

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0480749001](#)  
**Status:** **Active**  
**Overview:** [modular\\_plugs\\_jacks](#)  
**Description:** Modular Jack, Right Angle, SMT, 10/100, with Integrated Magnetics and LED, 8/8, Lead free

**Documents:**

[3D Model](#) [Product Specification PS-48074-002 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

CSA LR19980  
 UL E107635

**General**

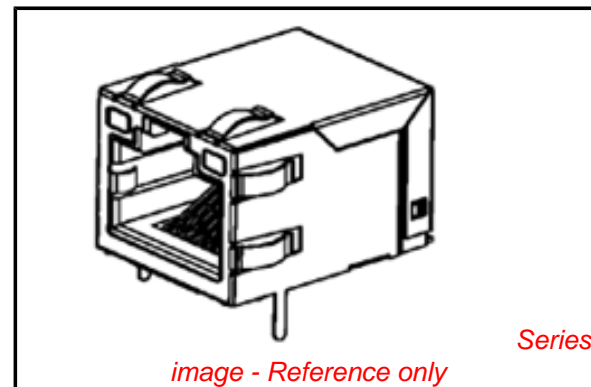
Product Family Modular Jacks/Plugs  
 Series [48074](#)  
 Comments With LED|SMT Type  
 Component Type PCB Jack  
 Magnetic Yes  
 Overview [modular\\_plugs\\_jacks](#)  
 Performance Category 5  
 Power over Ethernet (PoE) Non-PoE  
 Product Name RJ45

**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 Embossed Tape on Reel  
 Pitch - Term. Interface (in) 0.040 In, 0.072 In  
 Pitch - Term. Interface (mm) 1.02 mm, 1.84 mm  
 Ports 1  
 Positions / Loaded Contacts 8/8  
 Surface Mount Compatible (SMC) Yes  
 Temperature Range - Operating -40°C to +70°C  
 Termination Interface: Style Surface Mount  
 Waterproof / Dustproof No  
 Wire/Cable Type N/A

**Electrical**

Current - Maximum per Contact 1.5A  
 Grounding to PCB Yes



**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](mailto: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**

[48074Series](#)

**Mates With**

FCC 68 Plugs

Grounding to Panel  
Shielded  
Voltage - Maximum

Panel Ground Tab  
Yes  
150V AC (RMS)

**Material Info**

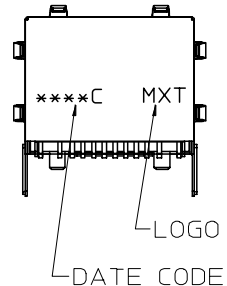
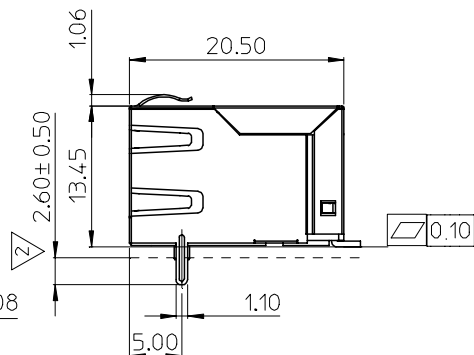
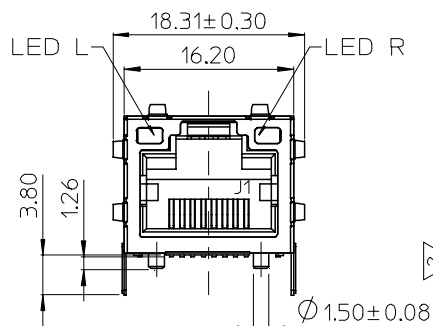
**Reference - Drawing Numbers**

Packaging Specification  
Product Specification  
Sales Drawing  
Test Summary

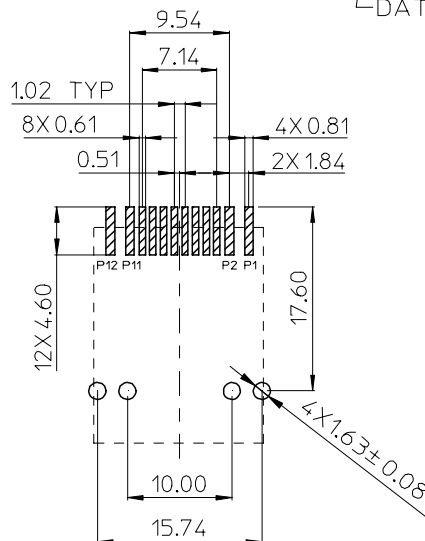
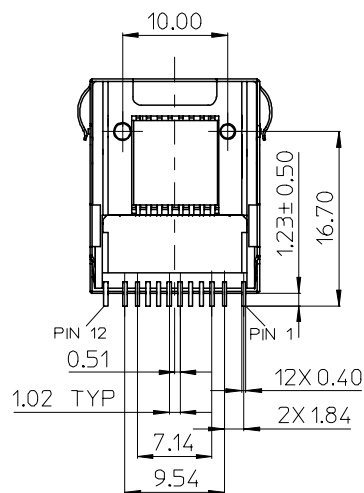
PK-48074-002  
PS-48074-002  
SD-48074-002  
TS-48074-002

