



TNCA Series Connectors (DC~18GHz)

MicrowaveTown TNCA connectors are 50Ω precision connectors. They are designed with excellent characteristics over the full frequency range up to 18GHz. TNCA connectors are mechanically compatible with TNC connectors.

Specifications

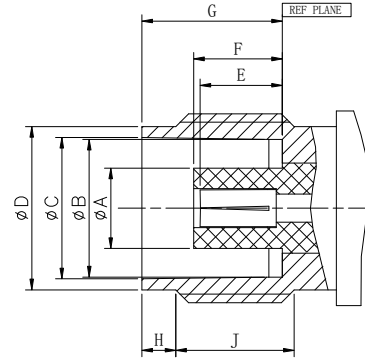
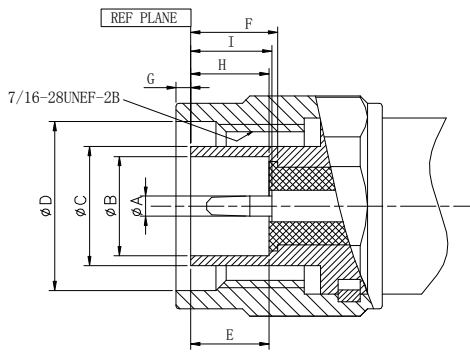
Impedance:	50Ω
Frequency:	DC-18GHz
VSWR:	
DC-18GHz...	1.15:1 (max)
Contact Resistance:	Center Contact≤1.5mΩ Housing≤0.2mΩ
Insulation Resistance:	≥5000MΩ
Dielectric Withstanding Voltage:	1500V
Durability:	500 cycle
Temperature Range:	-55℃~+165℃

Material/Finishing

Housing:	Stainless Steel SU303	Polished/Passivated
Center Contact:	Beryllium Copper	
		Gold Plated(MIL-G-45204)
Insulators:	PTFE&PEI	

Interfaces:PER MIL-STD-348A

Interface Dimensions

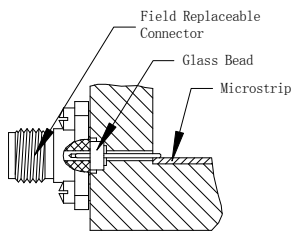


TNCA Male				
	mm		Inch	
	Min	Max	Min	Max
A	1.32	1.37	0.052	0.054
B	6.05	6.15	0.238	0.242
C	7.98	8.08	0.314	0.318
D	11.18	---	0.440	---
E	5.28	---	0.208	---
F	5.38	---	0.212	---
G	5.28	---	0.208	---
H	5.28	---	0.208	---

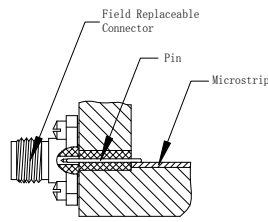
TNCA Female				
	mm		Inch	
	Min	Max	Min	Max
A	4.62	4.72	0.182	0.186
B	8.10	8.15	0.319	0.321
C	8.31	8.46	0.327	0.333
D	9.60	9.68	0.378	0.381
E	5.03	5.28	0.198	0.208
F	5.03	5.28	0.198	0.208
G	8.31	8.51	0.327	0.335
H	1.73	2.24	0.068	0.088
J	4.75	---	0.187	---

✧ TNCA Replaceable Connectors

➤ Product Application

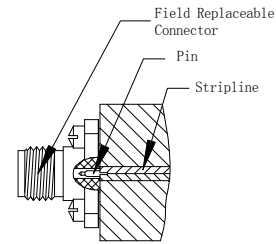


glass bead Transitions to Microstrip and Stripline Circuits



Launch Pin & Dielectric Transitions to Microstrip and Stripline Circuits

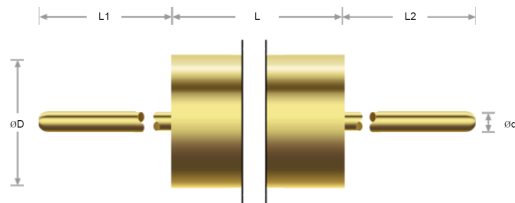
*refer to combination type connector



Pin/Tab Transitions to Microstrip and Stripline Circuits

*refer to combination type connector

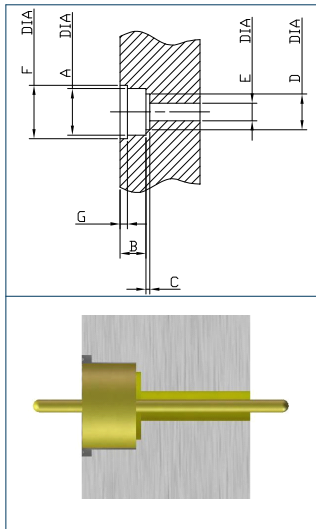
➤ Glass Bead Commonly Used Size



Commonly used size (recommend)			
d	<u>0.46mm</u> 0.018"	<u>0.51mm</u> 0.020"	<u>0.91mm</u> 0.036"
D	<u>2.79mm</u> 0.110"	<u>4.01mm</u> 0.158"	<u>6.81mm</u> 0.268"
L	<u>1.52mm</u> 0.06"	<u>1.52mm</u> 0.06"	<u>1.52mm</u> 0.06"
L1	A variety of sizes available		
L2	A variety of sizes available		

*Note: both ends of L1\L2 can insert into connector, depth less than 2.5mm

➤ Glass Bead Installation Dimension (FYI)



Pin diameter	0.46mm 0.018"	0.51mm 0.020"	0.91mm 0.036"
A	Glass bead dimension D&L		
B	Glass bead dimension D&L		
C	<u>0.18-0.23mm</u> 0.007-0.009"	<u>0.23-0.25mm</u> 0.009-0.010"	<u>0.46-0.56mm</u> 0.018-0.022"
D	<u>2.13-2.18mm</u> 0.084-0.086"	<u>3.15-3.20mm</u> 0.124-0.126"	<u>3.76-3.86mm</u> 0.148-0.152"
E	This is 50 ohms transmission line, In accordance with pin diameter conversion, E=pin diameter*2.3		
F	Solder capture slot, common dimension is F=A+1mm		
G	Solder capture slot, common dimension is 0.5mm		

*Note: C/D structure is optional if processing precision cannot guarantee



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✧ TNCA Receptacle (Tab Contact) Connectors

➤ Product Application

