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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

Documents:

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

Agency Certification

CSA LR19980
 UL E107635

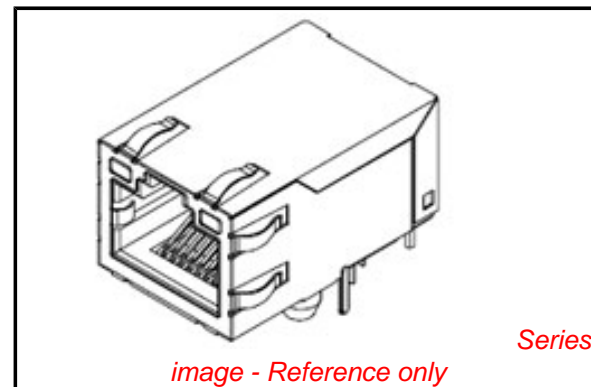
General

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)

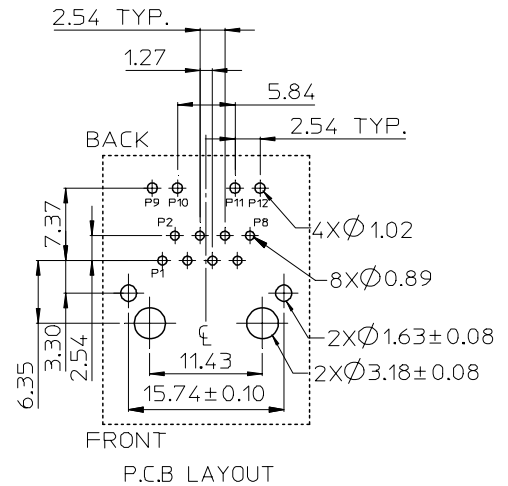
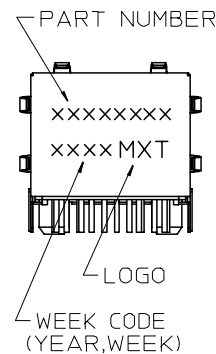
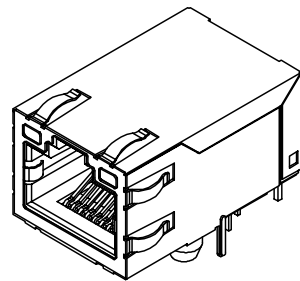
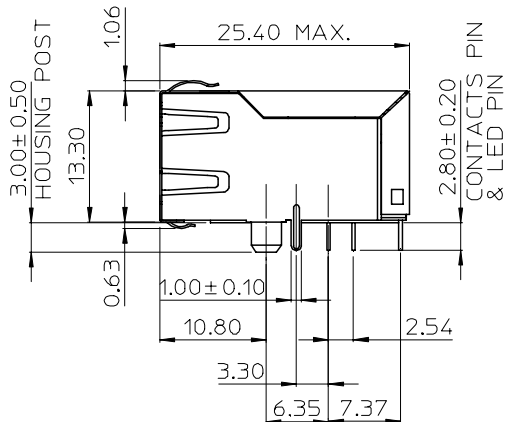
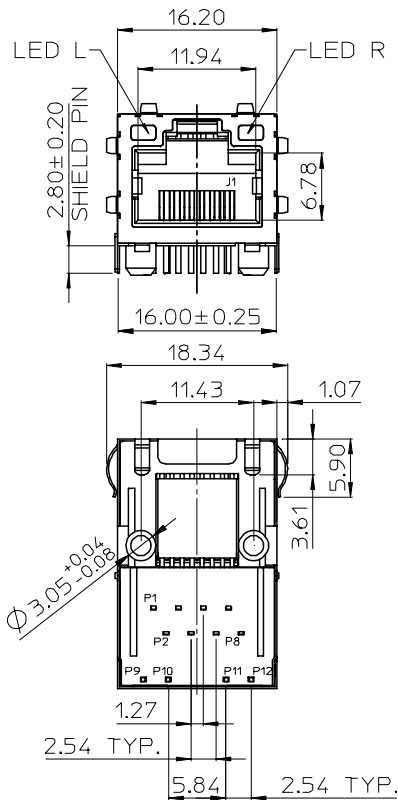
Material Info

