



## Directional Coupler RK20-544P-6G

MTS-No.: 26042

### Description

The Directional Couplers (DC Thru) of this series are designed to work between 700 MHz and 6000 MHz. They cover for example GSM, DECT, UMTS, Bluetooth, WiMAX, Wi-Fi (2.4G / 5G) and all LTE frequency bands.

The multisection stripline design exhibits very good directivity, 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	700 - 6000 MHz		
		<b>min.</b>	<b>typ.</b>	<b>max.</b>
1.5	VSWR (at all ports)		1.1	1.25
1.6	Insertion Loss		0.25 dB	0.5 dB
1.7	Coupling		20 ±0.5 dB	
1.8	Coupling flatness @ 700 - 6000 MHz		±0.4 dB	±0.9 dB
1.9	Directivity			
	@ 700 - 4000 MHz	22 dB	27 dB	
	@ 4000 - 5500 MHz	18 dB	23 dB	
	@ 5500 - 6000 MHz	15 dB	20 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 17 mm (LxWxH)
3.4	Case style	Milled aluminium enclosure
3.5	Colour	SurTec650 (Chrome alloy)
3.6	Weight	105 grams

#### 4 Delivered parts:

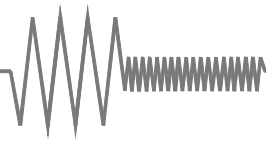
RK20-544P-6G  
Datasheet

#### 5 Comments:

Warranty	12 months
RoHS-compliant	Yes

#### 6 Recommended accessories:

RF-cables  
50 Ω SMA male (matching)



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## Typical measurements:

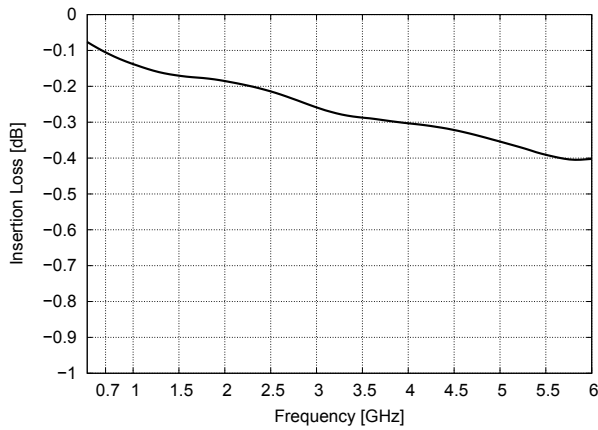


Fig. 1: Input port to output port insertion loss

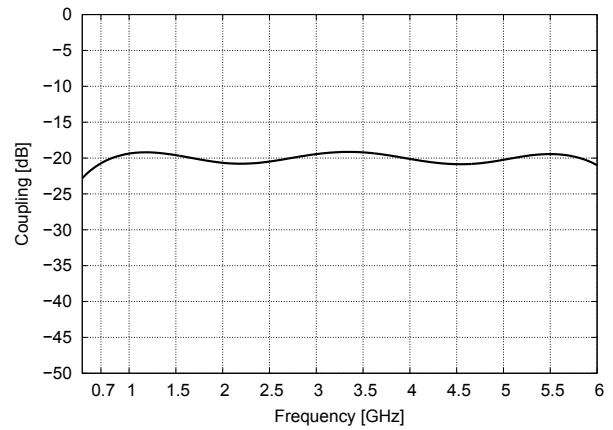


Fig. 2: Coupling between input and coupling port

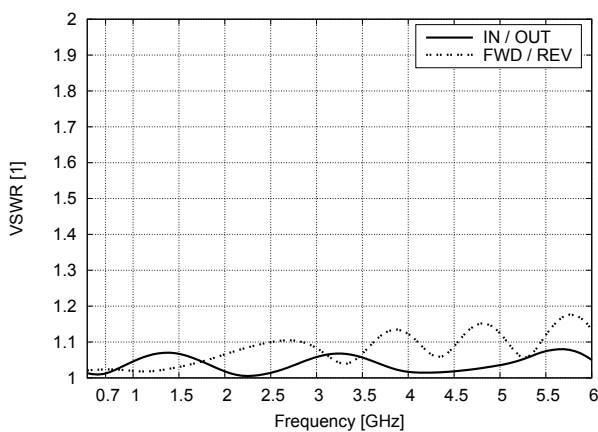


Fig. 3: VSWR for IN / OUT and FWD / REV ports

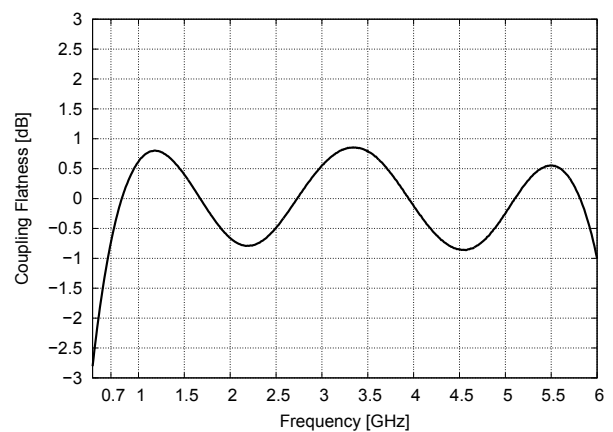


Fig. 4: Coupling flatness

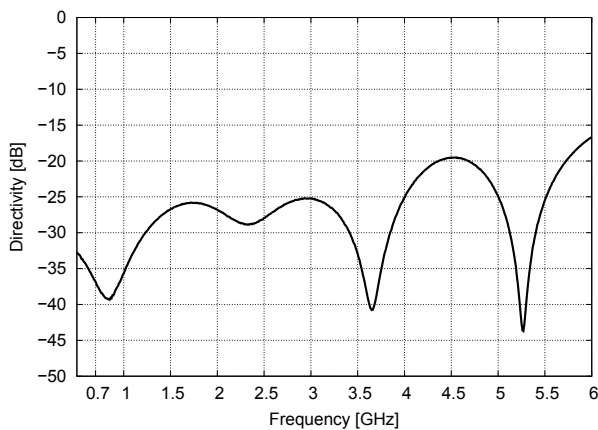


Fig. 5: Directivity (REV - FWD + IL)

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Views:

