

Description

Zeeteq 50 ohm SMA coaxial connectors are subminiature, precision connectors operating up to 18GHz on semi-rigid cables and 12.4GHz on flexible cables. Its threaded coupling mechanism features high durability, high reliability and low VSWR.

SMA connectors are widely used in radar, microwave communication and instrumentation.

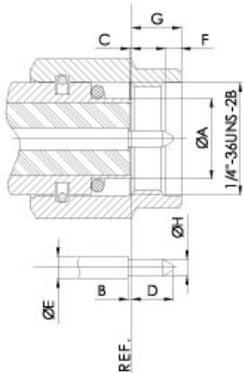
Zeeteq's SMA connectors comply with IEC 60169-15, they are available in two versions of body: passivated stainless steel is for high durability, the brass with gold plated is a standard usage.

Configuration

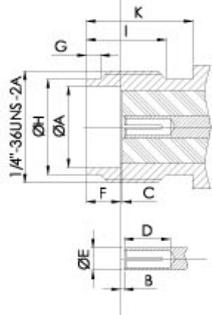
plug straight cable connector.....	58
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Interface Scheme

Plug



Jack



Interface Dimensions

	Plug		Jack		
	min.	max.	min.	max.	
A	-	4.59	4.59	-	A
B	0.00	0.25	0.00	0.25	B
C	0.00	0.25	0.00	0.25	C
D	-	2.54	2.67	-	D
E	1.24	1.29	1.24	1.29	E
F	0.38	1.14	1.88	1.98	F
G	-	3.43	0.38	1.14	G
H	0.90	0.94	5.28	5.49	H
I	-	-	4.32	-	I
K	-	-	5.54	-	K

SPECIFICATION

ELECTRICAL DATA

Impedance	50Ω
Frequency range for interface	DC-18GHz
VSWR(typical value)	
-straight, semi-rigid	1.02+0.010f(GHz)
-angle, semi-rigid	1.04+0.015f(GHz)
-straight, flexible	1.03+0.010f(GHz)
-angle, flexible	1.05+0.030f(GHz)
RF leakage	
-semi-rigid cable	≥ 100dB-f(GHz)
-flexible cable	≥ 60dB-f(GHz)
Dielectric withstanding voltage(sea level, in Vrms,50Hz)	
-semi-rigid cable	≥ 1000
-flexible cable	≥ 750
Working voltage(at sea level, in Vrms,50Hz)	
-semi-rigid cable	≤ 335
-flexible cable	≤ 250
Insulation resistance	≥ 5000MΩ
Contact resistance	
-center contact	≤ 3mΩ
-outer contact	≤ 2.5mΩ

MECHANICAL DATA

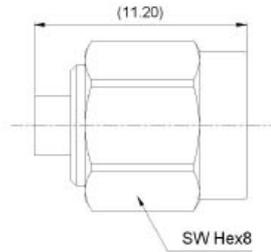
Recommended coupling nut torque	
-stainless steel	0.8-1.1Nm
-brass	0.45Nm
Coupling nut retention force	≥ 270N
contact retention force	
-axial	≥ 22N

ENVIRONMENTAL DATA

Temperature range	-65°C- +165°C
Climatic category	IEC 55/155/21
Thermal shock	MIL-STD-202,Method 107, Condition B
Moisture resistance	MIL-STD-202,Method 106
Corrosion	MIL-STD-202,Method 101, Condition B
Vibration	MIL-STD-202,Method 204, Condition D
Shock	MIL-STD-202,Method 213, Condition I

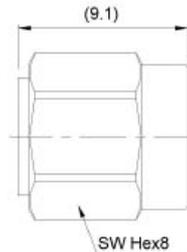
MATERIAL DATA		
PART	MATERIAL	PLATING
Body, outer contact	Brass	Gold
	Stainless steel	Passivated
Pin contact	Brass	Gold
	Beryllium copper	Gold
Socket contact	Beryllium copper	Gold
Ferrule	Copper	Gold
	Brass	Gold
Lock washer	Bronze	Gold
Insulator	PTFE or PFA	
Gasket	Silicone rubber	

PLUG STRAIGHT CABLE CONNECTORS



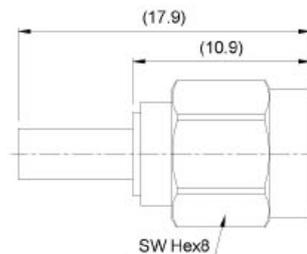
* With pin and insulator

Part number	Cable code	Cable	Center contact	Outer contact	Body plating
4998.SMA.PSC.01.111	01	UT47	solder	solder	gold
4999.SMA.PSC.02.111	02	UT85 RG405	solder	solder	gold
4999.SMA.PSC.02.141	02	UT85 RG405	solder	solder	passivated ¹⁾
5000.SMA.PSC.03.111	03	UT141 RG402	solder	solder	gold
5000.SMA.PSC.03.141	03	UT141 RG402	solder	solder	passivated ¹⁾



