



SERIES 26.5 GHz SMA SUBMINIATURE CONNECTORS

Description

Due to their improved mechanical construction these connectors can be used up to 26.5 GHz. Their main features are high mechanical strength, high durability and low VSWR. They are interchangeable with the standard SMA connectors (18 GHz).

Besides several designs for use with .086" and .141" semi-rigid cables, the emphasis of this expanded line of SMA connectors is also placed on angle connectors available with crimp or solder type cable attachment. Furthermore, the program also includes panel connectors for Micro-Strip applications and adaptors.

Technical Data

ELECTRICAL DATA		REQUIREMENTS	
Frequency range		DC – 26.5 GHz	
VSWR			
– straight connectors		1.05 + 0.005f (GHz)	up to 18 GHz
		1.21	18 to 26.5 GHz
– right angle connectors		1.1 + 0.01f (GHz)	
– flange connectors for Micro-Strip		1.12	up to 6 GHz
		1.21	6 to 26.5 GHz
– adaptors	31 SMA, 32 SMA, 33 SMA	1.05 + 0.005f (GHz)	up to 24 GHz
		1.17	24 to 26.5 GHz
	34 SMA	1.05 + 0.014f (GHz)	up to 24 GHz
		1.39	24 to 26.5 GHz

MECHANICAL DATA	REQUIREMENTS
Recommended coupling nut torque	0.8 ... 1.1 Nm / 7.1 in.-lbs ... 9.7 in.-lbs
Cable retention force ¹⁾	see pages 36 – 41
Durability (matings)	500

1) value considers maximum load of the cables without irreversible variations of specifications.

ENVIRONMENTAL DATA	EQUIVALENT MIL TEST CONDITIONS
Temperature range	– 65°C ... + 165°C / – 85°F ... + 329°F
Corrosion	Saltspray test, acc. to MIL-STD-202, Method 101, Condition B

MATERIAL DATA	SPECIFICATION
Centre contact	beryllium-copper, gold plated
Body, coupling nut	beryllium-copper, gold plated stainless steel, passivated
Insulator	PTFE
Gasket	silicone rubber

Connectors for Semi-Rigid Cables

straight plugs

- > with pin and insulator
- > cable entry soldered
- > centre contact soldered

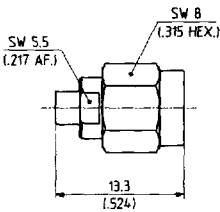


Fig. 1

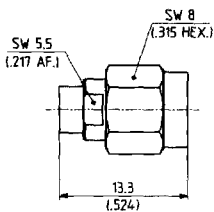
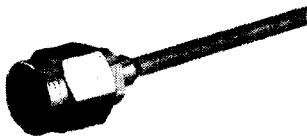
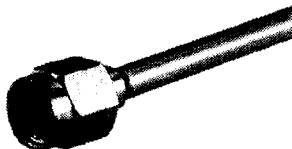
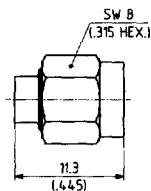


Fig. 2



SUHNER TYPE	Ident. no.	Cable group (example)		Assembly instruction	Variant	Weight	Fig.
11 SMA-50-2-100	648717	Y3, Y11 (EZ 86)		27032	gold/CuBe	2.93 g/.103 oz.	1
11 SMA-50-3-100	648718	Y5, Y12 (EZ 141)		27032	gold/CuBe	2.82 g/.099 oz.	2

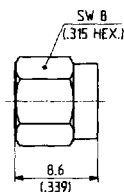
- > without pin and insulator
- > cable entry soldered



SUHNER TYPE	Ident. no.	Cable group (example)	CECC 22111-		Assembly instruction	Variant	Weight
11 SMA-50-3-14	544546	Y5 (EZ 141)	801-03		9055	gold/CuBe	2.20 g/.077 oz.
11 SMA-50-3-44	642314	Y5 (EZ 141)	801-04		9055	stainless steel ²⁾	2.20 g/.077 oz.

2) solder parts gold plated

- > without pin and insulator
- > cable entry soldered



SUHNER TYPE	Ident. no.	Cable group (example)	CECC 22111-	MIL M 39012/	Assembly instruction	Variant	Weight
11 SMA-50-3-16	544548	Y5 (EZ 141)	801-01	92-4101	9055	gold/CuBe	2.00 g/.070 oz.
11 SMA-50-3-42	649222	Y5 (EZ 141)			9055	economic ¹⁾	2.00 g/.070 oz.
11 SMA-50-3-66	641644	Y5 (EZ 141)	801-02	92-3101	9055	stainless steel ²⁾	2.00 g/.070 oz.

