# **SMA Connector**

SMA connectors are very popular thread coupling miniature coaxial connectors which satisfy quality standards and are characterized by high durability, high mechanical stability, long life and optimum electrical properties. The connectors are available in various classes for different applications with outer conductors in different materials and therefore with different price levels.

#### Features

Interface and quality tested according to IEC 60169-15.

Frequency range up to 18GHz

VSWR(straight connector):  $\leq 1.05$  typ.

Optimal electrical characteristics

High quality standard

Reliable and long service life

#### Applications

Cable connectors (straight and right angle) for flexible, semi-flex and semi-rigid cables

PCB connectors (straight and right angle)

Panel connectors in various flanges for solder, stripline and microstrip types

**Terminations** 

Adaptors

**Tools and Accessories** 

Specifications				
Electrical Characteristics				
Impedance	50 Ω			
Frequency range	0~18GHz			
VSWR	≤1.1+0.02 * f (GHz)			
Insulation resistance	≥5000MΩ			
Center contact resistance	≤3.0mΩ			
Outer contact resistance	≤2.0mΩ			
Withstand voltage	1000 V rms			
Working voltage	480V			
RF-leakage(dB)	≥100dB@1GHz			

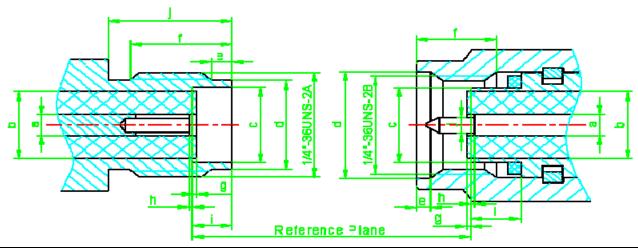
Mechanical Characteristics				
Coupling torque	0.8Nm~1.1Nm			
Coupling nut retention	≥180N			
Center contact captivation	22N			
Center contact retention force	≥0.28N			
Mating cycles	≥500			



Environmental Data				
Temperature range	-55℃~+155℃			
Moisture resistance	IEC 61169-1,Subclause9.4.3			
Rapid change of temperature	IEC 61169-1, Subclause 9.4.4			
Vibration	IEC 61169-1,Subclause9.3.3			
Shock	IEC 61169-1,Subclause9.3.14			
Corrosion resistance	IEC 61169-1,Subclause9.4.6			

Materials				
Body	CuZn/ Au plating			
Outer contact	CuZn/ Au plating			
Center contact	CuZn/CuBe/ Au plating			
Insolator	PPTFE			

# **Interface Dimensions**

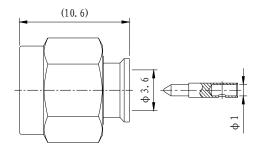


	SMA(50ohm) Series					
Male	e (Plug)	Female(Jack)				
Code	Code Min	Max	Min	Max		
Α	1.245	1.295	1.245	1.295		
В		4.178		4.178		
С	4.6	4.67		4.59		
D	5.28	5.49	6.35			
E	0.38	1.14	0.38	1.14		
F	4.32		2.54			
G	0.05	-0.18	0.05	-0.18		
Н	0	0.41	0			
ı	1.88	1.98				
J	5.54		0.902	0.94		

- 1) Contact diameters refer to 50 Ohm.
- 2) Resilient, dim. to meet electrical and mechanical requirements
- 3)All dimensions are in mm,tolerance according to ISO2768 m-H.



# **Cable Connectors**

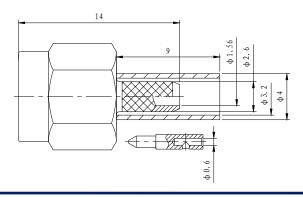


## **SMA-JB3**

Part No: 5070004

Inner conductor Brass(Gold plating)
Outer conductor Brass(Gold plating)

Insulator PTFE

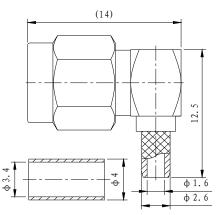


# **SMA-J316**

Part No: 5070277

Inner conductor Brass(Gold plating)
Outer conductor Brass(Gold plating)

Insulator PTFE

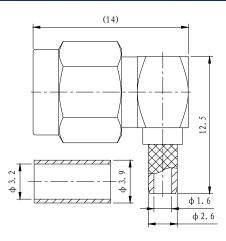


# SMA-JW316D

Part No: 5070271

Inner conductor Brass(Gold plating)
Outer conductor Brass(Gold plating)

