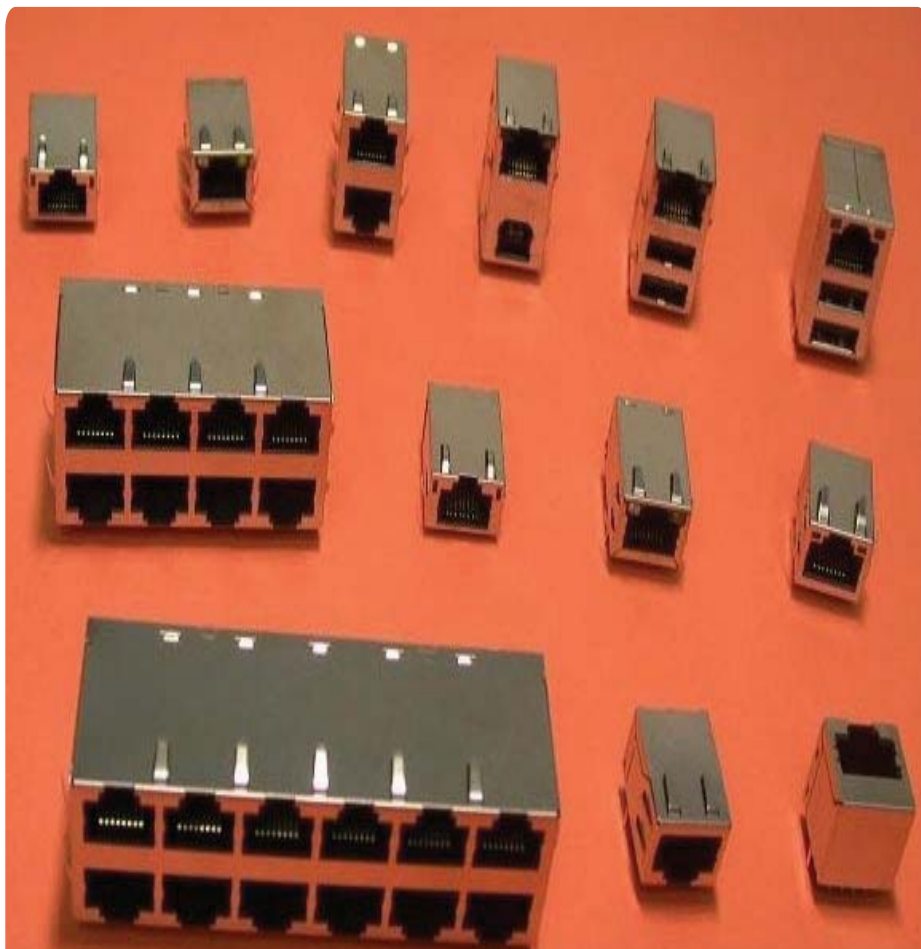


## MAGNETIC JACK CONNECTORS

### DESCRIPTION

Magnetic jack connectors are highly integrated devices that combine network magnetics and RJ45 connectors. In addition to connectivity, magnetic jacks provide signal conditioning, electro-magnetic interference suppression and signal isolation previously performed by separate, discrete magnetic components.

Magnetic jacks form factors include single, multi-port, stacked, and USB solutions that are widely used in Telecom, Data, Networking, and Home Entertainment markets for various applications, such as Servers, Switching Hubs, Routers, Printers, Personal Computers, Set Top Boxes, and Digital LCD TVs.



### FEATURES & BENEFITS

- 10/100 or 1000 BaseT option
- With or without LED
- Spring fingers on shells for better EMI
- Tab up and tab down options
- Low profile design option
- Modular transformer design to increase production output rate and reduce process cost
- RoHS compatible

### TARGET MARKETS & APPLICATIONS

- Target Markets
  - Enterprise Networking
  - Home and Small Business Networking
  - Home Entertainment
  - Office Peripherals
- Target Applications
  - Servers, Switching Hubs, Routers
  - Set Top Box, Digital TV, LCD TV
  - Printers
  - Desktop and Notebook PC's



**TECHNICAL INFORMATION**

**MATERIALS**

- Shell: Stainless Steel
- Housing: High Thermoplastic, UL 94V-0
- RJ Contact: Copper Alloy
- Module: High Thermoplastic, UL 94V-0
- Input Pin: Copper Alloy
- Plating: 15u" gold plating on contact with 50u" min Nickel under plating; 100u" min matte tin on solder tail with 50u" min Nickel under plating

**ELECTRICAL PERFORMANCE**

- Insertion loss: 1000 BaseT:1~125MHz  
10/100 BaseT: 1~100MHz
- Return loss:
  - 1000 BaseT: - 1 ~ 30 MHz : -18db min  
- 30 ~ 60 MHz : -16db min  
- 60 ~ 80 MHz : -12db min  
- 80 ~ 100 MHz : -10db min
  - 10/100 BaseT: - 1 ~ 30 MHz : -18db min  
- 30 ~ 60 MHz : -16db min  
- 60 ~ 80 MHz : -12db min
- Common mode rejection @ 1~100MHz: -30dB
- Cross talk: 1000 BaseT @ 1~100 MHz: -25dB  
10/100 BaseT @1~100 MHz: -35dB
- Inductance @ 100KHz/0.1V, 8mA DC  
Bias: 350uH Min
- Hi-Pot test: 1500V rms, 60 sec

**ENVIRONMENTAL**

- MIL-STD-1344A
- EIA-364
- Operating Temperature Range: 0°C to 70°C
- Storage Temperature Range: -40°C to 85°C

**MECHANICAL PERFORMANCE**

- Insertion Force: 22N Max.
- Removal Force (w/o lock): 22N Max
- Durability: 1000 Cycles

**SPECIFICATIONS**

- Product Specification: Refer to drawing
- Packaging Specification: Refer to drawing

**PACKAGING**

- Tray

**PART NUMBERS**

Part Number	Product Type	No. of Positions	Tab Type	With LED	With Spring	Xfer Application	Profile
10082590	2x1	20		No	Yes	10/100	
10083988	RJ45 + Double Deck USB A	22		Yes	No	10/100	High
10084278	RJ45 + Double Deck USB A	22		Yes	No	1000	High
10084279	RJ45 + Double Deck USB A	19		Yes	Yes	10/100	Low
10084280	RJ45 + Double Deck USB A	22		Yes	Yes	1000	Low
10084281	1x1	12	Down	Yes	Yes	10/100	
10084282	1x1	14	Down	Yes	Yes	1000	
10084428	1x1	12	Up	Yes	Yes	10/100	
10084429	1x1	14	Up	Yes	Yes	1000	
10084430	1x4	48	Down	Yes	Yes	10/100	
10084431	1x4	56	Down	Yes	Yes	1000	
10084432	2x1	28		Yes	Yes	10/100	
10084433	2x1	28		Yes	Yes	1000	
10085071	RJ45 + USB B	14		Yes	Yes	10/100	
10085072	RJ45 + USB B	18		Yes	Yes	1000	
10085073	1x1	17	Up	Yes	Yes	10/100	Low
10085074	1x1	17	Up	Yes	Yes	1000	Low
10085075	1x1	12	Up	Yes	Yes	10/100	
10085076	1x1	14	Up	Yes	Yes	1000	
10085077	1x1	10	Up	Yes	Yes	10/100	
10085078	1x1, Vertical Type	8		No	No	10/100	
10085079	2x4	112		No	Yes	10/100	
10085080	2x4	112		No	Yes	1000	
10085081	2x6	168		No	Yes	10/100	
10085082	2x6	168		No	Yes	1000	