

Micro USB (USB 2.0) - GMCB05 Series

COMPLIANT TO USB 2.0 SPECIFICATION; IDEAL FOR FAST CHARGING

As the leading manufacturer of interconnects, Amphenol ICC develops a wide range of Micro USB connectors for the consumer, datacom, industrial, and automotive applications. Micro USB 2.0 connectors have power contacts of 1.8A and 3A current for fast charging. The plastic tongue and two layer shells design ensure high reliability and prevent connector damage. Amphenol offers customized design to suit various customer requirements. These connectors also offer high speed signal stability up to 480Mb/s transmission.

- 5 circuits
- Compliant to USB 2.0 specification
- High speed 480Mb/s transmission
- Halogen-free, RoHS compliance
- Fully shielded



FEATURES

- 5 positions with USB 2.0 specification compliance
- Robust shell hold-down design
- Available in various options like shell DIP and SMT
- High speed signal stability up to 480Mb/s transmission
- Optimized shell structure design
- Rugged Gold-plated leaf contact for reliability needs
- Halogen-free material
- The smallest USB 2.0 Interface

BENEFITS

- Plug operation includes a snap in catch with tactile feedback ensuring an easy connection
- Reliable SMT process, and soldering with Printed Circuit Board (PCB)
- High performance in Signal Integrity (SI)
- Full metal shielding protects against Electromagnetic Interference (EMI), Radio-Frequency interference (RFI), and Electromagnetic Discharge (ESD)
- Full metal shielding protects against EMI (Electromagnetic Interference)/ RFI (Radio-Frequency interference) / ESD (Electromagnetic Discharge)
- Improves contact resistance and prevents corrosion
- Meets environmental, health and safety requirements
- Improved real estate space saving

TECHNICAL INFORMATION

MATERIAL

- Housing: High Temperature Thermoplastic, complies with UL 94V-0, Black
- Contact: Copper alloy, Selective gold plated on contact area, 50u" min. nickel under-plated gold flash overall or Tin 100u"min selective plated.
- Shell: Stainless Steel

MECHANICAL PERFORMANCE

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

ELECTRICAL PERFORMANCE

- Low Level Contact Resistance:
- Initial: $30m\Omega$ max.
- Final Δ R: 20m Ω max.
- Insulation: $100 \text{m}\Omega$ min.
- Voltage Rating: 30V DC
- Current Rating at T30°C max.
 - Signal 1.0A per contact
 - Power 1.8A per contact

PACKAGING

• Tape and Reel

SPECIFICATION

Amphenol Product Specification: PS-7395

ENVIRONMENTAL

- Operating Temperature: -40°C to +85°C
- Shipping and Storage Temperature: -20°C to + 60°C
- Thermal Shock: No physical damage
 - Contact Resistance: Δ R=+10m Ω max.
- Cyclic Temperature Humidity: No physical damage
- Contact Resistance: Δ R=+10m Ω max.
- Temperature Life: No physical damage
- Contact Resistance: Δ R=+10m Ω max.
- Solderability: 95% of immersed area must show no voids, Pin holes
- Salt Spray Test: No physical damage
 - Contact Resistance: Δ R=+10m Ω max.

TARGET MARKETS/APPLICATIONS



GPS Infotainment sytsems



ISDN and PBXs



Digital Media Player Gaming Mobile Phone Set Top Box TV Panel Tablet



HDD



POS System

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PART NUMBERS

Description	Orientation	Pins	Application	Shell Hold Down Length (mm)	Part Numbers
Type B, Receptacle	Right Angle	5	SMT	2.95	GMCB053X1123H1HR
Type B, Receptacle	Right Angle, High Rise	5	SMT	0.81	GMCB05821124EU
Type B, Receptacle	Right Angle Sink	5	SMT	0.7	GMCB05AX1124HEU
Type B, Receptacle	Right Angle	5	SMT	-	GMCB053X1X21BEU
Type B, Receptacle	Right Angle	5	SMT	0.6	GMCB053X1X24CEU
Type B, Receptacle	Vertical	5	SMT	1.7 / 2.3	GMCB05BXX124XH1EU
Type B, Receptacle	Right Angle, IPX4	5	SMT	-	GMCBA058XX1230HHR
Type B, Receptacle	Reverse Right Angle	5	SMT	0.85	GMCB05DX1123BEU
Type AB, Receptacle	Right Angle, High Rise	5	SMT	0.81	GMCB058XXX34CHR
Type AB, Receptacle	Vertical, Low Profile	5	SMT	1.5	GMCB051X1X34HEU

Mouser Electronics

Authorized Distributor

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Amphenol:

<u>GMCB05821124EU</u> <u>GMCB05B11124H1EU</u> <u>GMCB05D11123BEU</u> <u>GMCB05321123H1HR</u> <u>GMCB05821134CHR</u> GMCB05821424EU GMCB05A21124HEU GMCB05B23124H1EU GMCB05321124CEU GMCB05321121BEU