Insulator PTFE



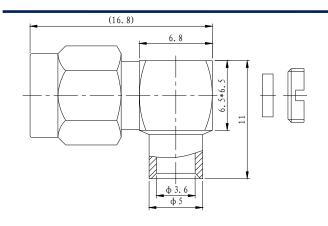
## SMA-JW316

Part No: 5070273

Inner conductor Brass(Gold plating)
Outer conductor Brass(Gold plating)

Insulator PTFE



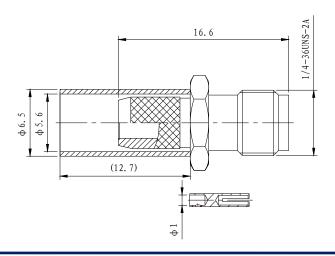


## **SMA-JWB3**

Part No: 5070294

Inner conductor Brass(Gold plating)
Outer conductor Brass(Gold plating)

Insulator PTFE



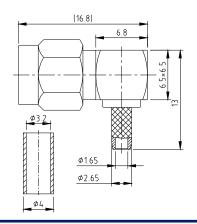
## SMA-K5

Part No: 5070269

Inner conductor Beryllium copper(Gold plating)

Outer conductor Brass(Gold plating)

Insulator PTFE

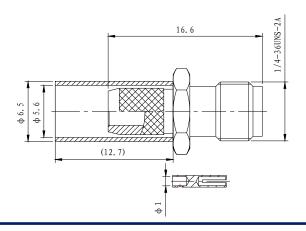


## **SMA-KW3**

Part No: 5070250

Inner conductor Brass(Gold plating)
Outer conductor Brass(Gold plating)

Insulator PTFE



# SMA-K5

Part No: 5070269

Inner conductor Beryllium copper(Gold

plating)

Outer conductor Brass(Gold plating)

Insulator PTFE



# 15 12 4-\$2.6

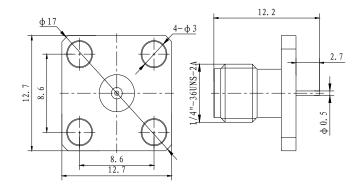
## **SMA-KFB2**

Part No: 5070312

Inner conductor Brass(Gold plating)
Outer conductor Brass(Gold plating)

Insulator PTFE

# Microstrip Connector

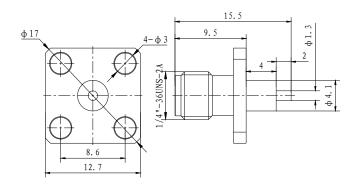


# SMA-KFD-2.7

Part No: 5070291

Inner conductor Brass(Gold plating)
Outer conductor Brass(Gold plating)

Insulator PTFE

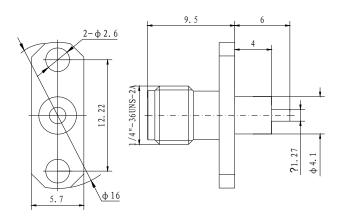


#### **SMA-KFD5**

Part No: 5070265

Inner conductor Brass(Gold plating)
Outer conductor Brass(Gold plating)

Insulator PTFE

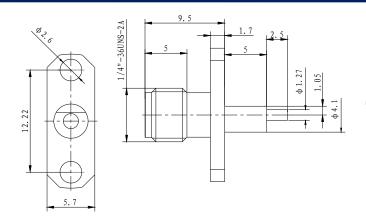


## **SMA-KFDB**

Part No: 5070286

Inner conductor Brass(Gold plating)
Outer conductor Brass(Gold plating)

Insulator PTFE

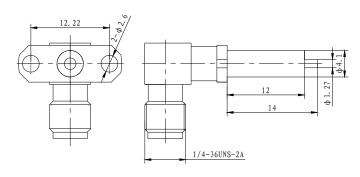


# SMA-KFD-010

Part No: 5070316

Inner conductor Brass(Gold plating)
Outer conductor Brass(Gold plating)

Insulator PTFE

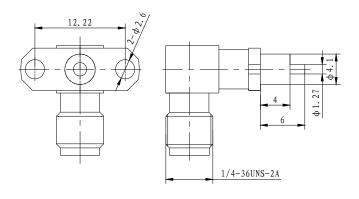


#### **SMA-KWFDB**

Part No: 5070287

Inner conductor Brass(Gold plating)
Outer conductor Brass(Gold plating)

Insulator PTFE



# **SMA-KWFDC**

Part No: 5070288

Inner conductor Brass(Gold plating)
Outer conductor Brass(Gold plating)

Insulator PTFE

Note: The CAD drawings above are for reference only, We can supply customized cost -deduction solutions.