* Without pin and insulator

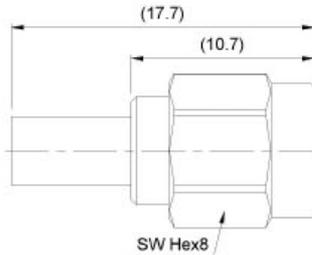
Part number	Cable code	Cable	Center contact	Outer contact	Body plating
5001.SMA.PSC.03.111	03	UT141 RG402	—	solder	gold
5001.SMA.PSC.03.141	03	UT141 RG402	—	solder	Passivated ¹⁾



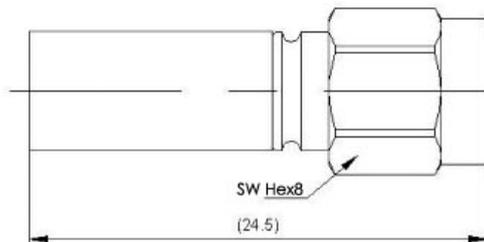
Part number	Cable code	Cable	Center contact	Outer contact	Body plating
5002.SMA.PSC.05.111	05	RG178 RG196	solder	crimp	gold

¹⁾ body material is stainless steel

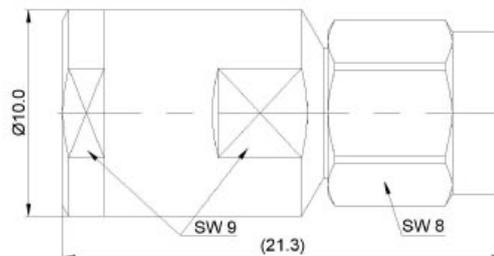
PLUG STRAIGHT CABLE CONNECTORS



Part number	Cable code	Cable	Center contact	Outer contact	Body plating
5003.SMA.PSC.06.111	06	RG174 RG188 RG316	solder	crimp	gold
5003.SMA.PSC.06.141	06	RG174 RG188 RG316	solder	crimp	passivated ¹⁾
5004.SMA.PSC.07.111	07	RG316D	solder	crimp	gold
5004.SMA.PSC.07.141	07	RG316D	solder	crimp	passivated ¹⁾



Part number	Cable code	Cable	Center contact	Outer contact	Body plating
5005.SMA.PSC.08.111	08	RG58 RG303	solder	crimp	gold
5005.SMA.PSC.08.141	08	RG58 RG303	solder	crimp	passivated ¹⁾
5006.SMA.PSC.09.111	09	RG142 RG223 RG400	solder	crimp	gold
5006.SMA.PSC.09.141	09	RG142 RG223 RG400	solder	crimp	passivated ¹⁾



Part number	Cable code	Cable	Center contact	Outer contact	Body plating
5180.SMA.PSC.08.111	08	RG58	solder	clamp	gold
5181.SMA.PSC.09.111	09	RG223	solder	clamp	gold

1) body material is stainless steel

PLUG RIGHT ANGLE CABLE CONNECTORS

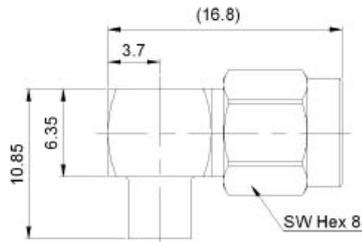


Figure 1

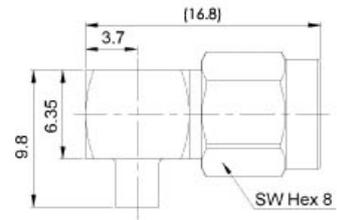
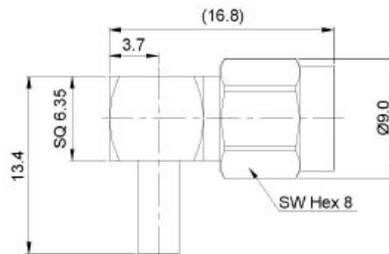


Figure 2

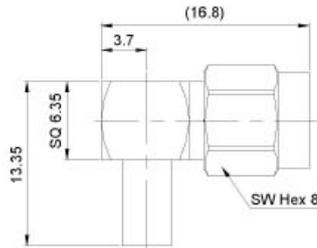
Part number	Cable code	Cable	Center contact	Outer contact	Body plating	Figure
5007.SMA.PRC.01.111	01	UT47	solder	solder	gold	2
5008.SMA.PRC.02.111	02	UT85 RG405	solder	solder	gold	1
5008.SMA.PRC.02.141	02	UT85 RG405	solder	solder	passivated ¹⁾	1
5009.SMA.PRC.03.111	03	UT141 RG402	solder	solder	gold	1
5009.SMA.PRC.03.141	03	UT141 RG402	solder	solder	passivated ¹⁾	1



