



All dimensions are in mm; tolerances according to ISO 2768 m-H

**Interface**

According to ISO 20860-1; USCAR 18-4 (a)

**Documents**

Assembly instruction MA\_59V047 and subordinate documents (a)

**Material and plating**

**Connector parts**

	Material	Plating
Center contact	Spring bronze	Gold, min. 0.8 µm, over chemical nickel
Outer contact	Spring bronze	Tin, 1.5-3 µm
Dielectric	PA12-GB30	
Crimping sleeve	Spring bronze	Tin, 1.5-3 µm

**Electrical data**

Impedance 50 Ω <sup>(a)</sup>  
 Frequency DC to 3 GHz  
 Returnloss depending on assembly instructions:

Acc. assembly instruction MA\_59V047:

Frequency	Returnloss
DC to 1 GHz	≤ -23 dB
1 GHz to 2 GHz	≤ -18 dB
2 GHz to 3 GHz	≤ -15 dB

Acc. assembly instruction MA\_59V047\_VW\_LH:

Frequency	Returnloss, cable length 6m, ungated
DC to 1 GHz	≤ -17 dB
1 GHz to 2 GHz	≤ -17 dB +3.00 dB/GHz • (f - 1 GHz)
2 GHz to 4 GHz	≤ -14 dB +1.50 dB/GHz • (f - 2 GHz)
4 GHz to 6 GHz	≤ -11 dB +0.75 dB/GHz • (f - 4 GHz)

Insertion loss ≤ 0.1 x dB  
 Insulation resistance ≥ 1x10<sup>3</sup> MΩ  
 Center contact resistance ≤ 5 mΩ  
 Outer contact resistance ≤ 5 mΩ  
 Test voltage 750 V rms  
 Working voltage 335 V rms  
 Power current ≤ 1 A DC  
 RF-leakage ( optional ) ≥ 60 dB up to 1 GHz

- Limitations are possible due to the used cable type -

**Mechanical data**

Mating cycles min. 25 <sup>(a)</sup>  
 Engagement force ≤ 25 N  
 Disengagement force ≥ 2 N

**Environmental data**

Temperature range -40°C to +105°C  
 Thermal shock ISO 20860-2 clause 9.2  
 Temperature and humidity ISO 20860-2 clause 9.3 <sup>(a)</sup>  
 Vibration and mechanical shock ISO 20860-2 clause 9.1  
 Dry heat ISO 20860-2 clause 9.4  
 RoHS compliant

- Limitations are possible due to the used cable type -

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RF\_35/05.10/6.2

FAKRA - HF

STRAIGHT JACK

**59K16B-102T4**

**Tooling**

Crimp dimension acc. to assembly instruction! (a)

**Suitable cables**

Cable type see assembly instruction (a)

**Packing**

Standard not packed (a)  
Weight 1.33 g/pce

**Change History**

Rev.	Date	Change
a00	03.11.20	-Added USCAR18 and ISO 20860-1 -Added subordinate documents -Mating cycles changed from ≤ to min. -Conversion to the ISO standards -Cable types and Crimp dimension are listed in the installation instructions. -Changed in to not packed -Electrical data updated

While the information has been carefully compiled to the best of our knowledge, nothing is intended as representation or warranty on our part and no statement herein shall be construed as recommendation to infringe existing patents. In the effort to improve our products, we reserve the right to make changes judged to be necessary.

Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
H. Mühlfellner	07.07.09	F. Danzl	04.11.20	a00	20-2270	T. Unterhauser	04.11.20

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