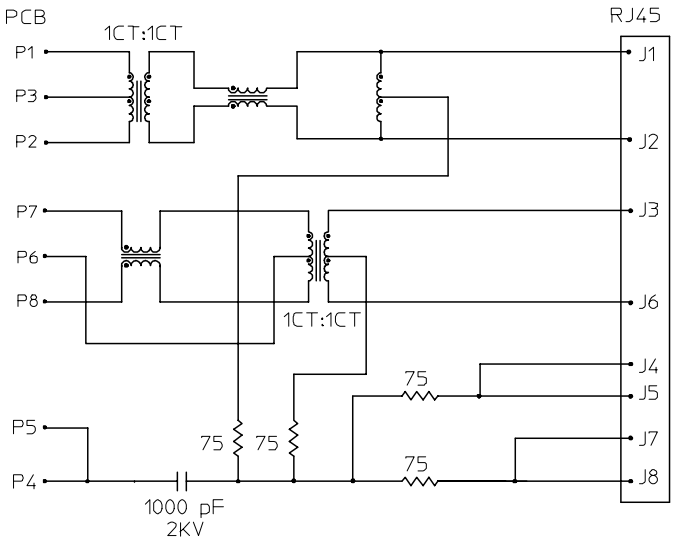
GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.25	± ---
1 PLACE	± 0.25	± ---
ANGULAR ± 3 °		

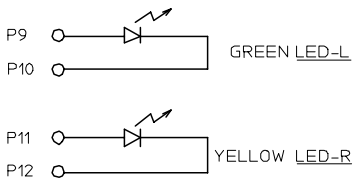
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE	MM ONLY
SCALE	1:1
DESIGN UNITS	METRIC
	THIRD ANGLE PROJECTION
DRAWN BY / DATE	LINDA 2005/08/26
CHECKED BY / DATE	ALLEN LIN 2005/08/26
APPROVED BY / DATE	WILSON CHANG 2005/08/26
MATERIAL NO.	48025-0002
TITLE	MODR JK RA DIP WITH LED MAGNETICS FOR IR REFLOW (LEAD FREE VERSION)
	MOLEX INCORPORATED
DOCUMENT NO.	SD-48025-006
SHEET NO.	1 OF 2
SIZE	A4

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

SEE SHEET 1
EC NO: SH2006-0106 2005/10/07
DRWN:ALLIN 2005/10/12
CH'KD: 2005/10/13
APPR:WWSCHANG
DESCRIPTION
A
REV

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
SCALE: 1:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: LINDA DATE: 2005/08/26
CHECKED BY: ALLEN LIN DATE: 2005/08/26
APPROVED BY: WILSON CHANG DATE: 2005/08/26
MATERIAL NO.: 48025-0002

TITLE: MODR JK RA DIP WITH LED MAGNETICS FOR IR REFLOW (LEAD FREE VERSION)
MOLEX INCORPORATED
DOCUMENT NO.: SD-48025-006
SHEET NO.: 2 OF 2
SIZE: A4

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