

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

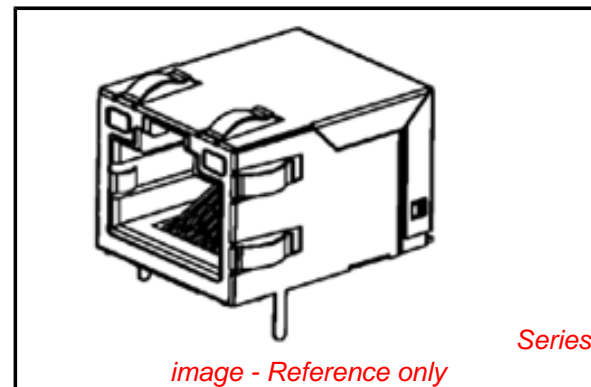
Product Family Modular Jacks/Plugs
 Series [48074](#)
 Comments With LED|SMT Type
 Component Type PCB Jack
 Magnetic Yes
 Overview [modular_plugs_jacks](#)
 Performance Category 5
 Power over Ethernet (PoE) Non-PoE
 Product Name RJ45

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
 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

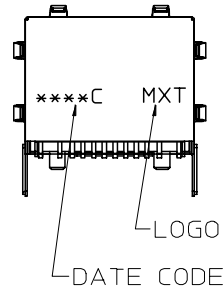
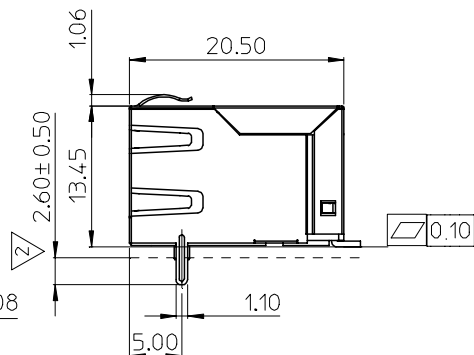
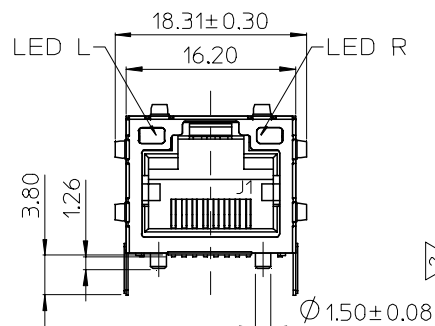
Reference - Drawing Numbers

Packaging Specification
Product Specification
Sales Drawing
Test Summary

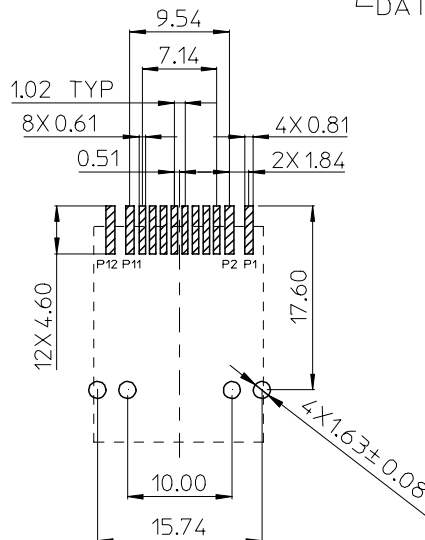
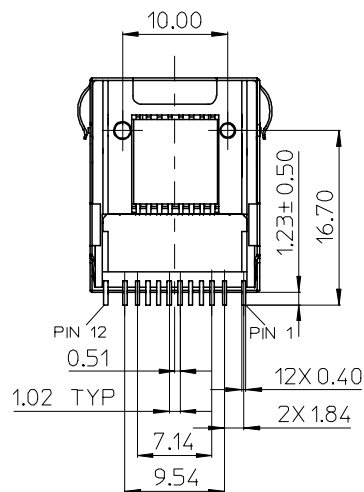
PK-48074-002
PS-48074-002
SD-48074-002
TS-48074-002