This document was generated on 05/25/2010

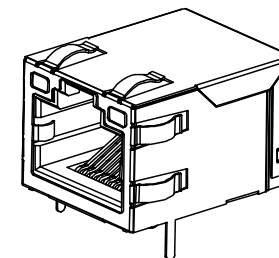
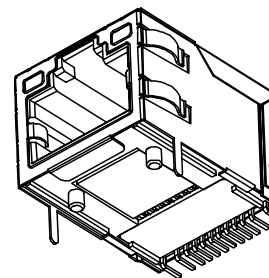
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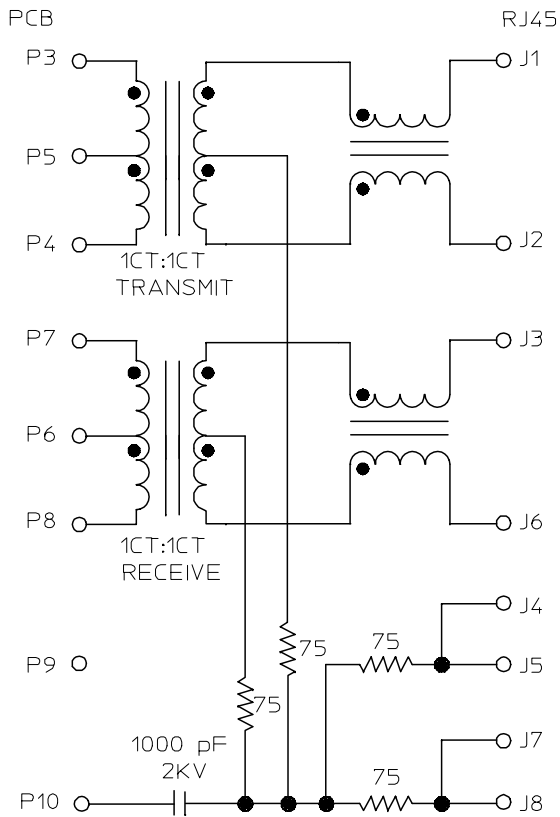
- NOTES:
- MATERIAL:  
METAL SHELL: BRASS  
HOUSING: POLYAMIDE, GLASS FIBER FILLED, UL94V-0, COLOR: BLACK  
INSERT: POLYAMIDE, GLASS FIBER FILLED, UL94V-0, COLOR: BLACK  
TERMINAL: PHOSPHOR BRONZE
  - PLATING:  
TERMINAL:  
CONTACT AREA: GOLD(Au), THICKNESS=30 MICROINCH MINIMUM.  
SOLDER TAIL: TIN(Sn) PLATED, THICKNESS=100 MICROINCH MINIMUM.  
UNDER PLATE: NICKEL (Ni) PLATED.  
METAL SHELL:  
NICKEL (Ni) PLATED OVERALL, THICKNESS=50 MICROINCH MINIMUM.  
SURFACE APPEARANCE: BRIGHT.  
SOLDER AREA: IMMERSE TIN(Sn), THICKNESS=100 MICROINCH MINIMUM.
  - FOR IR REFLOW APPLICATION.
  - RECOMMENDED PCB THICKNESS: 1.60±0.05
  - PRODUCT SPECIFICATION REFER TO PS-48074-002.
  - TEST SUMMARY REFER TO TS-48074-002.
  - PACKAGING SPECIFICATION REFER TO PK-48074-001.
  - RETENTION FORCE: 30 lbf.
  - COPLANARITY: 0.10mm MAX.
  - LEAD FREE AND RoHS COMPLIANT PRODUCT.



RECOMMENDED P.C.B. LAYOUT



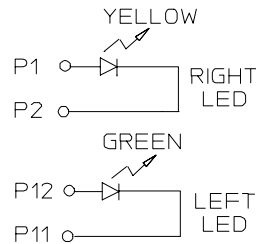
RoHS FOR 48074-0001 EC NO: SH2007-0130 DRWN: ALL IN CHKD: APPR: WMSCHANG	2006/10/04 2006/10/04 2006/10/04	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
						DRAWN BY LINDA	DATE 2006/08/08	TITLE MODULAR JACK WITH LED & INTEGRATED MAGNETICS SMT TYPE				
							CHECKED BY ALLEN LIN	DATE 2006/08/10	MOLEX INCORPORATED			
							APPROVED BY ERICK LAN	DATE 2006/08/10	MATERIAL NO. 48074-9001			
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DOCUMENT NO. SD-48074-002		SHEET NO. 1 OF 2					



MAGNETIC SCHEMATIC

MAGNETIC ELECTRICAL SPECIFICATION

PARAMETER	SPECIFICATIONS		
INSERTION LOSS	100 KHZ		
	1.0 dB MAX.		
RETURN LOSS (Z OUT=100 OHM±15%)	1-10 MHz	30 MHz	60-80 MHz
	20 dB MIN	16 dB MIN	12 dB MIN
CROSSTALK	1-10 MHz	30-60 MHz	60-100 MHz
	40 dB MIN	35 dB MIN	30 dB MIN
COMMON MODE REJECTION RATIO	1-50 MHz	50-130 MHz	
	30 dB MIN	20 dB MIN	
HIPOT	@60 Hz, 1 MIN		
	1500 Vrms		



LED SCHEMATIC

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 <sub>F</sub> =20mA
FORWARD VOLTAGE	2.1	MAX.=2.5	2.2	MAX.=2.5	V	I <sub>F</sub> =20mA

SEE SHEET 1 EC NO: SH2007-0130 DRWN: ALL IN CHKD: APPR: WMSCHANG	2006/10/04 2006/10/04 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 LED & INTEGRATED MAGNETICS SMT TYPE				
		4 PLACES ± --- ± ---	3 PLACES ± --- ± ---	2 PLACES ± 0.25 ± ---	1 PLACE ± 0.25 ± ---	CHECKED BY ALLEN LIN	DATE 2006/08/10	MOLEX INCORPORATED			
		ANGULAR ± 3 °				APPROVED BY ERICK LAN	DATE 2006/08/10				
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				MATERIAL NO. 48074-9001	DOCUMENT NO. SD-48074-002	SHEET NO. 2 OF 2			