



Rosenberger provides Micro-RF components such as Micro-RF test switches, PCB connectors, cable assemblies, adapters.

Rosenberger bietet Mikro-HF-Komponenten wie Mikro-HF-Testschalter, -PCB-Steckverbinder, Kabel-Assemblies, Adapter.

Micro-RF components can be used up to 6 GHz in various wireless applications, e. g. cellular and cordless phones, Bluetooth and wireless LAN applications, PDAs (Personal Digital Assistants) or wireless data collecting systems.

Mikro-HF-Komponenten sind für verschiedene Wireless-Anwendungen bis 6 GHz geeignet, z. B. Mobil- und Schnurlostelefone, Bluetooth-Anwendungen, Wireless LAN, PDAs (Personal Digital Assistants) oder Datenerfassungssysteme.

Micro-RF

Contents

- Micro-RF Switches
- Micro-RF Cable Assemblies
- Micro-RF Adaptors

Technical Data Micro-RF Switches

Code 15

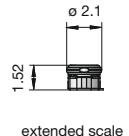
Applicable standards Anwendbare Normen	
Interface according to Interface gemäß	Rosenberger Micro-RF
Quality tested according to Qualitätsprüfung gemäß	IEC 60068
Electrical data Elektrische Daten	
Impedance Wellenwiderstand	50 Ω
Frequency range Frequenzbereich	DC to 6 GHz
Return loss (cable connector straight) Rückflusssdämpfung (Kabelsteckverbinder gerade)	≥ 26 dB @ DC to 2 GHz ≥ 22 dB @ 2 GHz to 4 GHz ≥ 16 dB @ 4 GHz to 6 GHz
Insertion loss Dämpfung	$\leq 0.05 \times \sqrt{f(\text{GHz})}$ dB
Insulation resistance Isolationswiderstand	≥ 5 G Ω
Center contact resistance Übergangswiderstand Innenleiter	≤ 100 m Ω
Outer contact resistance Übergangswiderstand Außenleiter	≤ 50 m Ω
Working voltage Betriebsspannung	4 V rms
Mechanical data Mechanische Daten	
Mating cycles Steckzyklen	≥ 100
Engagement force Steckkraft	≤ 4 N
Disengagement force Ziehkraft	≥ 2 N
Environmental data Umweltdaten	
Temperature range Temperaturbereich	-40 °C to +90 °C
Max. soldering temperature (PCB connectors) Max. Löttemperatur (Leiterplattensteckverbinder)	IEC 61760-1, +260 °C for 10 sec.
Materials Materialien	
Body Gehäuse	Zn diecasting, Au plating
Switching spring Schaltfeder	CuBe, Au plating
Stationary spring Feder	CuZn, Au plating
Spring carrier Federstütze	PEEK

Rosenberger-connectors fulfill in principle the indicated data of the Technical Data. Individual values of connectors may deviate depending upon application, design, type of cable, assembly method and execution. Specific data sheets for particular products can be provided on request from your Rosenberger sales partner.

Rosenberger-Steckverbinder erfüllen grundsätzlich die in den Technischen Daten angegebenen Daten. Je nach Anwendung, Bauart, Kabeltyp, Montageart und -ausführung können einzelne Werte von Steckverbindern hiervon abweichen. Spezifische Datenblätter zu einzelnen Produkten erhalten Sie auf Anfrage von Ihrem Rosenberger-Ansprechpartner.

Micro-RF Switch

RF Test Switch

Ordering Number	Version	Remarks	Packing Unit	
15 K 101-40M E4	straight	SMD	2500, 9000 tape & reel	 extended scale