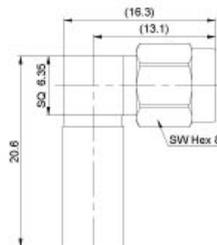
Part number	Cable code	Cable	Center contact	Outer contact	Body plating
5010.SMA.PRC.05.111	05	RG178 RG196	solder	crimp	gold

¹⁾ body material is stainless steel

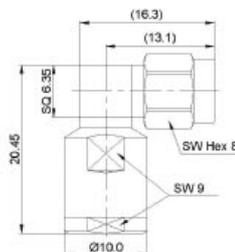
PLUG RIGHT ANGLE CABLE CONNECTORS



Part number	Cable code	Cable	Center contact	Outer contact	Body plating
5011.SMA.PRC.06.111	06	RG174 RG188 RG316	solder	crimp	gold
5012.SMA.PRC.07.111	07	RG316D	solder	crimp	gold

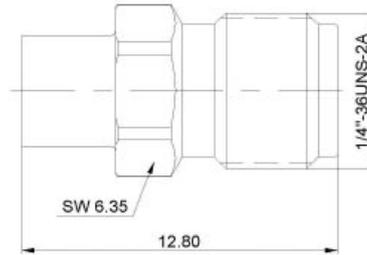


Part number	Cable code	Cable	Center contact	Outer contact	Body plating
5013.SMA.PRC.08.111	08	RG58 RG303	solder	crimp	gold
5014.SMA.PRC.09.111	09	RG142 RG223 RG400	solder	crimp	gold

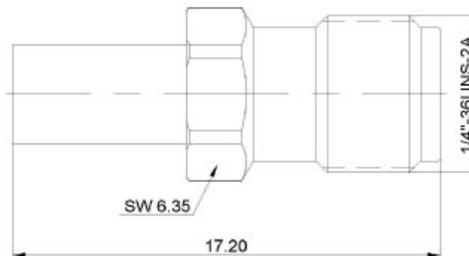


Part number	Cable code	Cable	Center contact	Outer contact	Body plating
5203.SMA.PRC.08.111	08	RG58	solder	clamp	gold
5204.SMA.PRC.09.111	09	RG223	solder	clamp	gold

JACK STRAIGHT CABLE CONNECTORS

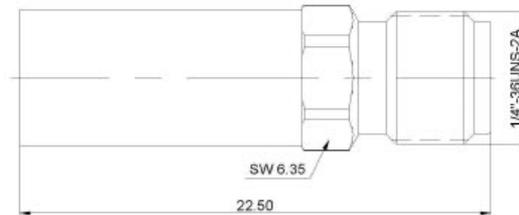


Part number	Cable code	Cable	Center contact	Outer contact	Body plating
5158.SMA.JSC.02.110	02	UT85 RG405	solder	solder	gold
5159.SMA.JSC.03.110	03	UT141 RG402	solder	solder	gold

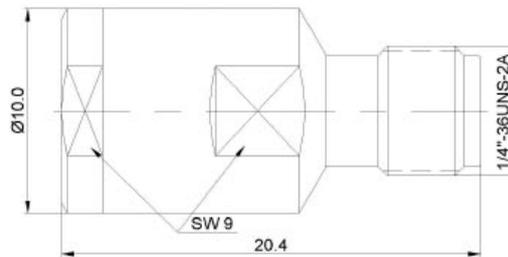


Part number	Cable code	Cable	Center contact	Outer contact	Body plating
5160.SMA.JSC.05.111	05	RG178 RG196	solder	crimp	gold
5030.SMA.JSC.06.111	06	RG174 RG188 RG316	solder	crimp	gold
5031.SMA.JSC.07.111	07	RG316D	solder	crimp	gold

JACK STRAIGHT CABLE CONNECTORS

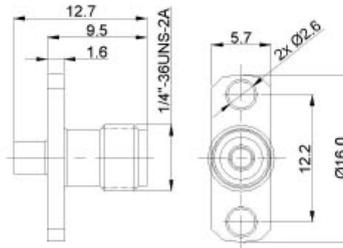


Part number	Cable code	Cable	Center contact	Outer contact	Body plating
5161.SMA.JSC.08.111	08	RG58 RG303	solder	crimp	gold
5162.SMA.JSC.09.111	09	RG142 RG223 RG400	solder	crimp	gold



Part number	Cable code	Cable	Center contact	Outer contact	Body plating
5182.SMA.JSC.08.111	08	RG58	solder	clamp	gold
5183.SMA.JSC.09.111	09	RG223	solder	clamp	gold

JACK STRAIGHT FLANGE CABLE CONNECTORS



Part number	Cable code	Cable	Center contact	Outer contact	Body plating
5015.SMA.JSC.01.110	01	UT47	solder	solder	gold
5016.SMA.JSC.02.110	02	UT85 RG405	solder	solder	gold
5017.SMA.JSC.03.110	03	UT141 RG402	solder	solder	gold