This document was generated on 05/25/2010

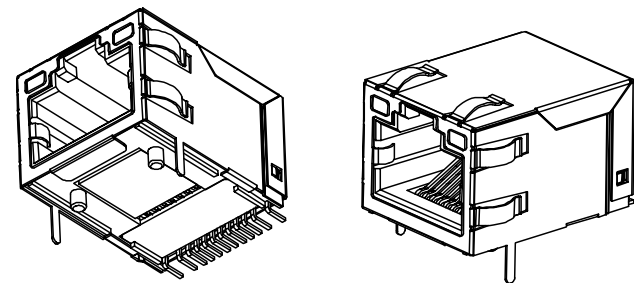
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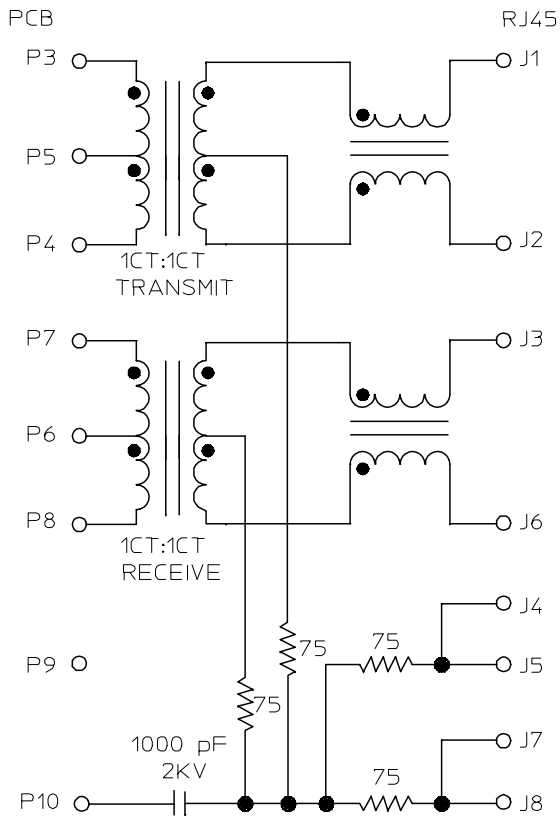
- NOTES:
- MATERIAL:
METAL SHELL: BRASS
HOUSING: POLYAMIDE, GLASS FIBER FILLED, UL94V-0, COLOR: BLACK
INSERT: POLYAMIDE, GLASS FIBER FILLED, UL94V-0, COLOR: BLACK
TERMINAL: PHOSPHOR BRONZE
 - PLATING:
TERMINAL:
CONTACT AREA: GOLD(Au), THICKNESS=30 MICROINCH MINIMUM.
SOLDER TAIL: TIN(Sn) PLATED, THICKNESS=100 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



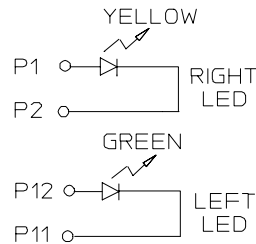
RoHS FOR 48074-0001 EC NO: SH2007-0130 DRWN: ALL IN CHKD: APPR: WMSCHANG	2006/10/04 2006/10/04 2006/10/04	DESCRIPTION QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
				mm	INCH	DRAWN BY LINDA	DATE 2006/08/08	TITLE MODULAR JACK WITH LED & INTEGRATED MAGNETICS SMT TYPE			
			4 PLACES	±---	±---	CHECKED BY ALLEN LIN	DATE 2006/08/10	MOLEX INCORPORATED			
			3 PLACES	±---	±---	APPROVED BY ERICK LAN	DATE 2006/08/10	DOCUMENT NO. SD-48074-002			
			2 PLACES	±0.25	±---	MATERIAL NO. 48074-9001					
			1 PLACE	±0.25	±---	DOCUMENT NO. SD-48074-002					
			ANGULAR ± 3 °		MATERIAL NO. 48074-9001		DOCUMENT NO. SD-48074-002		SHEET NO. 1 OF 2		
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						



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 _F =20mA
FORWARD VOLTAGE	2.1	MAX.=2.5	2.2	MAX.=2.5	V	I _F =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 ± --- ANGULAR ± 3 °	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPROVED BY ERICK LAN	DATE 2006/08/10	MOLEX INCORPORATED			
		REV	DESCRIPTION	MATERIAL NO. 48074-9001	DOCUMENT NO. SD-48074-002	SHEET NO. 2 OF 2		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		