

# **Waterproof Micro USB 2.0**

# SHIELDED WATERPROOF MICRO USB 2.0 TYPE B

Amphenol ICC's Waterproof Micro USB 2.0 comes with full metal shielding that protects against Electromagnetic Interference (EMI), Radio-Frequency Interference (RFI), and Electromagnetic Discharge (ESD). The USB connector supports fast charging with 1.8A power contacts and is capable to support up to 3A for customized needs. The dual layer shell design with plastic tongue ensures high reliability and prevents damage from connector abuse. These halogen-free connectors meet IPX4 industry ratings. Customized designs are also available upon request.

- Equipped with 5 circuits capable of 480Mb/s high-speed transmissions
- Compliant to USB 2.0 specifications
- Fully shielded metal shell with overmolded sealing
- Halogen-free and RoHS compliant



#### **FEATURES**

- Equipped with 5 circuits compliant to USB 2.0 specifications
- Robust shell hold-down design
- The smallest USB 2.0 interface
- Optimized shell structure design with full metal shielding
- Rugged Gold-plated leaf contact
- Halogen-free material
- Optimized design structure with epoxy glue-based plastic sealing

#### **BENEFITS**

- High-speed signal up to 480Mb/s transmission
- Improved peeling force
- Saves space on PCB
- Protects against EMI, RFI and ESD
- Prevents corrosion and improves reliability
- Meets environmental, health and safety requirements
- Meets IPX4 ratings

### TECHNICAL INFORMATION

#### **MATERIAL**

- Housing: High temperature thermoplastic, complies with UL 94V-0, black colour
- Shell: Stainless steel
- Contact: Copper alloy, selective gold plated on contact area, 50u" min. nickel under-plated gold flash overall or tin 100u"min. selective plated.

#### **MECHANICAL PERFORMANCE**

- Insertion Force: 35N (3.57 Kgf) max.
- Withdrawal Force: 10N (1.02 Kgf) min.
- Durability: 10,000 cycle unplug / plug 8N (0.81 Kgf) min.
- Vibration: No disturbance greater than 1µs
- Mechanical Shock: No disturbance greater than 1μs

#### **ELECTRICAL PERFORMANCE**

- Low Level Contact: Initial  $30m\Omega$  max.; Final  $\Lambda$ R:  $20m\Omega$  max.
- Insulation:  $100M\Omega$  min.
- Current Rating/Temperature Rise: ∆T30°C max.
- Voltage: 30V DC.
- Current: Signal contacts 1.0A, Power contacts 1.8A

#### **PACKAGING**

■ Tape & Reel

#### **SPECIFICATION**

■ Amphenol Specification: PS-7655

#### **ENVIRONMENTAL**

- Operating Temperature: -40°C to +85°C
- Shipping Storage Temperature: -20°C to +60°C
- Thermal Shock: No physical damage, contact resisitance ΔR=10mΩ max.
- Cyclic Temperature Humidity: No physical damage, contact resisitance  $\Delta R$ =10m $\Omega$  max.
- Temperature Life: No physical damage, contact resisitance  $\Delta R$ =10m $\Omega$  max.
- Salt Spray: No physical damage, contact resisitance ΛR=10mΩ max.
- Solderability: 95% of immersed area, No voids pin holes

#### **TARGET MARKETS/APPLICATIONS**



Charger Car Media Player/Hub



Connector Hub Flash Disk Mobile Phone/Tablet VR Camera



Hard Disk Drives Solid State Drives



Industrial Computer POS System



Medical

## **PART NUMBERS**

Descrption	Part Numbers
Waterproof Micro USB 2.0, Type B Receptacle, Right Angle SMT, IPX4 Rating	GMCBA058XX1230HHR