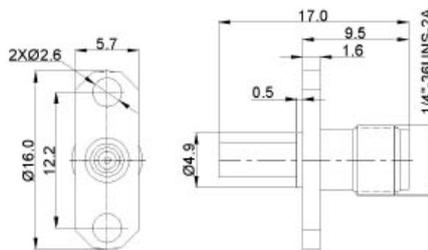


Figure 1

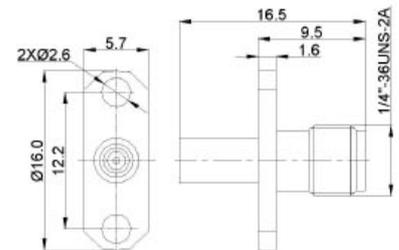
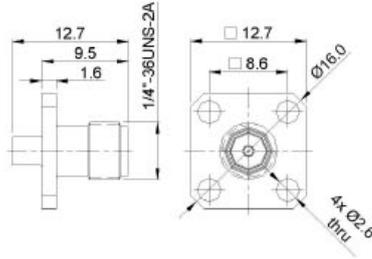


Figure 2

Part number	Cable code	Cable	Center contact	Outer contact	Body plating	Figure
5163.SMA.JSC.05.111	05	RG178 RG196	solder	crimp	gold	1
5164.SMA.JSC.06.111	06	RG174 RG188 RG316	solder	crimp	gold	2
5165.SMA.JSC.07.111	07	RG316D	solder	crimp	gold	2

JACK STRAIGHT FLANGE CABLE CONNECTORS



Part number	Cable code	Cable	Center contact	Outer contact	Body plating
5018.SMA.JSC.01.110	01	UT47	solder	solder	gold
5019.SMA.JSC.02.110	02	UT85 RG405	solder	solder	gold
5020.SMA.JSC.03.110	03	UT141 RG402	solder	solder	gold

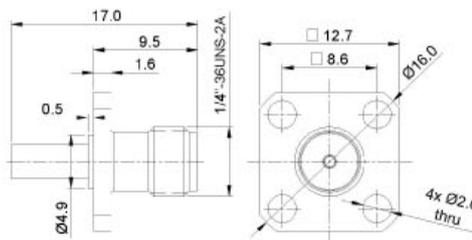


Figure 1

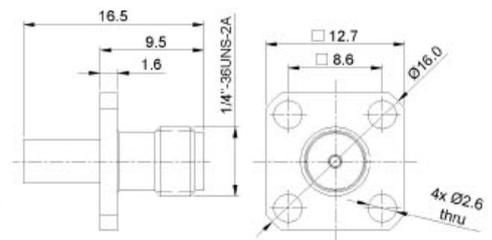


Figure 2

Part number	Cable code	Cable	Center contact	Outer	Body plating	Figure
5108.SMA.JSC.05.111	05	RG178 RG196	solder	crimp	gold	1
5167.SMA.JSC.06.111	06	RG174 RG188 RG316	solder	crimp	gold	2
5168.SMA.JSC.07.111	07	RG316D	solder	crimp	gold	2

JACK STRAIGHT BULKHEAD CABLE CONNECTORS

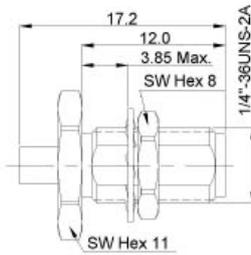


Figure 1

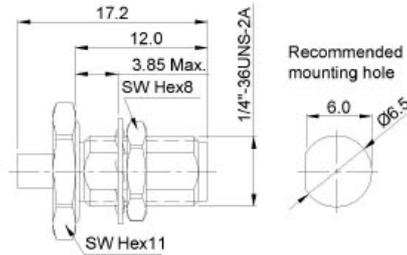


Figure 2

Part number	Cable code	Cable	Center contact	Outer contact	Body plating	Panel sealing	Figure
5021.SMA.JSC.01.111	01	UT47	solder	solder	gold	no	1
5022.SMA.JSC.02.111	02	UT85 RG405	solder	solder	gold	no	1
5023.SMA.JSC.03.111	03	UT141 RG402	solder	solder	gold	no	1
5173.SMA.JSC.02.111	02	UT85 RG405	solder	solder	gold	yes	2
5174.SMA.JSC.03.111	03	UT141 RG402	solder	solder	gold	yes	2

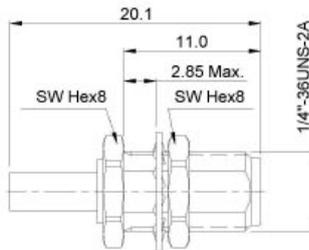


Figure 1

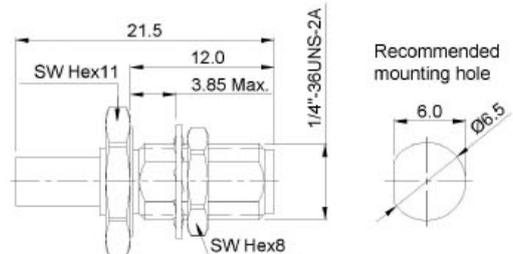


Figure 2

Part number	Cable code	Cable	Center contact	Outer contact	Body plating	Panel sealing	Figure
5024.SMA.JSC.05.111	05	RG178 RG196	solder	crimp	gold	no	1
5175.SMA.JSC.05.111	05	RG178 RG196	solder	crimp	gold	yes	2

