

7mm Precision Connectors 2680A1 – Rigid Line Connectors

Description

The 2680A1 is a precision 7mm coaxial connector designed primarily for use with rigid air dielectric transmission lines (principal dimensions: 0.2756/0.01197 in.) and is equivalent to 7mm. These connectors provide superior electrical and mechanical performance for precision laboratory instruments. The sexless coupling mechanism permits any two 7mm connectors to be mated directly. The outer coupling nut can be removed and other coupling mechanisms substituted without disturbing the air line assembly.

The connector barrel configuration complies with IEEE requirements for 7mm general precision connectors. Because electrical and mechanical mating are accomplished in the same plane, the reference plane is clearly defined and permits accurate determination of electrical lengths.

All movable components of the connector are captivated. Assembly instructions with air line preparation dimensions are provided with each connector. The coupling unit is a 3/4" hex fabricated from stainless steel. (See Maury data sheet 5E-060.)



Specifications

Frequency Range	DC to 18 GHz
Characteristic Impedance	50 ohm ±0.2%
VSWR.	1.003 +0.002 (F GHz)
Insertion Loss (dB)	< 1.007 \sqrt{f} (GHz) per pair
Leakage (up to 6 GHz)	Better than 120 dB below signal
DC Contact Resistance	Inner: <1.0 milliohm; Outer: <0.1 milliohm

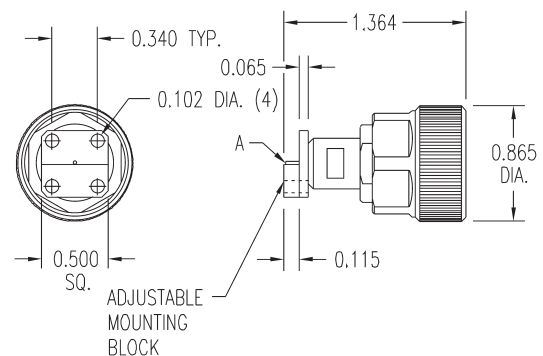
MODEL	DESCRIPTION
2680A1	7mm Sexless

7mm Precision Micro-Strip Connectors 2683 Series

Description

These connectors are designed for mounting on miniature micro-strip packages. They provide a well matched transition from DC to 18 GHz with a typical VSWR of 1.10, with a 50 ohm nominal impedance.

MODEL	DIMENSION "A" (INCHES)
2683A1	0.010 diameter pin
2683B1	0.006 thick x 0.020 wide tab



Accessories

Precision connectors require precision assembly and proper gaging of the connector pin depth and location in order to produce optimum performance. The following accessories are the best tools available for doing the job correctly. We highly recommended their use for assembly or disassembly of the Maury precision 7mm connectors on this page.

MODEL	DISCRIPTION
A028	Push-on style 7mm connector gage kit (see page 92)
2697A	Tool kit
2698C2	Torque wrench; 3/4-inch hex; 12 in. lbs (see page 94)