

Modular Jack With Integrated Magnetics – RJMG Series – 2xN

STACKED AND GANGED RJ45 SOLUTION SUPPORTING 100BASE-T, 1G, 2.5G, 5G, AND 10G ETHERNET PHY

RJMG series offers a wide variety of fully RoHS compliant Magnetic Modular Jacks for RJ45. The right angle and through hole type is offered in 2xN (2x1, 2x2, 2x4, 2x6, and 2x8) port with tab-up and tab-down options. This series comes with LED options and is compatible with Power over Ethernet (PoE). RJMG series is offered with both shielded and EMI options, which provides enhanced protection. Gold plating option is also available for the contact area.

- Designed to meet the IEEE802.3ab standard
- 100BASE-T, 1G, 2.5G and 10G. PoE and surge protection.
- Tab-up and tab-down, shielded and EMI options
- Standard operating temperature: 0°C to 75°C
- Extended operating temperature: -40°C to +85°C and -40°C to +105°C



TARGET MARKETS



FEATURES

- 100BASE-T, 1G/2.5G/5G/10G
- 2xN (2x1, 2x2, 2x4, 2x6, and 2x8) port
- Low mode conversion
- DIP type
- Shielded and EMI options
- LED options
- Integrated Magnetics
- Gold plating option of contact area

BENEFITS

- Meets wide range of cable performance requirements up to Cat 6a
- Provides PCB space savings
- Improved EMI performance
- Facilitates easy PCB assembly
- Advanced EMI and ESD protection
- Customers can opt for the LED color of their choice
- Provides DC isolation
- Price and performance flexibility

TECHNICAL INFORMATION

MATERIAL

- Housing: High Temperature Thermoplastic, UL 94V-0, Black
- Contacts: Phosphor Bronze, Plated with 1.27um (50u”) min Gold over 1.27um (50u”) min Nickel on the Mating Area and 2.54um (100u”) min Matte Tin over Nickel on the Contact Tails
- Shell: Copper Alloy or Stainless Steel
- LEDs: Epoxy Lens, Tin Plated Steel Tails
- PCB: FR4 Fibreglass, Lead-Free

MECHANICAL PERFORMANCE

- Durability: Per EIA 364-09, 750 Mating Cycles
- Vibration: Per EIA 364-28 Random Condition II (10g, 10-500Hz, 6 Hours), No Discontinuity > 1us
- Shock: Per EIA 364-27 Test Condition A (11 ms, 50g, 1/2 Sine), No Discontinuity > 1us
- Insertion & Withdrawal Force: Per EIA-364-13, 20N (4.5lbf) max. (Latch Disengaged)

ELECTRICAL PERFORMANCE

- Design to meet standard IEEE802.3ab
- 100BASE-T, 1GBT (100BASE-T/1000-BT), 2.5G, 5G, 10G, Power Over Ethernet(PoE function/PoE function plus) surge protection
- Standard Operating Temperature: 0°C to 75°C
- Extended Operating Temperature: -40°C to +85°C and -40°C to +105°C

PACKAGING

- Packing tray available upon request

SPECIFICATION

- Design to meet standard IEEE802.3ab

ENVIRONMENTAL

- Temperature Life With Load: Per EIA-364-17, 1.5A, 70°C, 500 Hours
- Temperature Life Without Load: Per EIA-364-17, 105°C, 1000 Hours
- Thermal Shock: Per EIA-364-32, -55°C to +105°C, 25 Cycles
- Humidity: Per EIA 364-31, 21 Cycles, 504 Hrs, 25°C to 65°C, 90-95% RH, with -10°C Cold Shock
- Humidity: Per EIA-364-31, Steady State, 21 Days, 50°C, 90-95% RH
- Mixed Flowing Gas: Per EIA 364-65 Class IIA (Cl2, NO2, H2S and SO2), 14 Day Exposure
- Salt Spray: Per EIA 364-26, 250 Hours, 5% Salt, 35°C
- Solvent Resistance: Isopropyl Alcohol and 5% Sodium Hydroxide Solution, 24 Hrs Each
- LED Luminous Intensity: 0.5mCd min at 2mA Forward Current
- Solderability: Per EIA-364-52, 95% Coverage after Category 2 Steam Aging

