

Power Divider LT6-544P-6G

MTS-No.: 28500

Description

The Power Dividers of this series are designed to work between 500 MHz and 6000 MHz. They cover for example GSM, DECT, UMTS, Bluetooth, WiMAX, Wi-Fi (2.4G/5G) and all LTE frequency bands.

These units are Wilkinson dividers and can also be used as combiners.



Technical data:

1 RF-specifications:

1.1	Divider type	LT6, 6-way		
1.2	Impedance	50 Ω		
1.3	Input power (see table) @ common port @ output ports 1 - 6	40 W max. @ VSWR \leq 2.0 : 1 1 W max. each port		
1.4	Frequency range	500 - 6000 MHz		
1.5	VSWR in	min.	typ.	max.
	@ 700 - 5850 MHz		1.3	1.6
	@ 500 - 700 MHz		1.8	2.1
	@ 5850 - 6000 MHz		1.5	1.8
	VSWR out			
	@ 500 - 5850 MHz		1.2	1.5
	@ 5850 - 6000 MHz		1.3	1.6
1.6	Insertion loss (+7.8 dB) @ 700 MHz @ 5850 MHz		0.5 dB 3.4 dB	0.6 dB 3.8 dB
1.7	IL derating / 200 MHz		0.11 dB	
1.8	Isolation (see plot) @ 700 - 6000 MHz @ 500 - 700 MHz	18 dB 13 dB	23 dB 18 dB	
1.9	Amplitude balance		0.15 dB	0.4 dB
1.10	Phase balance		2.0°	6.0°

2 Connections:

2.1	RF-in- and outputs	7x SMA female (7x N female available @ MTS-No.: 28501)
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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)	114.5 mm x 138 mm x 11.5 mm (LxWxH)
3.4	Case style	Milled aluminium enclosure
3.5	Colour	SurTec650 (Chrome alloy)
3.6	Weight	400 grams

4 Delivered parts:

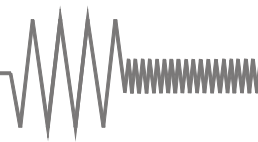
LT6-544P-6G
Datasheet

5 Comments:

Warranty	12 months
RoHS-compliant	Yes

6 Recommended accessories:

RF-cables
Attenuators series PAH



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Typical measurements:

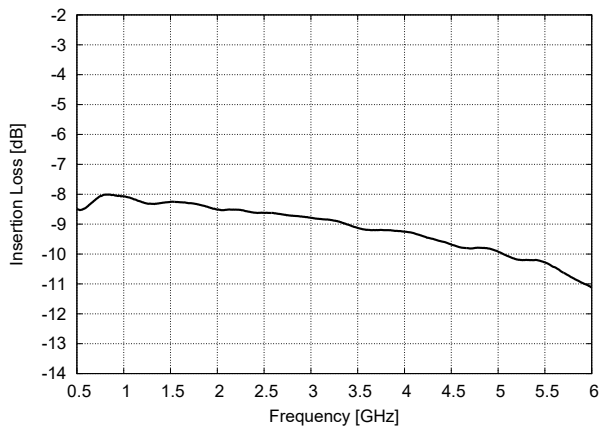


Fig. 1: Common port to output port insertion loss

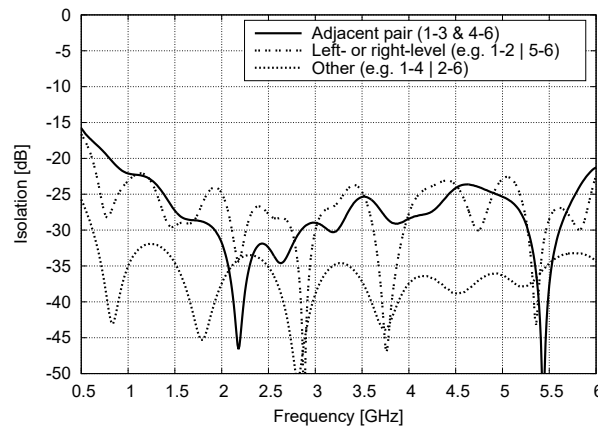


Fig. 2: Isolation between output ports

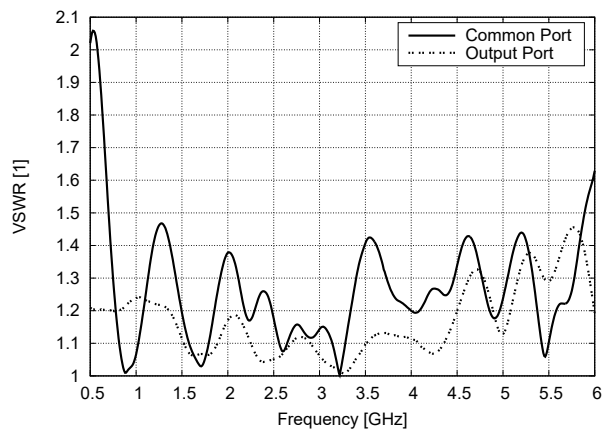


Fig. 3: VSWR for common and output ports

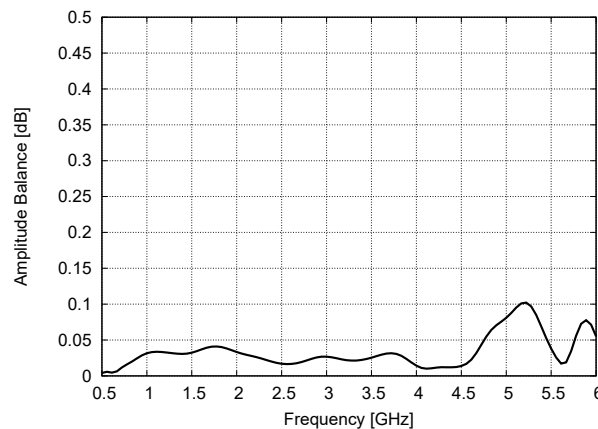


Fig. 4: Amplitude balance between output ports

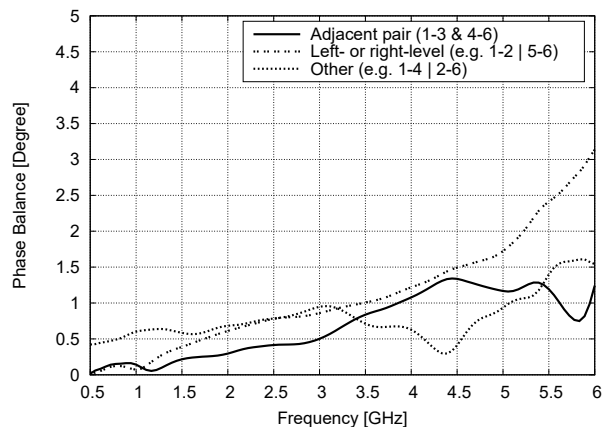
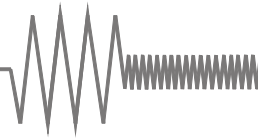


Fig. 5: Phase balance between output ports



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Power ratings:

6-way Power Divider input ratings		
Load VSWR	In-phase (0°)	Out-of-phase (180°)
≤ 1.2 : 1	40 Watts	40 Watts
≤ 2.0 : 1	40 Watts	40 Watts
∞	20 Watts	6 Watts
6-way Power Combiner input ratings		
Input signals	0° Phase Difference	180° Phase Difference
Coherent	6 x 6.6 Watts	6 x 1 Watt
Non-coherent	6 x 2 Watts	

Views:

