

Coaxial-to-microstrip adapters

Description and purpose

Coaxial-to-microstrip adapters are designed to connect coaxial path with microwave unit cards in a quality manner. Adapter installation methods: threaded or flanged connection (flanges with two and four mounting holes are available). The advantage of these adapters is that the damaged adapter may be replaced without disassembly and unsoldering of microwave unit. 7.0/3.04 mm, 3.5/1.52 mm, 2.92/1.27 mm and 2.4/1.042 mm cross-sections of coaxial-to-microstrip adapters are available. The central conductor is plated with wear-proof gold. Adapter body is made of stainless steel. Low dielectric permeability and high strength insulation is applied. PKM2-20 and PKM2-40 adapters are used in combination with MK100 microwave hermetic seals (not included). Used materials and adapter design provide low loss and reflection level, high stability of parameters for at least 2000 connect/disconnect cycles at operating temperatures between -60 °C and +110 °C. Minimum screen attenuation is 90 dB. The coaxial-to-microstrip adapters, except for PKM2-06-01R-0.98/0.4-2 and PKM2-06-01R-0.98/1.9-2, are manufactured in accordance with ZHNKU.468566.004 TU specification.



Specification

Model	Connector	Fig.	Coating	Frequency range, GHz	VSWR, max. (typ.)	Insertion loss for couple, dB max. (typ.)
PKM2-06-01R-0.98/0.4-2	Type III (female)	1	Gold	0 ... 6	1.25 (1.2)	1 (0.3)
PKM2-06-01R-0.98/1.9-2		2				
PKM2-20-03R-0.3M	Type IX, ver. 3 (female)	3	none	0 ... 32	1.2 (1.15)	0.7 (0.25)
PKM2-20-03R-0.3D		4				
PKM2-20-13R-0.3M	3.5 mm (female)	3				
PKM2-20-13R-0.3D		4				
PKM2-20-03-0.3M	Type IX, ver. 3 (male)	5				
PKM2-20-03-0.3D		6				
PKM2-20-13-0.3M	3.5 mm, ver. 3 (male)	5				
PKM2-20-13-0.3D		6				
PKM2-20-03R-0.3F	Type IX, ver. 3 (female)	7				
PKM2-20-13R-0.3F	3.5 mm (female)	8				
PKM2-20-03-0.3F	Type IX, ver. 3 (male)					
PKM2-20-13-0.3F	3.5 mm (male)	9				
PKM2-20-03R-0.3F2	Type IX, ver. 3 (female)					
PKM2-20-13R-0.3F2	3.5 mm (female)	10				
PKM2-20-03-0.3F2	Type IX, ver. 3 (male)					
PKM2-20-13-0.3F2	3.5 mm (male)					

Model	Connector	Fig.	Coating	Frequency range, GHz	VSWR, max. (typ.)	Insertion loss for couple, dB max. (typ.)
PKM2-40-14P-0.3M	2.92 mm (female)	11	none	0 ... 40	1.25 (1.15)	0.7 (0.25)
PKM2-40-14R-0.3D		12				
PKM2-40-14R-0.3F2		13				
PKM2-40-14R-0.3F		14				
PKM2-40-14-0.3M	2.92 mm (male)	15				
PKM2-40-14-0.3D		16				
PKM2-40-14-0.3F2		17				
PKM2-40-14-0.3F		18				
PKM2-40-05R-0.3M	2.4 mm (female)	19				
PKM2-40-05R-0.3F2		20				
PKM2-40-05R-0.3F		21				
PKM2-40-05-0.3M	2.4 mm (male)	22				
PKM2-40-05-0.3F2		23				
PKM2-40-05-0.3F		24				

NOTE

- M – screwed in part with M6 × 0.75 metric thread
- D – screwed in part with 1/4"-36UNS-2A inch thread
- F – flange with 4 holes
- F2 – flange with 2 holes

For detailed information on use of coaxial-to-microwave adapters, refer to document General Connectors at www.micran.ru.

