

USB 3.1 Micro – GSB343 Series

COMPLIANT TO USB 3.1 SPECIFICATION; IDEAL FOR CONSUMER & SERVER APPLICATIONS

As the leading manufacturer of interconnects, Amphenol ICC develops a wide range of USB 3.1 Micro connectors for consumer, datacom, industrial, and automotive applications. SuperSpeed USB, with upgraded interface offers a number of enhanced features. USB 3.1 Gen 1 now operates with full-duplex signalling over two differential pairs, improving host-directed simultaneous-by-directional communication. USB 3.1 Micro offer a 5Gb/s signalling rate offering 10x performance increase over Hi-Speed USB 2.0. SuperSpeed USB is backward compatible with USB 2.0 and will provide optimized power efficiency.

- Over 10 times performance increase over USB 2.0
- Backward compatible with USB 2.0
- High-speed 5Gb/s transmission
- Fast Sync-N-Go



TARGET MARKETS



FEATURES

- USB 3.1 Gen 1 specification compliance with 10 positions
- Optional DIP and SMT for shell application
- Robust two layer shells design
- Super speed up to 5Gb/s transmission
- Optimized shell structure design
- Rugged gold-plated leaf contact for reliability needs
- Halogen-free material
- 4 solder pad solderable at shell bottom ensuring mounting force

BENEFITS

- Plug operation includes a snap in catch with tactile feedback ensuring an easy connection
- Shell reliable mounted on PCB
- Peeling force improvement
- High performance in Signal Integrity (SI)
- Full metal shielding for Electromagnetic Interference (EMI) / Radio-Frequency interference (RFI) / Electromagnetic Discharge (ESD) protection
- Improves contact resistance and prevents corrosion
- Meets environmental, health and safety requirements
- Improved real estate space savings

TECHNICAL INFORMATION

MATERIAL

- Housing: High Temperature Thermoplastic, complies with UL 94V-0, Optional Colour
- Contact: Copper alloy, Selective gold plated on contact area, 100u" min. matte tin plated on soldering tail, 50u" min. nickel under-plated overall
- Shell: Stainless Steel, Nickel Plating Overall

MECHANICAL PERFORMANCE

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

ELECTRICAL PERFORMANCE

- Low Level Contact Resistance:
 - Initial: 30mΩ max. for VBUS and GND contacts
 - 50mΩ max. for all other contacts
 - Δ R:10mΩ max.
- Insulation:100mΩ min.
- Voltage Rating: 30 V DC
- Current Rating: 1.8A max.
- Mated connection impedance: 90Ω ± 15Ω (85Ω~105Ω)

PACKAGING

- Tape and Reel

SPECIFICATION

- Amphenol Product Specification: PS-7440/PS-7428

ENVIRONMENTAL

- Operating Temperature: -40°C to +85°C
- Shipping and Storage Temperature: -40°C to +85°C
- Thermal Shock: No physical damage
- Cyclic Temperature Humidity: No physical damage
- Temperature Life: No physical damage
- Solderability: 95% of immersed area must show no voids, Pin holes
- Mixed Flowing Gas: No physical damage
- Soldering Heat: No physical damage

TARGET MARKETS/APPLICATIONS



GPS
Infotainment Systems



ISDN and PBXs



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



HDD



POS System

PART NUMBERS

Description	Orientation	Pins	Application	Shell Hold Down Length (mm)	Part Numbers
Micro B, Receptacle	Right Angle	10	SMT	-	GSB3431X3XHR
Micro B, Receptacle	Right Angle	10	SMT	1 / 1.4	GSB343K33XXHR
Micro B, Receptacle	Right Angle, High Rise	10	SMT	0.81	GSB343T33XHR