

# Modular Jack With Integrated Magnetics – RJMG Series – 1xN

## MULTI PORT RJ45 SOLUTION SUPPORTING 100BASE-T, 1G, 2.5G, 5G, AND 10G ETHERNET PHY

RJMG series offer a wide variety of fully RoHS compliant Magnetic Modular Jacks for RJ45. The right angle through-hole type is offered in 1xN (1x2, 1x4 through 1x8) 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
- 1xN (1x2, 1x4 through 1x8) 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

- Tray/Tube/Tape and Reel 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 1x2, Right Angle, DIP type, Standard, Tab-up type, 100BASE-T & 1000BASE-T, LED options	RJMG212 series
RJMG 1x2, Right Angle, DIP type, Standard, Tab-up type, 100BASE-T & 1000BASE-T, LED options and PoE function	RJMG212 series
RJMG 1x2, Right Angle, DIP type, Short body, Tab-up type, 100BASE-T & 1000BASE-T, LED options	RJMG212S series
RJMG 1x2, Right Angle, DIP type, Sink type, Tab-up type, 100BASE-T & 1000BASE-T, LED options	RJMG2128 series
RJMG 1x2, Right Angle, DIP type, Lower profile, Tab-down type, 100BASE-T & 1000BASE-T, LED options	RJMG212TM series
RJMG 1x2, Right Angle, DIP type, Short body, Tab-down type, 100BASE-T & 1000BASE-T, LED options	RJMG221P series
RJMG 1x2, Right Angle, DIP type, Sink type, Tab-up type, 10G, LED options	RJMG3128 series
RJMG 1x4, Right Angle, DIP type, Standard, Tab-up type, 100BASE-T & 1000BASE-T, LED options	RJMG214 series
RJMG 1x4, Right Angle, DIP type, Standard, Tab-up type, 100BASE-T & 1000BASE-T, LED options and PoE function	RJMG214 series
RJMG 1x4, Right Angle, DIP type, Short body, Tab-down type, 100BASE-T & 1000BASE-T, LED options	RJMG214K series
RJMG 1x4, 2.5G Right Angle, DIP type, Sink type, Tab-up type, LED options	RJMG414 series
RJMG 1x4, 2.5G Right Angle, DIP type, Sink type, Tab-up type, LED options and PoE function	RJMG414 series
RJMG 1x4, 5G Right Angle, DIP type, Standard, Tab-up type, LED options and PoE function	RJMG514 series
RJMG 1x4, Right Angle, DIP type, Sink type, Tab-up type, 10G, LED options	RJMG4128 series
RJMG, Input output Connectors, 1G 1x1 V/T, LED options	RJMG2V1SLN12W5R

CM10RJMG1XN042E4

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Authorized Distributor

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## Amphenol:

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[RJMG20162141BER](#) [RJMG1BD3B8K1ANR](#) [RJMG2010S9930NR](#) [RJMG201031110NR](#) [RJMG2012211A0FR](#)  
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