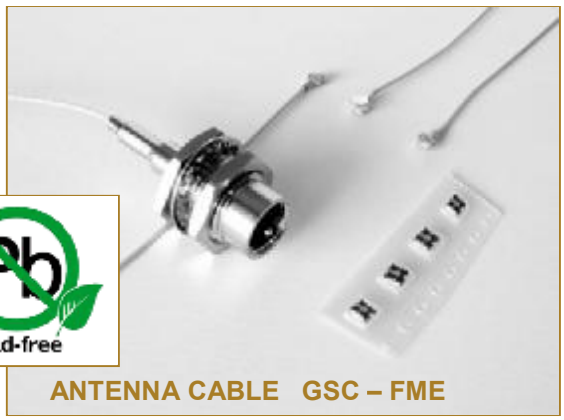
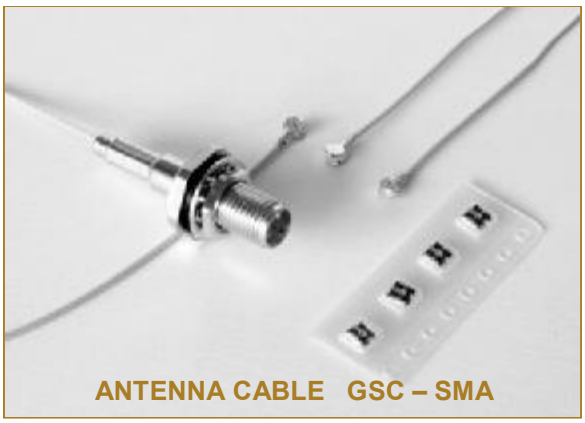
ANTENNA CABLE ASSEMBLIES FOR GSM MODULES

COAXIAL CABLE ASSEMBLIES - GSC SERIES



ANTENNA CABLE GSC – FME



ANTENNA CABLE GSC – SMA

FEATURES

- High Frequency Device
- Frequency available from 0 to 6 GHz (SMA) or 0 to 3 GHz (FME)
- SMT, Micro miniature coaxial connector GSC for high density mounting (side device)
- RF connector with reliable Broadband Performance FME or SMA (side antenna)
- Low insertion loss
- Matched with ultra-thin coaxial cable (0,8 mm dia.)

APPLICATIONS

- Wireless communication equipment (GSM modules SIEMENS MC39i, TC35i)
- Mobile, portable and cordless phones
- GPS receivers and applications
- Wireless LAN
- Bluetooth
- Microwave radio equipment
- Measurement equipment
- Other radio application with demand on connection to antennas with FME or SMA

SPECIFICATIONS

Item	Rating and Characteristic	
	GSC-FME	GSC-SMA
Frequency	0 - 3 GHz	0 - 6 GHz
VSWR* (max.)	1.4 at 0.9 GHz 2.2 at 1.9 GHz	1.4 at 0.9 GHz 1.9 at 1.9 GHz
Nominal Impedance	50 Ω	50 Ω
Temperature Range	-40°C to +90°C	-40°C to +90°C
Voltage	250 Vrms	250 Vrms
Resist.* - Out. contact: Center contact:	129 mΩ 23 mΩ	129 mΩ. 22 mΩ.
Withstand Voltage	300 (AC) rms	300 (AC) rms
Insulation Resistance	500 MΩ min.	500 MΩ min.
Attenuation*: (Insertion Loss)	0.7dB at 0.9GHz 1.9dB at 1.9GHz	0.6dB at 0.9GHz 1.1dB at 1.9GHz
Operation Humidity	90% max.	90% max.

PART NUMBERING

Part Number	Description
GSM GSC-FME STANDARD	GSC(f)-FME STANDARD(m), 100 mm
GSM GSC-FME MASSIVE	GSC(f)-FME MASSIVE(m), 100 mm
GSM GSC-FME MASS.SUCO	GSC(f)-FME MASS.SUCO, 100 mm
GSM GSC-SMA CABLE	GSC(f)-SMA(f), 100 mm

* - length of measured samples - 10cm

MATERIALS

FME connector (m)

Part Name	Material
Body	Brass, Nickel/Gold plating Brass SUCO*/Gold plating
Contact	Brass, Gold Plating
Lock Washer	PH Bronze, Nickel Plating
Nut	Brass, Nickel Plating
Insulator	Teflon, White
Ferrule	Brass, Nickel Plating

SMA connector (f)

