

# SERIES SMS SUBMINIATURE CONNECTORS

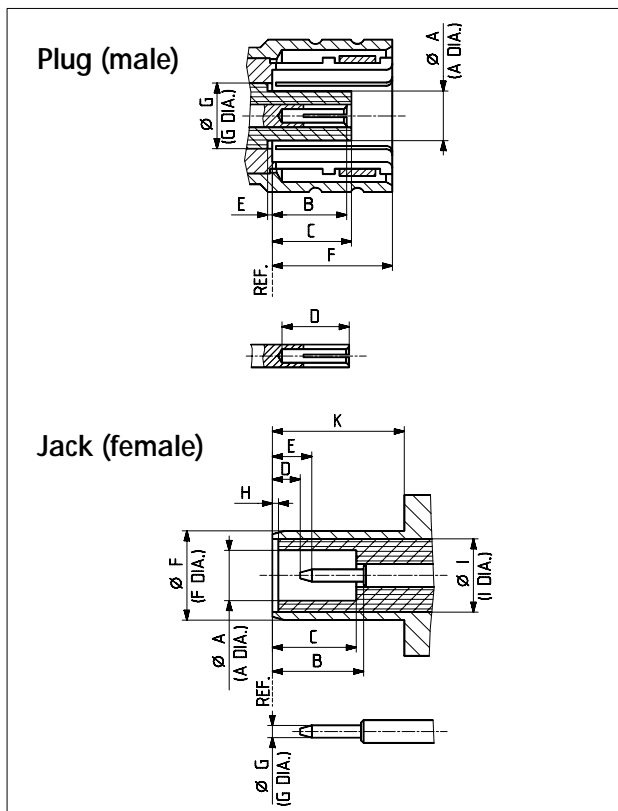
## Description

SUHNER SMS connectors are used in applications requiring rapid connection and disconnection, even where space is limited. The small physical size of the connector allows a high packing density to be achieved. The low engaging and disengaging forces due to the slide-on mechanism make this connectors specially suited for rack or panel systems. These connectors are suitable for applications up to 4 GHz.

The SMB, SMC and SMS series have an identical inner construction, but a different coupling mechanism.

In accordance with the international specifications, plugs are fitted with female center contacts and jacks with male center contacts. To increase the voltage rating, all insulators overlap.

## Interface Dimensions



## Interface Dimensions in mm / inches

	Plug		Jack	
	min.	max.	min.	max.
A	---	2.06 / .081	2.08 / .082	---
B	2.85 / .112	3.40 / .134	3.40 / .134	---
C	---	3.40 / .134	3.40 / .134	---
D	2.79 / .110	---	0.61 / .024	---
E	0.00 / .000	---	---	2.13 / .084
F	---	5.20 / .205	3.66 / .144	3.71 / .146
G	3.05 / .120 nom.		0.48 / .019	0.53 / .021
H	---	---	0.00 / .000	---
I	---	---	3.05 / .120 nom.	
K	---	---	5.30 / .209	---

**Note:** SUHNER SMS plugs are intermateable with SUHNER SMB jacks without any restrictions.

## Technical Data

ELECTRICAL DATA	REQUIREMENTS
Impedance	50 $\Omega$
Frequency range	DC ... 4 GHz
RF-leakage (measured at 1 GHz)	$\geq 55$ dB
Dielectric withstanding voltage (at sea level)	750 V rms, 50 Hz (depending on cable)
Working voltage (at sea level) - unmated	$\leq 250$ V rms, 50 Hz (depending on cable)
Working voltage (at sea level) - unmated	$\leq 350$ V DC (depending on cable)
Insulation resistance	$\geq 10^4$ M $\Omega$
Contact resistance - centre contact - outer contact	$\leq 5$ m $\Omega$ $\leq 2.5$ m $\Omega$

MECHANICAL DATA	REQUIREMENTS
Engagement force	typ. 8 N / 1.8 lbs
Disengagement force	typ. 5 N / 1.1 lbs
Contact captivation	$\geq 10$ N / 2.25 lbs
Durability (matings)	$\geq 500$

ENVIRONMENTAL DATA	TEST CONDITIONS
Temperature range	- 65° C ... + 165° C / - 85° F ... + 329° F
Climatic category	IEC → 55 / 155 / 21
Thermal shock	MIL-STD-202, Method 107, Condition B
Moisture resistance	MIL-STD-202, Method 106
Corrosion	Saltspray test acc. to MIL-STD-202, Method 101, Condition B
Vibration	MIL-STD-202, Method 204, Condition C

MATERIAL DATA			
CONNECTOR PART	STANDARDS	MATERIAL	PLATING
Bodies, pin contact	QQ-B-626	brass	gold
Socket contact	QQ-C-530	beryllium-copper, hardened	gold
Crimp ferrule	SUHNER® specification QQ-B-626	copper brass	gold
Springs	QQ-C-530	beryllium-copper, hardened	gold
Insulators		PTFE or PFA	

Some connectors may have a specification that differs from the above mentioned data.