1) use torque wrench 74 Z-0-0-79

2) solder parts gold plated

right angle plugs

- > cable entry soldered
- > centre contact soldered

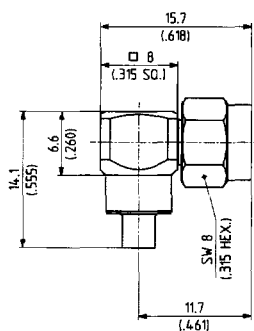


Fig. 1

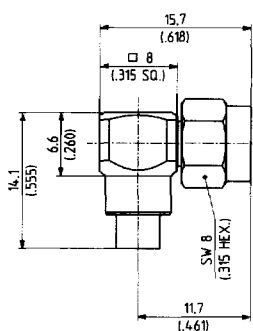
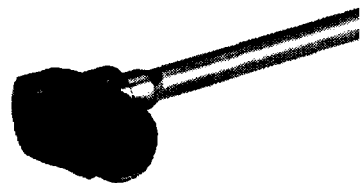


Fig. 2



SUHNER TYPE	Ident. no.	Cable group (example)	Assembly instruction	Variant	Weight	Fig.
16 SMA-50-3-100	648291	Y3, Y11 (EZ 86)	9194	stainless steel ²⁾	5.40 g/.189 oz.	1
16 SMA-50-3-100	648293	Y5, Y12 (EZ 141)	9194	stainless steel ²⁾	5.60 g/.196 oz.	2

2) solder parts gold plate

bulkhead jacks

- > cable entry soldered
- > centre contact soldered
- > with panel seal
- > suitable for insulated mounting
- > insulating washers see page 425

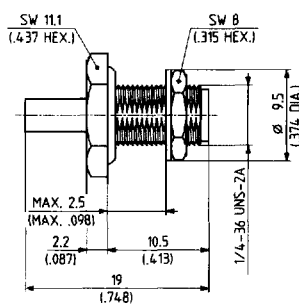


Fig. 1

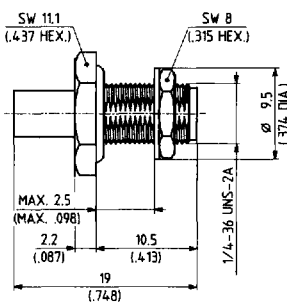
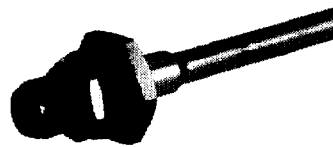


Fig. 2



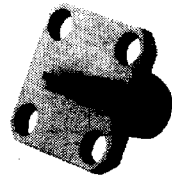
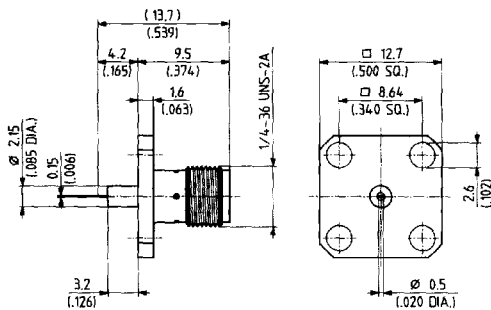
SUHNER TYPE	Ident. no.	Cable group (example)	Assembly instruction	Mounting hole	Variant	Weight	Fig.
24 SMA-50-2-100	648727	Y3, Y11 (EZ 86)	27055	ML 35	gold/CuBe	3.50 g/.123 oz.	1
24 SMA-50-3-100	648728	Y5, Y12 (EZ 141)	27055	ML 35	gold/CuBe	3.70 g/.130 oz.	2

• centre contact captivated

Stripline Launcher

panel launcher, female

> tab contact

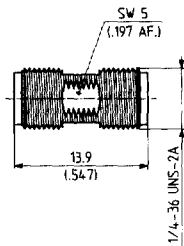


SUHNER TYPE	Ident. no.	Flange type	Mounting hole	Variant	Weight	Notes
23 SMA-50-0-94 •	649049	square	ML 93	stainless steel		

Adaptors Within-Series

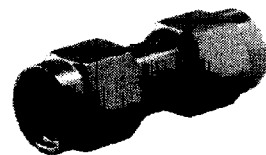
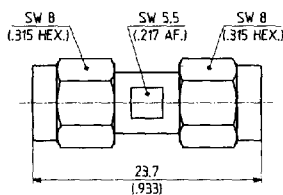
straight adaptors

> jack to jack



SUHNER TYPE	Ident. no.	VSWR	Variant	Weight
31 SMA-50-0-100 •	648729	see page 159	gold/CuBe	

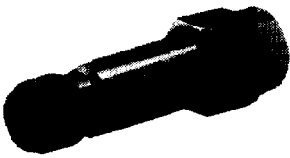
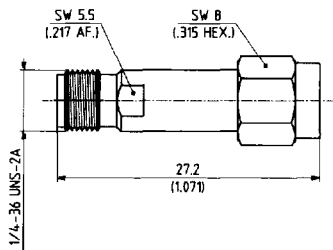
> plug to plug



SUHNER TYPE	Ident. no.	VSWR	Variant	Weight
32 SMA-50-0-100 •	648730	see page 159	gold/CuBe	6.00 g/.210 oz.

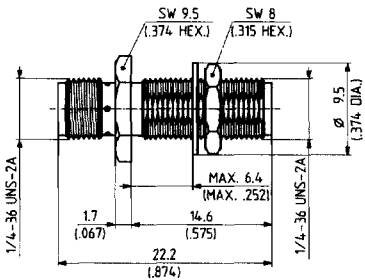
• centre contact captivated

> plug to jack



SUHNER TYPE	Ident. no.	VSWR	Variant	Weight
33 SMA-50-0-100 •	648731	see page 159	gold/CuBe	5.00 g/. 175 oz.

- > jack to jack
- > bulkhead mounted
- > suitable for insulated mounting
- > insulating washers see page 425



SUHNER TYPE	Ident. no.	Mounting hole	VSWR	Variant	Weight
34 SMA-50-0-100 •	648732	ML 35	see page 159	gold/CuBe	4.00 g/. 140 oz.

• centre contact captivated