Dimensions

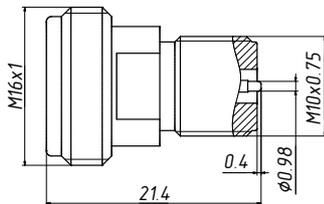


Fig. 1

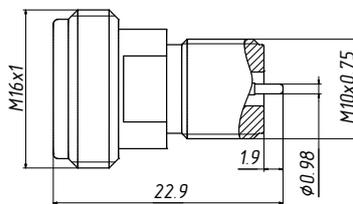


Fig. 2

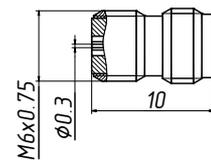


Fig. 3

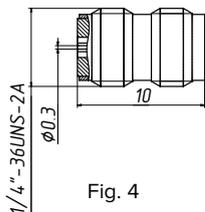


Fig. 4

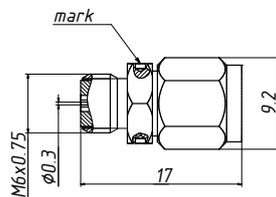


Fig. 5

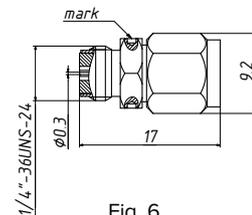


Fig. 6

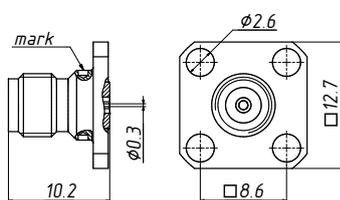


Fig. 7

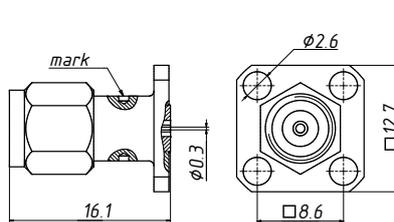


Fig. 8

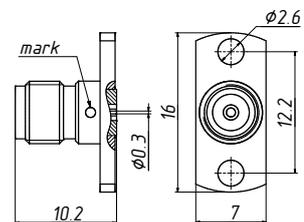


Fig. 9

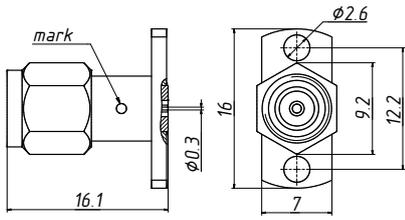


Fig. 10

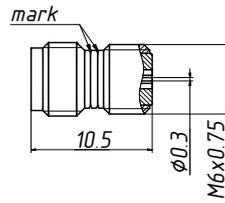


Fig. 11

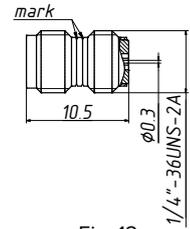


Fig. 12

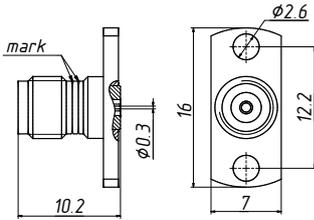


Fig. 13

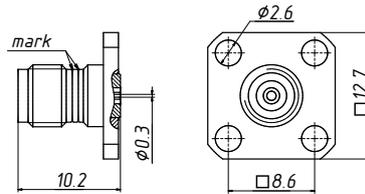


Fig. 14

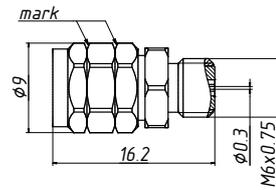


Fig. 15

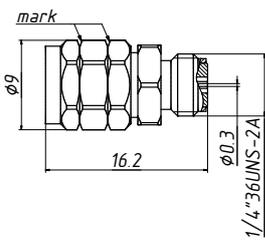


Fig. 16

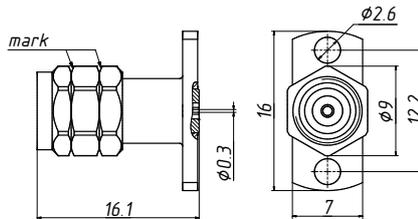


Fig. 17

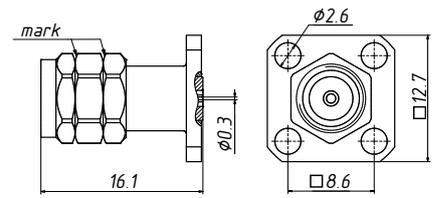


Fig. 18

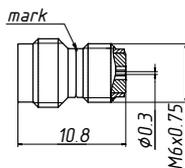


Fig. 19

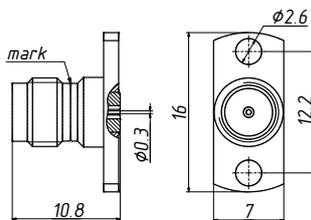


Fig. 20

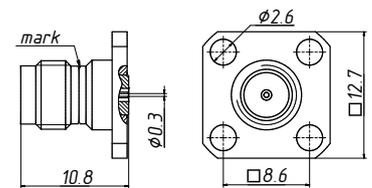


Fig. 21

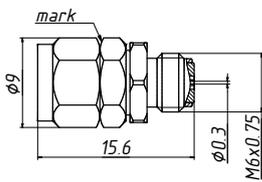


Fig. 22

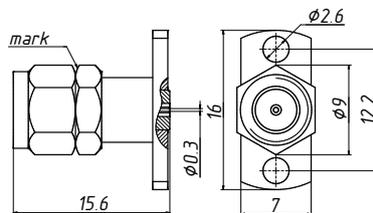


Fig. 23

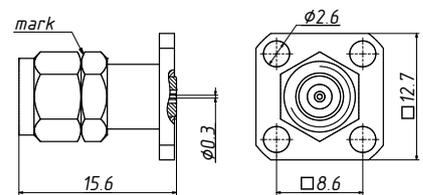


Fig. 24

ORDERING EXAMPLE

- PKM2-20-03R-0.3D Coaxial-to-microstrip adapter, screwed-in with inch thread, type IX, ver. 3 (female) connector.