Part Name	Material
Body	Brass, Gold Plated
Contact	PH Bronze, Gold Plated
Lock Washer	Brass, Gold Plated
Nut	Brass, Gold Plated
Insulator	Teflon
Ferrule	Brass, Gold Plated
Gasket	Sillicon Rubber, Block

MATERIALS

GSC connector (female)

Part Name	Material
Center contact	Copper Alloy, Gold Plating
Outer contact	Copper Alloy/Gold
Insulator	Engineering Plastic
Cable insulation	Ultra-thin Teflon FEP (0,8 mm dia.), single shield minimal radius for exceptional bending: 5 mm minimal radius for repeated bending: 10 mm

GSC connector (male)

Part Name	Material
Center contact	Stainless Steel/Gold
Outer contact	Copper Alloy, Silver Plating
Insulator	Engineering Plastic

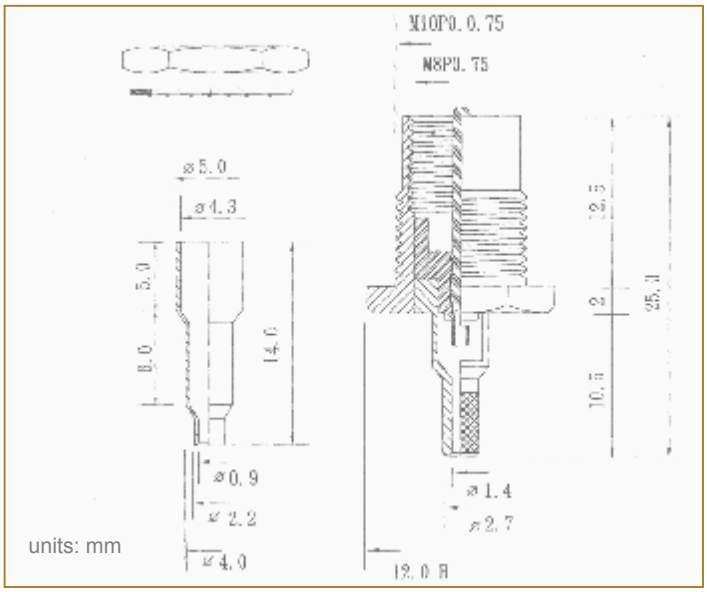
DIMENSIONS

FME connector (m)

FME connector (male) is miniature screw lock coaxial connector. The connector styles are available for flexible and conformable cables. Connector is designed for mobile radio and wireless communication area due its compact size and durability.

FME STANDARD (m)

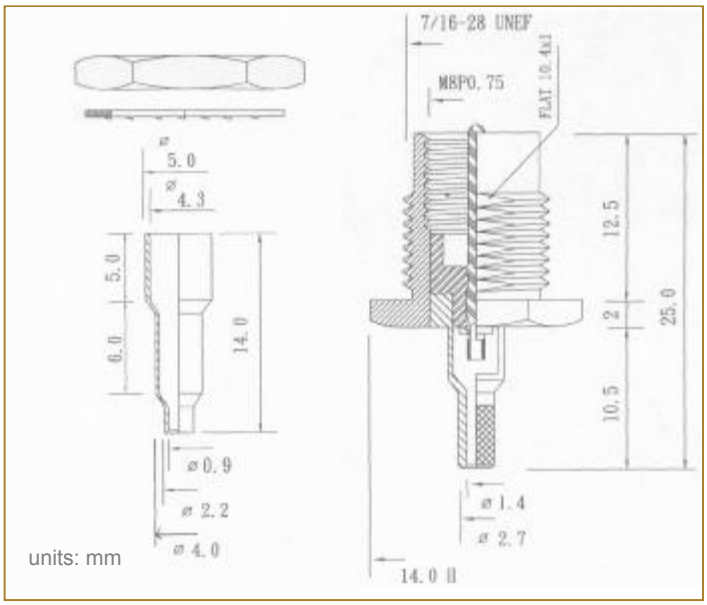
FME STANDARD connector with hexagon - 12.0 H, outside screw threads – M10, body finish plating – Nickel/Gold.