TARGET MARKETS/APPLICATIONS



Communications



Consumer



Data



Industrial & Instrumentation



Medical

PART NUMBERS

Description	Part Numbers
RJMG 2x1, Right Angle, DIP type, 100BASE-T & 1000BASE-T, LED options	RJMG221x series
RJMG 2x2, Right Angle, DIP type, 100BASE-T & 1000BASE-T, LED options	RJMG2X2 series
RJMG 2x4, Right Angle, DIP type, Tab-up type, 100BASE-T & 1000BASE-T, LED options	RJMG224T series
RJMG 2x4, Right Angle, DIP type, Tab-up type, 100BASE-T & 1000BASE-T, LED options and PoE function	RJMG2240 series
RJMG 2x6, Right Angle, DIP type, Tab-up type, 100BASE-T & 1000BASE-T, LED options	RJMG226N series
RJMG 2x6, Right Angle, DIP type, Tab-up type, 100BASE-T & 1000BASE-T, LED options and PoE function	RJMG226N series
RJMG 2x2, Right Angle, DIP type, 2.5G, LED options and PoE function	RJMG422N series
RJMG 2x4, Right Angle, DIP type, 2.5G, LED options and PoE function	RJMG424N series
RJMG 2x6, Right Angle, DIP type, 2.5G, LED options and PoE function	RJMG426N series
RJMG, Input output Connectors, 2x1 10G	RJMG3211L11D3FR
RJMG, Input output Connectors, 2x2 10G	RJMG322DN11E3ER
RJMG, Input output Connectors, 2X6 10G	RJMG3266N11G0ER

CM10RJMG2XN042EA4

Mouser Electronics

Authorized Distributor

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Amphenol:

[RJMG22213216MER](#) [RJMG121042180NA](#) [RJMG221031470NR](#) [RJMG221B44441ER](#) [RJMG221071230LR](#)
[RJMG12173A1R03RP](#) [RJMG224N321ALER](#) [RJMG221036170NR](#) [RJMG221044430ER](#) [RJMG121532110ER](#)
[RJMG121032180NA](#) [RJMG221129910NR](#) [RJMG1216322600R](#) [RJMG221B44440ER](#) [RJMG221MD44B9ER](#)
[RJMG221028810NR](#) [RJMG221C44430ER](#) [RJMG221F44430ER](#) [RJMG2210D4450ER](#) [RJMG2210R0037NR](#)
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[RJMG224TL0070FR](#) [RJMG104127142ERL](#) [RJMG221031430NR](#) [RJMG201K20070ER](#) [RJMG221DRAB70NR](#)
[RJMG224030032ER](#) [RJMG224034432FR](#) [RJMG221128810NR](#) [RJMG221032130NR](#) [RJMG221041470ER](#)
[RJMG2210B4450NR](#) [RJMG12213Y4461ER](#) [RJMG224030032FR](#) [RJMG224031132ER](#) [RJMG2210Q1435NR](#)
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[RJMG1NL00N842FR](#) [RJMG2210N1130PRB](#) [RJMG221020070PR](#) [RJMG2210Q4435NR](#) [RJMG2210R1130NR](#)
[RJMG222131260ER](#) [RJMG121032480NA](#) [RJMG12213126MER](#) [RJMG22213116MER](#) [RJMG22213Y2261CR](#)
[RJMG22213Y4461ER](#) [RJMG22213Y4461KR](#) [RJMG222K3116NER](#) [RJMG222K32169ER](#) [RJMG222K3446NERA](#)
[RJMG226N344C4ER](#) [RJMG226N344CLER](#) [RJMG226T34179ER](#) [RJMG282K3106NFR](#)