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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:**

<a href="#">3D Model</a>	<a href="#">Product Specification PS-48025-004 (PDF)</a>
<a href="#">Drawing (PDF)</a>	<a href="#">RoHS Certificate of Compliance (PDF)</a>

**Agency Certification**

CSA	LR19980
UL	E107635

**General**

Product Family	Modular Jacks/Plugs
Series	<a href="#">48025</a>
Comments	With Lightpipes Tail Length: 2.80mm (.110")
Component Type	PCB Jack
Magnetic	Yes
Overview	<a href="#">magnetic modular jacks</a>
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**

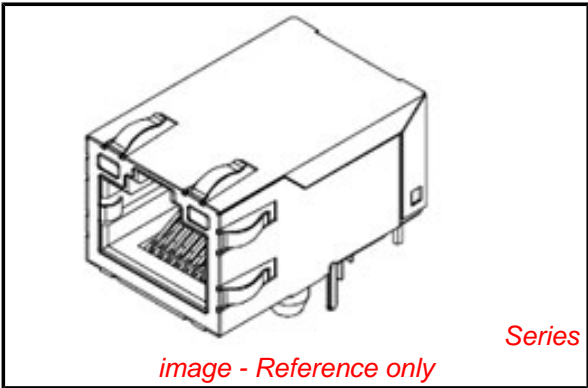


image - Reference only

**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**  
[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)

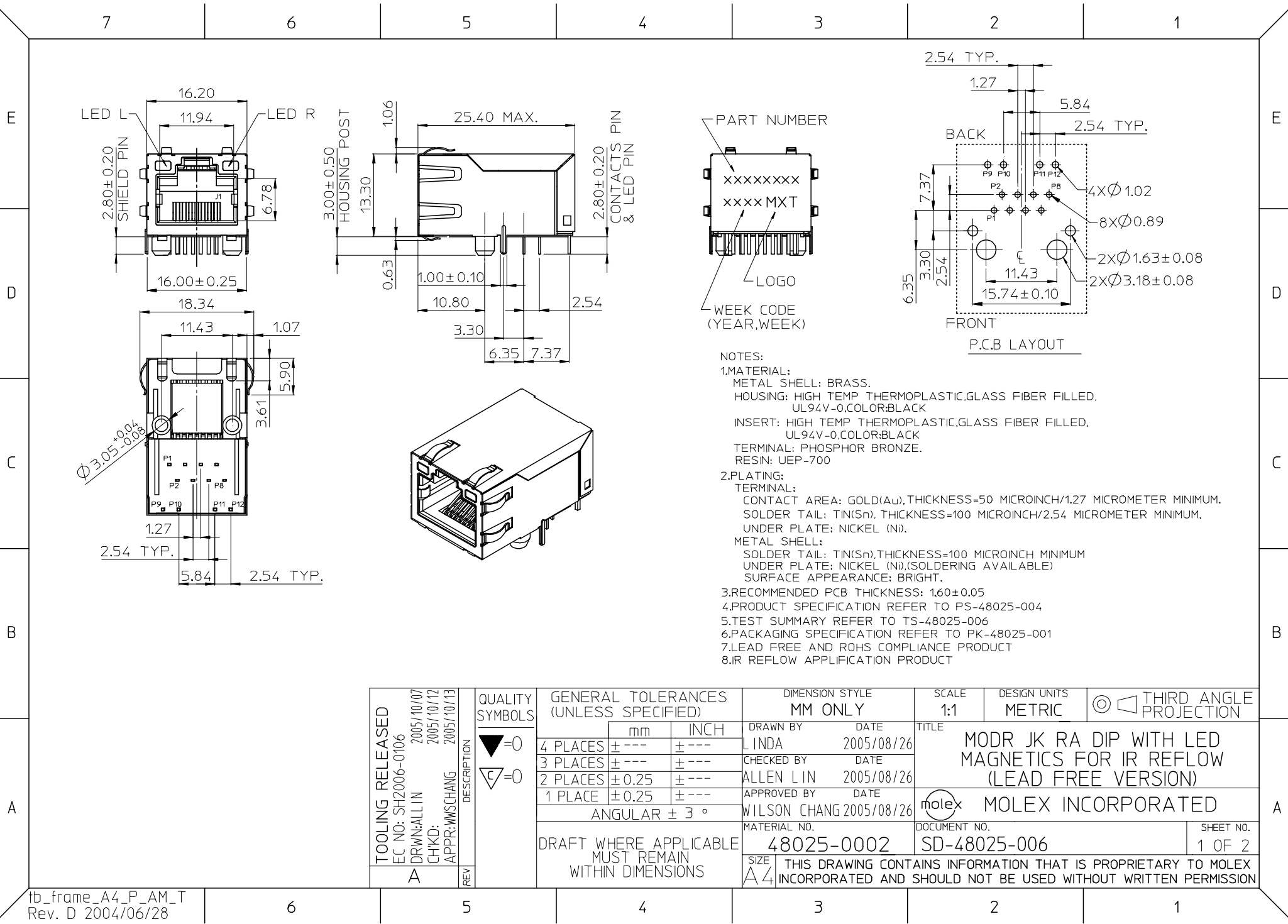
**Material Info**

**Reference - Drawing Numbers**

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

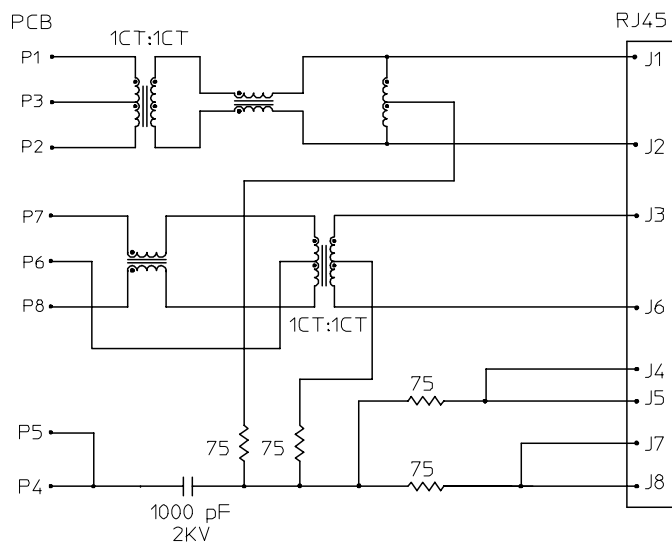
This document was generated on 05/26/2010

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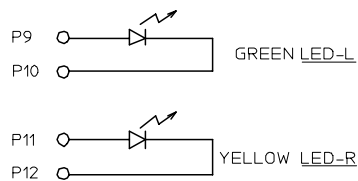


TOOLING RELEASED EC NO: SH2006-0106 DRWN:ALL IN CHKD: APPR:WWSCHANG A	2005/10/07 2005/10/12 2005/10/13	DESCRIPTION REV	QUALITY SYMBOLS  =0 =0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