JACK STRAIGHT BULKHEAD CABLE CONNECTORS

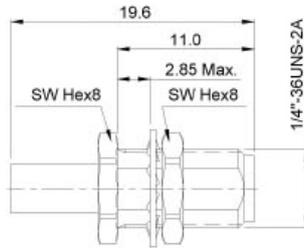


Figure 1

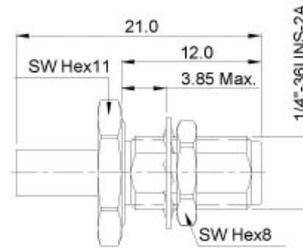
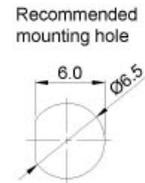


Figure 2



Part number	Cable code	Cable	Center contact	Outer contact	Body plating	Panel sealing	Figure
5025.SMA.JSC.06.111	06	RG174 RG188 RG316	solder	crimp	gold	no	1
5026.SMA.JSC.07.111	07	RG316D	solder	crimp	gold	no	1
5176.SMA.JSC.06.111	06	RG174 RG188 RG316	solder	crimp	gold	yes	2
5177.SMA.JSC.07.111	07	RG316D	solder	crimp	gold	yes	2

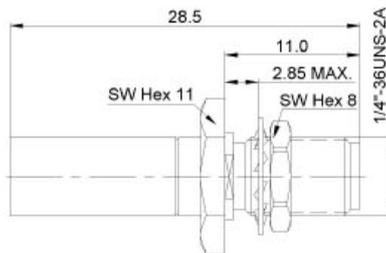


Figure 1

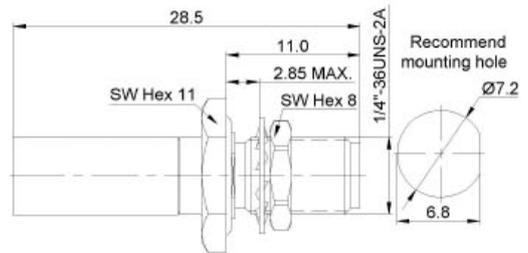
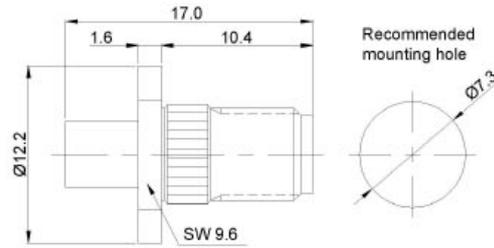


Figure 2

Part number	Cable code	Cable	Center contact	Outer contact	Body plating	Panel sealing	Figure
5027.SMA.JSC.08.111	08	RG58 RG303	solder	crimp	gold	no	1
5028.SMA.JSC.09.111	09	RG142 RG223 RG400	solder	crimp	gold	no	1
5178.SMA.JSC.08.111	08	RG58 RG303	solder	crimp	gold	yes	2
5179.SMA.JSC.09.111	09	RG142 RG223 RG400	solder	crimp	gold	yes	2

JACK STRAIGHT PRESS-IN CABLE CONNECTORS



Part number	Cable code	Cable	Center contact	Outer contact	Body plating
5169.SMA.JSC.02.110	02	UT85 RG405	solder	solder	gold
5170.SMA.JSC.03.110	03	UT141 RG402	solder	solder	gold

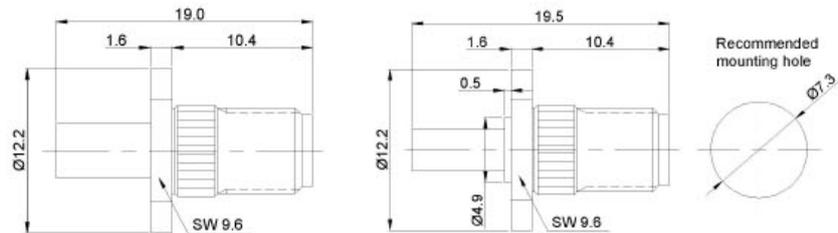
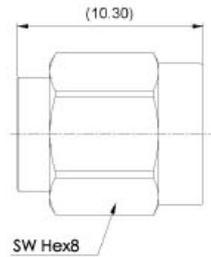