Reference - Drawing Numbers

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

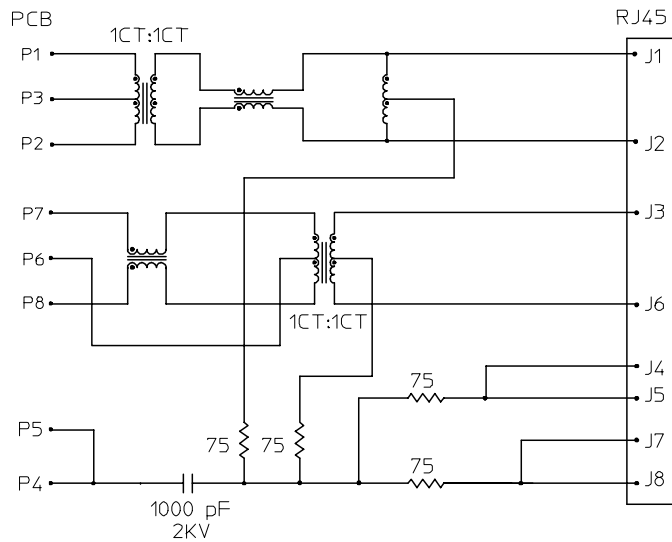
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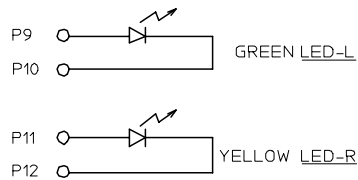


- NOTES:
- MATERIAL:
METAL SHELL: BRASS.
HOUSING: HIGH TEMP THERMOPLASTIC, GLASS FIBER FILLED, UL94V-0, COLOR: BLACK
INSERT: HIGH TEMP THERMOPLASTIC, GLASS FIBER FILLED, UL94V-0, COLOR: BLACK
TERMINAL: PHOSPHOR BRONZE.
RESIN: UEP-700
 - PLATING:
TERMINAL:
CONTACT AREA: GOLD (Au), THICKNESS=50 MICROINCH/1.27 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.
 - RECOMMENDED PCB THICKNESS: 1.60±0.05
 - PRODUCT SPECIFICATION REFER TO PS-48025-004
 - TEST SUMMARY REFER TO TS-48025-006
 - PACKAGING SPECIFICATION REFER TO PK-48025-001
 - LEAD FREE AND ROHS COMPLIANCE PRODUCT
 - IR REFLOW APPLICATION PRODUCT

TOOLING RELEASED EC NO: SH2006-0106 DRWN: ALL IN 2005/10/07 CHKD: 2005/10/12 APPR: WWSCHANG 2005/10/13	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 2005/08/26	TITLE MODR JK RA DIP WITH LED MAGNETICS FOR IR REFLOW (LEAD FREE VERSION)		
		4 PLACES	±---	±---	CHECKED BY ALLEN LIN	DATE 2005/08/26	MOLEX MOLEX INCORPORATED		
		3 PLACES	±---	±---	APPROVED BY WILSON CHANG	DATE 2005/08/26			
	2 PLACES	±0.25	±---	MATERIAL NO. 48025-0002			DOCUMENT NO. SD-48025-006	SHEET NO. 1 OF 2	
	1 PLACE	±0.25	±---	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



LED SCHEMATIC

MAGNETIC ELECTRICAL SPECIFICATION

PARAMETER	SPECIFICATIONS		
	100 KHz	1-125 MHz	
INSERTION LOSS	1.2 dB MAX	0.2+0.002*f^1.4 dB MAX	
		30-60 MHz	60-80 MHz
RETURN LOSS (Z OUT=100 OHM±15%)	.1-30 MHz	10-20*LOG ₁₀ (f/60 MHz) dB MIN.	10 dB MIN.
	16 dB MIN		
INDUCTANCE (OCL) (MEDIA SIDE, 0° +70°C)	350 uH MIN (MEASURED AT 100 KHz, 100 nVRMS 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	I _F =20mA
FORWARD VOLTAGE	2.1 MAX.=2.5	2.2 MAX.=2.5	V	I _F =20mA

SEE SHEET 1 EC NO: SH2006-0106 DRWN:ALL IN 2005/10/07 CHKD: 2005/10/12 APPR:WMSCHANG 2005/10/13	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 2005/08/26	TITLE MODR JK RA DIP WITH LED MAGNETICS FOR IR REFLOW (LEAD FREE VERSION)		
		4 PLACES	±---	±---	CHECKED BY ALLEN LIN	DATE 2005/08/26	MOLEX MOLEX INCORPORATED		
		3 PLACES	±---	±---	APPROVED BY WILSON CHANG	DATE 2005/08/26	DOCUMENT NO. SD-48025-006	SHEET NO. 2 OF 2	
			2 PLACES	±0.25	±---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			
			1 PLACE	±0.25	±---	SIZE THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
			ANGULAR ± 3 °						