FME MASSIVE, FME MASSIVE SUCO (m)

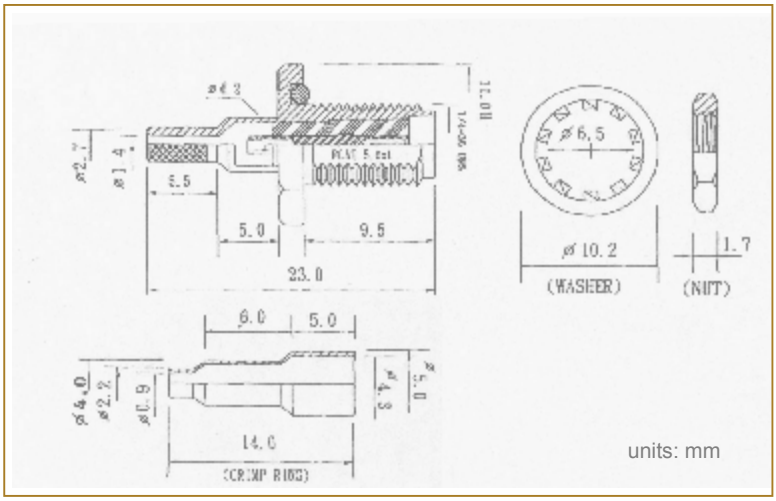
FME MASSIVE connector with hexagon - 14.0 H, outside screw threads – 7/16-28 UNEF, body finished plating – Nickel/Gold or SUCO*/Gold.

* SUCO plating - 3 layers anti-corrosion white Bronze



SMA connector (f)

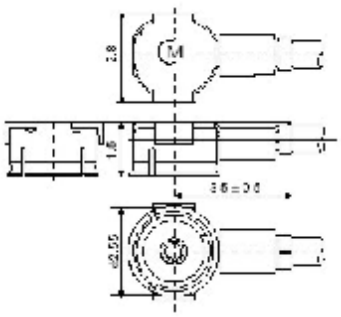
SMA connector (female) is semi-precision, miniature, high frequency connector and offer reliable broadband performance. Connector satisfy high quality standard and is characterized by high reliability, high mechanical stability, especially low VSWR and durability.



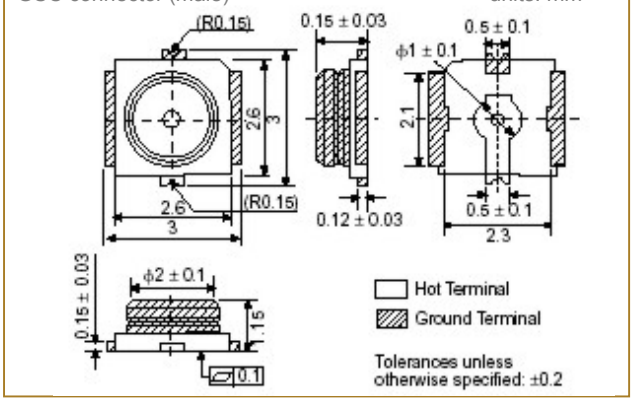
GSC connector (f, m)

SMT Ultra-Miniature coaxial connector (female, male) with high frequency performance from DC to 6 GHz The connector is the world's lightest coaxial connector and its construction allows very easy removal.

GSC connector (female) units: mm



GSC connector (male) units: mm

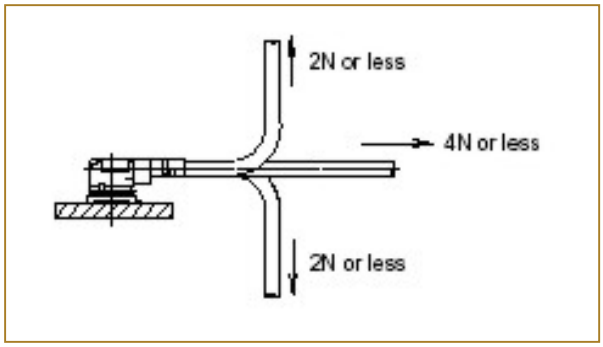


USAGE PRECATIONS

Connection and disconnection of connectors

To disconnect GSC connectors, hook the tools onto the connector cover and pull off vertically in the direction of the connector-coupling axis. To remove the connector directly, hold the connector cover and pull off vertically in the direction of the connector-coupling axis. (Please exercise caution so as not to injure fingertips or nails.)

To couple the connectors, the coupling axes of both connectors are aligned and the connectors are inserted as perpendicularly as possible. Do not attempt to insert on an extreme angle.



Permissible load on the cable after connector coupling

After the connectors are coupled, do not apply a load to the cable in excess of the values indicated in the diagram below.

Precautions

Please note that excessive twisting in the action of insertion or removal will cause damage of the cable, connectors or coupling.