Figure 1

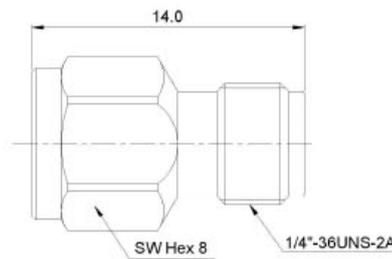
Figure 2

Part number	Cable code	Cable	Center contact	Outer contact	Body plating	Figure
5171.SMA.JSC.05.111	05	RG178 RG196	solder	crimp	gold	2
5172.SMA.JSC.06.111	06	RG174 RG188 RG316	solder	crimp	gold	1
5029.SMA.JSC.07.111	07	RG316D	solder	crimp	gold	1

SMA LOADS

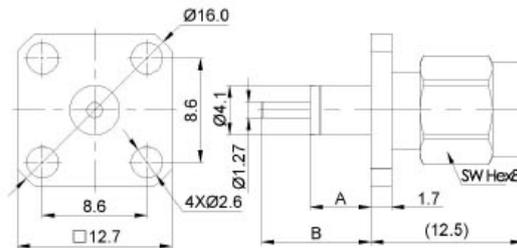


Part number	Impedance	Body plating	VSWR			
			DC-1GHz	1-2GHz	2-3GHz	3-6GHz
5087.SMA.PSL.00.155	50Ω	nickel	≤1.05	≤1.08	≤ 1.12	≤1.2



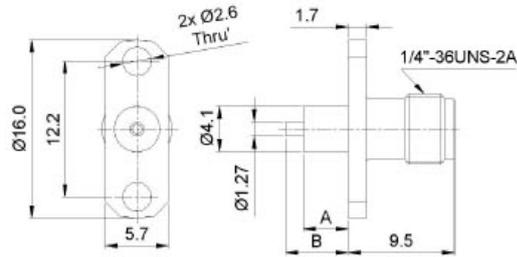
Part number	Impedance	Body plating	VSWR			
			DC-1GHz	1-2GHz	2-3GHz	3-6GHz
5089.SMA.JSL.00.155	50Ω	nickel	≤1.05	≤1.08	≤1.12	≤1.2

FLANGE MOUNT RECEPTACLES

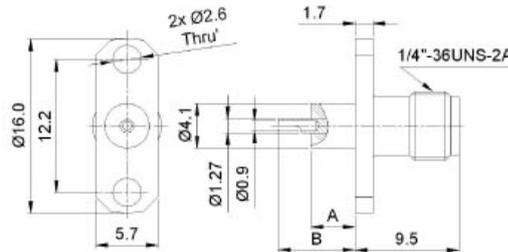


Part number	Center contact	A	B	Body plating	Notes
6125.SMA.PSF.00.111	coaxial rod	5	9	gold	extended dielectric
5977.SMA.PSF.00.111	coaxial rod	12	16.5	gold	extended dielectric
5978.SMA.PSF.00.111	coaxial rod	15	18	gold	extended dielectric

FLANGE MOUNT RECEPTACLES



Part number	Center contact	A	B	Body plating	Notes
6041.SMA.JSF.00.110	coaxial rod	5	8	gold	extended dielectric
6080.SMA.JSF.00.110	coaxial rod	4	5.6	gold	extended dielectric
6115.SMA.JSF.00.110	coaxial rod	15	18	gold	extended dielectric



Part number	Center contact	A	B	Body plating	Notes
6034.SMA.JSF.00.110	Solder cup	4	7	gold	extended dielectric
6074.SMA.JSF.00.110	Solder cup	4	10	gold	extended dielectric

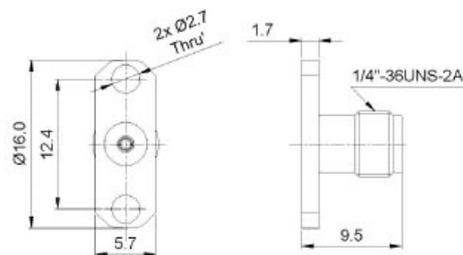


Figure 1

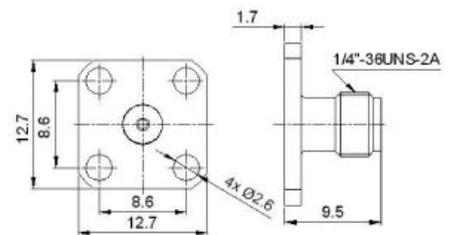
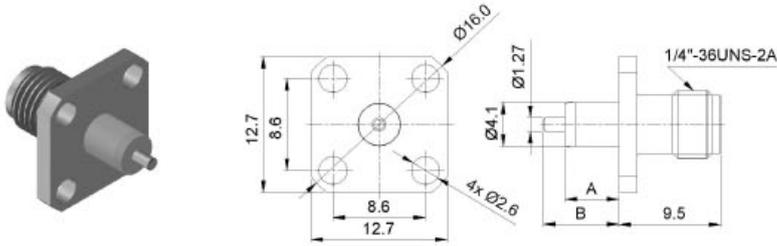


