



Directional Coupler RK20-544P-4G

MTS-No.: 25132

Description

The Directional Couplers (DC Thru) of this series are designed to work between 500 MHz and 4000 MHz. They cover for example GSM, DECT, UMTS, Bluetooth and all LTE frequency bands.

The multisection stripline design exhibits high directivity, excellent coupling flatness and VSWR at all ports.



Technical data:

1 RF-specifications:

1.1	Coupler type	RK20, 20 dB		
1.2	Impedance	50 Ω		
1.3	Input power	50 W max.		
1.4	Frequency range	500 - 4000 MHz		
		min.	typ.	max.
1.5	VSWR (at all ports)		1.1	1.25
1.6	Insertion Loss		0.4 dB	0.5 dB
1.7	Coupling		20 ±0.5 dB	
1.8	Coupling flatness @ 800 - 3800 MHz		±0.5 dB	±1.0 dB
1.9	Directivity			
	@ 500 - 3000 MHz	20 dB	25 dB	
	@ 3000 - 4000 MHz	13 dB	18 dB	

2 Connections:

2.1	RF-in- and outputs	4x SMA female
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3 General specifications:

3.1	Operating temperature	-40 °C - +85 °C
3.2	Reference temperature of specifications	+25 °C
3.3	Dimensions (without connections)	75 mm x 27.2 mm x 10 mm (LxWxH)
3.4	Case style	Milled aluminium enclosure
3.5	Colour	SurTec650 (Chrome alloy)
3.6	Weight	60 grams

4 Delivered parts:

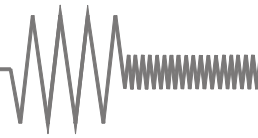
RK20-544P-4G
Datasheet

5 Comments:

Warranty	12 months
RoHS-compliant	Yes

6 Recommended accessories:

RF-cables
50 Ω SMA male (matching)



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Typical measurements:

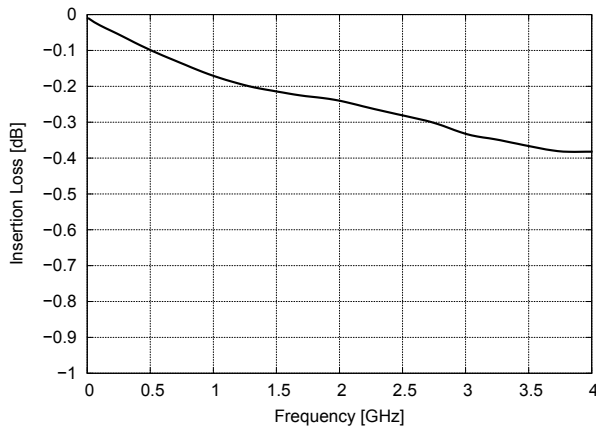


Fig. 1: Input port to output port insertion loss

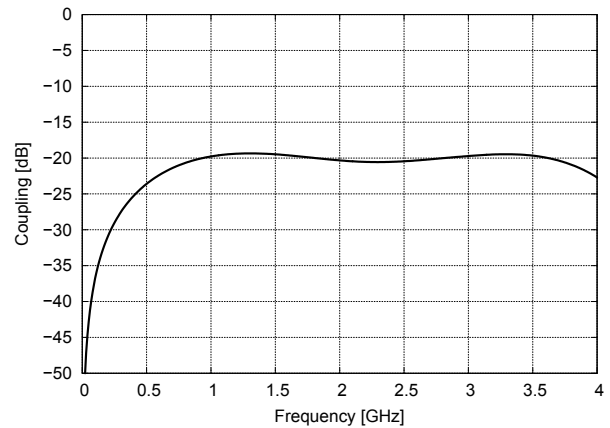


Fig. 2: Coupling between input and coupling port

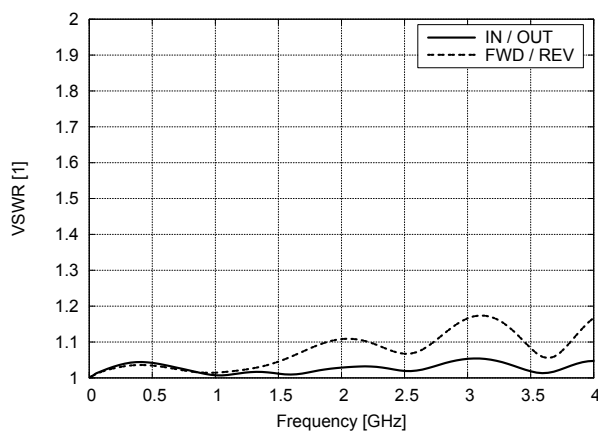


Fig. 3: VSWR for IN / OUT and FWD / REV ports

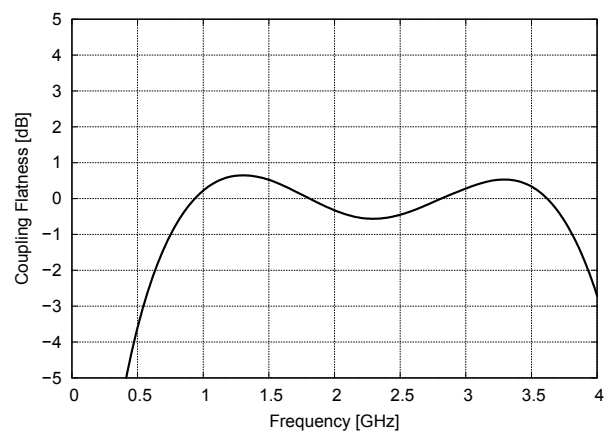


Fig. 4: Coupling flatness

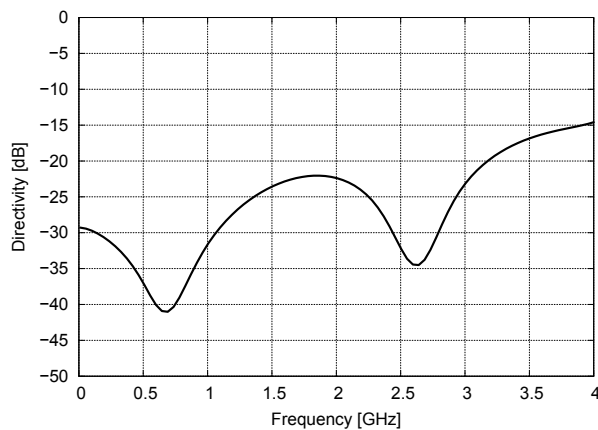


Fig. 5: Directivity (REV – FWD + IL)

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Views:

