

# Modular Jack With Integrated Magnetics – RJMG Series – Stacked

# RJ45-USB COMBO 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 RJMG Stacked USB 2.0/3.0. 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-75°C
- Extended operating temperature -40°C-85°C



#### **FEATURES**

- 100BASE-T, 1G/2.5G/5G/10G
- Stacked USB 2.0/3.0
- 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/PoE plus) surge protection
- Standard 0~75°C and extended -40~85°C temp

#### **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 100BASE-T & 1000BASE-T Stacked Single USB 2.0	RJMG2330 series
RJMG 100BASE-T & 1000BASE-T Stacked Dual USB 2.0	RJMG2310 series
RJMG 100BASE-T & 1000BASE-T Stacked Single USB 3.0	RJMG2511 series
RJMG 100BASE-T & 1000BASE-T Stacked Dual USB 3.0	RJMG2411 series
RJMG 2.5G Stacked Dual USB 3.1	RJMG4711 series
RJMG 100BASE-T & 1000BASE-T Stacked Dual USB 2.0, LED Option, Press-fit type	RJMG2510 series

MIORIMGSTK0918F

## **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## Amphenol:

 RJMG2310228A0ER
 RJMG231022830ER
 RJMG233022610ER
 RJMG1331171C1ER
 RJMG241KM2190ER

 RJMG138267101ER
 RJMG133218101DR
 RJMG251034430ER
 RJMG231022610ER
 RJMG2012228A0NR

 RJMG251031630DS
 RJMG251032130DS
 RJMG251034430ES
 RJMG252031130ES
 RJMG251031230CS

 RJMG133117101ER
 RJMG138117101CR
 RJMG221KL2670DR
 RJMG241151470ERB
 RJMG2330A1610ER

 RJMG221KL2170ER
 RJMG241156670ERB
 RJMG231021130ER
 RJMG233026110ERA
 RJMG1330071C1ER

 RJMG233021110ER
 RJMG221KL1670ER
 RJMG221KL1270ER
 RJMG251036130DS
 RJMG251G32130DS