Technical Data Micro-RF Components

Code 15

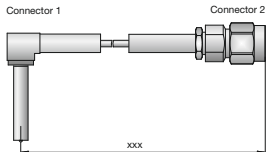
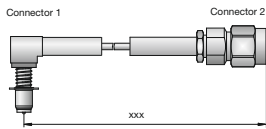
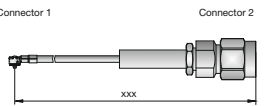
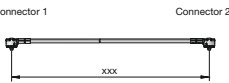
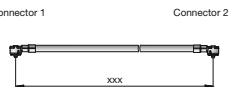
Applicable standards Anwendbare Normen	
Interface according to Interface gemäß	Rosenberger Micro-RF
Interface intermateable with Interface steckkompatibel mit	Micro-RF switch 15K101-40M
Quality tested according to Qualitätsprüfung gemäß	IEC 60068
Electrical data Elektrische Daten	
Impedance Wellenwiderstand	50 Ω
Frequency range Frequenzbereich	DC to 6 GHz
Return loss (Snap-on adaptor) Rückflusdämpfung (Snap-on-Adapter)	≥ 21 dB @ DC to 2 GHz ≥ 17 dB @ 2 GHz to 4 GHz ≥ 14 dB @ 4 GHz to 6 GHz
Return loss (Slide-on adaptor) Rückflusdämpfung (Slide-on-Adapter)	≥ 28 dB @ DC to 2 GHz ≥ 25 dB @ 2 GHz to 4 GHz ≥ 21 dB @ 4 GHz to 6 GHz
Insertion loss Dämpfung	≤ 0.05 x √f(GHz) dB
Insulation resistance Isolationswiderstand	≥ 5 GΩ
Center contact resistance Übergangswiderstand Innenleiter	≤ 50 mΩ
Outer contact resistance Übergangswiderstand Außenleiter	≤ 50 mΩ
Working voltage Betriebsspannung	4 V rms
Mechanical data Mechanische Daten	
Mating cycles (Snap-on adaptor) Steckzyklen (Snap-on Adapter)	≥ 10000
Engagement force Steckkraft	≤ 4 N
Disengagement force Ziehkraft	≥ 2 N
Environmental data Umweltdaten	
Temperature range Temperaturbereich	-40 °C to +90 °C
Max. soldering temperature (PCB connectors) Max. Löttemperatur (Leiterplattensteckverbinder)	IEC 61760-1, +260 °C for 10 sec.
Materials Materialien	
Center contact Innenleiter	CuBe / CuSn, Au plating
Outer contact Außenleiter	CuBe / CuSn, Au plating
Outer contact slide-on adaptor Außenleiter Slide-on-Adapter	CuZn, Au plating
Cupling nut slide-on adaptor Überwurfmutter Slide-on-Adapter	CuZn, Au plating
Inner, outer spring slide-on adaptor Innere, äußere Feder Slide-on-Adapter	Stainless steel, passivated
Dielectric Dielektrikum	PTFE / LCP

Rosenberger-products fulfill in principle the indicated data of the Technical Data. Individual values of products may deviate depending upon application, design, type of cable, assembly method and execution. Specific data sheets for particular products can be provided on request from your Rosenberger sales partner.

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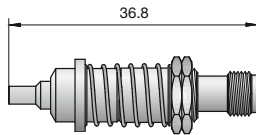
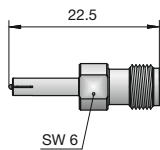
Cable Assemblies

Cable Assemblies

Ordering Number	Cable	Connector 1	Connector 2	Remarks	
LH1-021-xxx	RTK 013	15 S 209-3H1	32 S 101-3H1	xxx: please fill in requested length in mm	
LH1-025-xxx	RTK 013	15 S 206-3H1	32 S 101-3H1	xxx: please fill in requested length in mm	
LH1-026-xxx	RTK 013	15 S 201-1H1	32 S 101-3H1	xxx: please fill in requested length in mm	
LE3-006-xxx	RTK 008	15 S 201-1E3	15 S 201-1E3	xxx: please fill in requested length in mm	
LH1-071-xxx	RTK 013	15 S 201-1H1	15 S 201-1H1	xxx: please fill in requested length in mm	

Adaptors

Adaptors (Inter Series)

Ordering Number	Version	Remarks	Packing Unit	
15 S 132-K04 L5	straight	Micro-RF male - SMA female for 15 K 101-40M E4 slide-on Mating cycles ≥ 200000	1	
15 S 132-K02 L5	straight	Micro-RF male - SMA female for 15 K 101-40M E4 snap-on Mating cycles ≥ 10000	1	
15 S 132-K05 L5	straight	Micro-RF male - SMA female for 15 K 101-40M E4 snap-on Mating cycles ≥ 10000	1	