						DRAWN BY LINDA	DATE 2005/08/26	TITLE MODR JK RA DIP WITH LED MAGNETICS FOR IR REFLOW (LEAD FREE VERSION)			
						CHECKED BY ALLEN LIN	DATE 2005/08/26				
						APPROVED BY WILSON CHANG	DATE 2005/08/26	MOLEX INCORPORATED			
				ANGULAR ± 3 °		MATERIAL NO. 48025-0002			DOCUMENT NO. SD-48025-006		SHEET NO. 1 OF 2
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A 4	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

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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 <sub>10</sub> (f/60 MHz) dB MIN.	10 dB MIN.
INDUCTANCE <sub>O(OC)</sub> (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 <sub>10</sub> (f/10) dB MIN.	
COMMON MODE REJECTION RATIO	2 MHz	30-200 MHz	
	50 dB MIN	15-20*LOG <sub>10</sub> (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 <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: SH2006-0106	DRWN:ALL IN	2005/10/07	CHKD:	2005/10/12	APPR:WWSCHANG	2005/10/13	DESCRIPTION	REV	QUALITY SYMBOLS	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		DATE					
2 PLACES	± 0.25	± ---	WILSON CHANG		2005/08/26	DOCUMENT NO. SD-48025-006		SHEET NO. 2 OF 2													
A											DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SIZE A4	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						