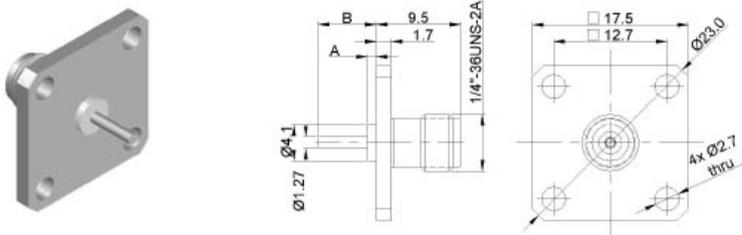
Figure 2

Part number	Center contact	figure	Body plating	Notes
6073.SMA.JSF.00.110	socket	1	gold	flush dielectric, 2 holes flange
5976.SMA.JSF.00.110	socket	2	gold	flush dielectric, 4 holes flange

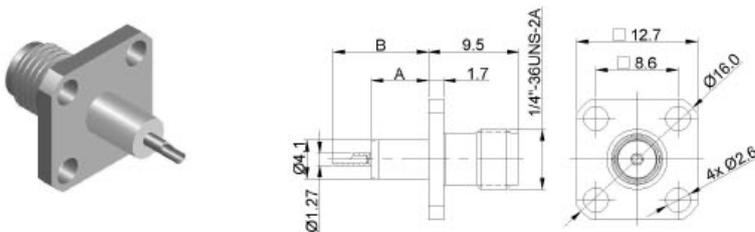
FLANGE MOUNT RECEPTACLES



Part number	Center contact	A	B	Body plating	Notes
6047.SMA.JSF.00.110	coaxial rod	5	7	gold	extended dielectric
5971.SMA.JSF.00.110	coaxial rod	5.5	8.5	gold	extended dielectric
5972.SMA.JSF.00.110	coaxial rod	15	18	gold	extended dielectric

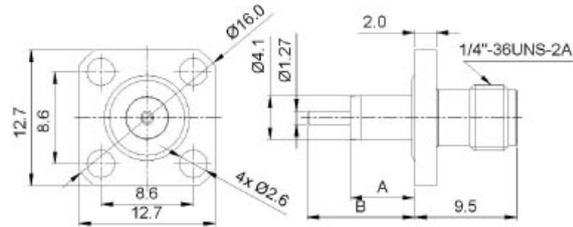


Part number	Center contact	A	B	Body plating	Notes
6044.SMA.JSF.00.110	coaxial rod	1	6.5	gold	extended dielectric, large flange version
5975.SMA.JSF.00.110	coaxial rod	4.5	9	gold	extended dielectric, large flange version

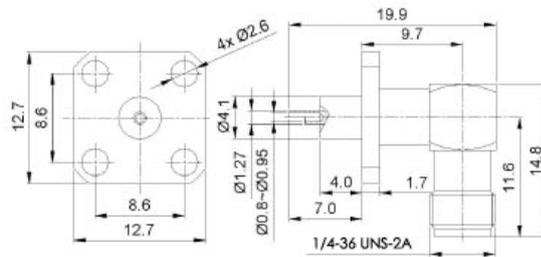


Part number	Center contact	A	B	Body plating	Notes
6033.SMA.JSF.00.110	solder cup	6	10	gold	extended dielectric
5973.SMA.JSF.00.110	solder cup	4.5	9.5	gold	extended dielectric
5974.SMA.JSF.00.110	solder cup	0	5	gold	extended dielectric

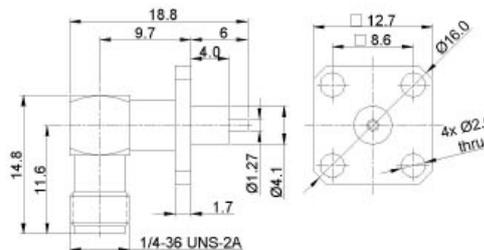
FLANGE MOUNT RECEPTACLES



Part number	Center contact	A	B	Body plating	Notes
6006.SMA.JSF.00.110	coaxial rod	5	7	gold	extended dielectric, with panel sealing
6064.SMA.JSF.00.110	coaxial rod	6	10	gold	extended dielectric, with panel sealing
6065.SMA.JSF.00.110	coaxial rod	22.5	26.5	gold	extended dielectric, with panel sealing

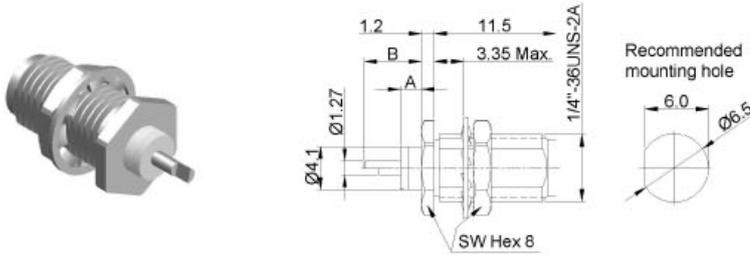


Part number	Center contact	Body plating	Notes
6027.SMA.JRF.00.110	Solder cup	gold	extended dielectric

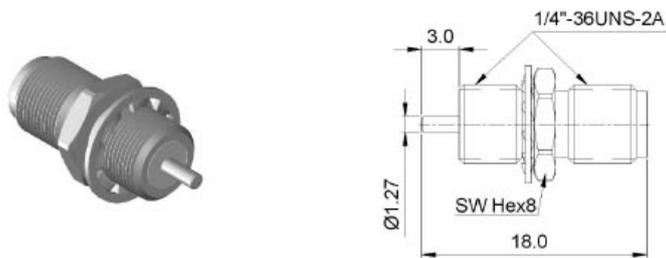


Part number	Center contact	Body plating	Notes
6048.SMA.JRF.00.110	coaxial rod	gold	extended dielectric

BULKHEAD RECEPTACLES

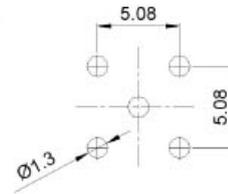
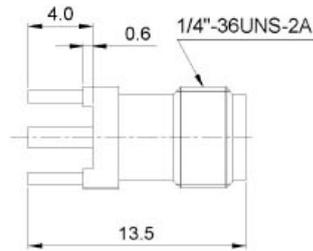


Part number	Center contact	A	B	Body plating	Notes
6045.SMA.JSB.00.111	coaxial rod	2	5.4	gold	extended dielectric, rear mount
5970.SMA.JSB.00.111	coaxial rod	4	7	gold	extended dielectric, rear mount



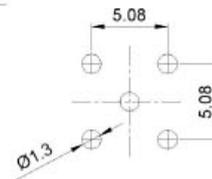
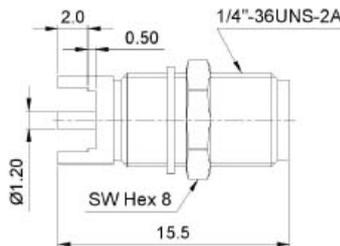
Part number	Center contact	Body plating	Notes
6085.SMA.JSB.00.111	coaxial rod	gold	flush dielectric, threaded mount, front mount

PCB MOUNT RECEPTACLES



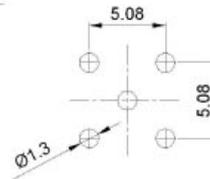
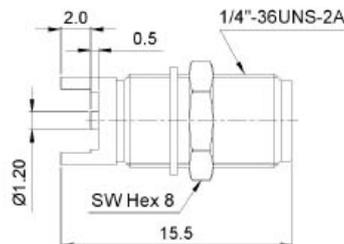
PCB LAYOUT

Part number	Center contact	Body plating	Notes
6066.SMA.JST.00.110	through hole	gold	flush dielectric, through hole mount



PCB LAYOUT

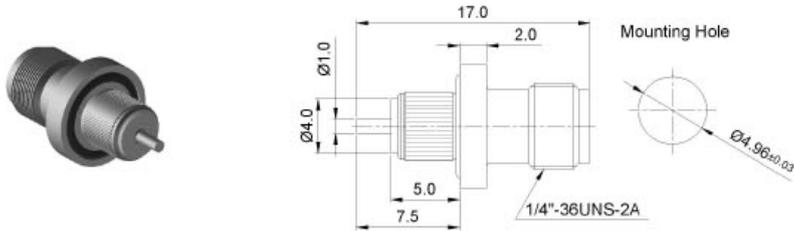
Part number	Center contact	Body plating	Notes
6114.SMA.JST.00.111	through hole	gold	flush dielectric, through hole mount



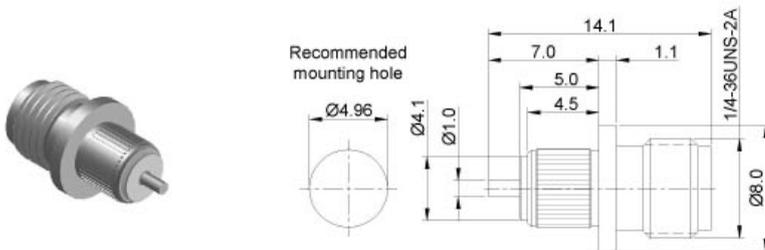
PCB LAYOUT

Part number	Center contact	Body plating	Notes
6061.SMA.JST.00.111	surface mount	gold	flush dielectric, through hole mount

PRESS IN RECEPTACLES



Part number	Center contact	Body plating	Notes
6037.SMA..JSP.00.110	coaxial rod	gold	extended dielectric, with panel sealing



Part number	Center contact	Body plating	Notes
6129.SMA..JSP.00.110	coaxial rod	gold	extended dielectric, without panel sealing