

## Power Divider LT2-544P-6G

MTS-No.: 25417

### 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  | LT2, 2-way                                       |             |             |
| 1.2  | Impedance   | 50 Ω   |             |             |
| 1.3  | Input power (see table)<br>@ common port<br>@ output ports 1, 2 | 20 W max. @ VSWR ≤ 2.0 : 1<br>1 W max. each port |             |             |
| 1.4  | Frequency range   | 500 - 6000 MHz                                   |             |             |
| 1.5  | VSWR in   | <b>min.</b>                                      | <b>typ.</b> | <b>max.</b> |
|      | @ 700 - 5850 MHz  |  | 1.15        | 1.35        |
|      | @ 500 - 6000 MHz  |  | 1.3         | 1.6         |
|      | VSWR out  |  |             |             |
|      | @ 500 - 5750 MHz  |  | 1.05        | 1.25        |
|      | @ 5750 - 6000 MHz   |  | 1.2         | 1.5         |
| 1.6  | Insertion loss (+3 dB)  |  |             |             |
|      | @ 700 MHz   |  | 0.2 dB      | 0.3 dB      |
|      | @ 5850 MHz  |  | 0.9 dB      | 1.1 dB      |
| 1.7  | IL derating / 200 MHz   |  | 0.03 dB     | 0.04 dB     |
| 1.8  | Isolation   |  |             |             |
|      | @ 700 - 5950 MHz  | 18 dB  | 23 dB       |             |
|      | @ 500 - 6000 MHz  | 13 dB  | 18 dB       |             |
| 1.9  | Amplitude balance   |  | 0.05 dB     | 0.2 dB      |
| 1.10 | Phase balance   |  | 0.5°        | 1.5°        |

#### 2 Connections:

|     |                    |  |
|-----|--------------------|--|
| 2.1 | RF-in- and outputs | 3x SMA female<br>(3x N female available<br>@ MTS-No.: 25418) |
|-----|--------------------|--|

#### 3 General specifications:

|     |   |                                 |
|-----|---|---------------------------------|
| 3.1 | Operating temperature                   | -40 °C - +85 °C                 |
| 3.2 | Reference temperature of specifications | +25 °C                          |
| 3.3 | Dimensions (without connections)        | 56 mm x 49 mm x 11.5 mm (LxWxH) |
| 3.4 | Case style                              | Milled aluminium enclosure      |
| 3.5 | Colour                                  | SurTec650 (Chrome alloy)        |
| 3.6 | Weight                                  | 70 grams                        |

#### 4 Delivered parts:

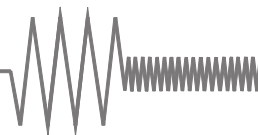
LT2-544P-6G  
Datasheet

#### 5 Comments:

|                |           |
|----------------|-----------|
| Warranty       | 12 months |
| RoHS-compliant | Yes       |

#### 6 Recommended accessories:

RF-cables  
Attenuators series PAH



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## Typical measurements:

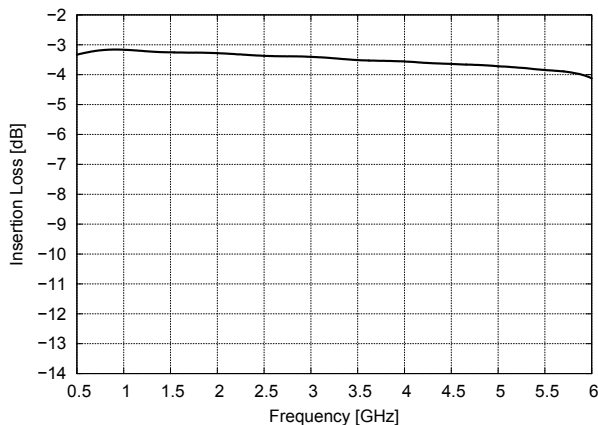


Fig. 1: Common port to output port insertion loss

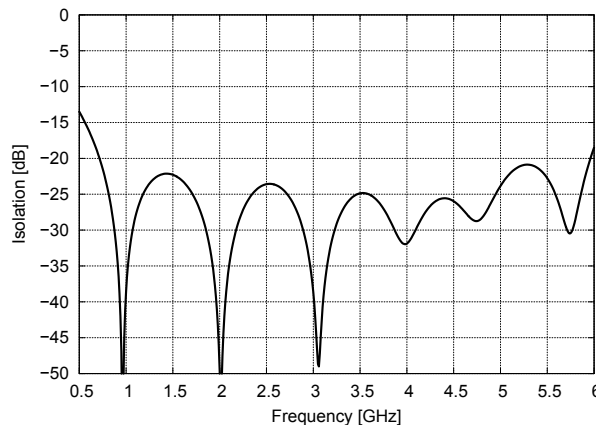


Fig. 2: Isolation between output ports

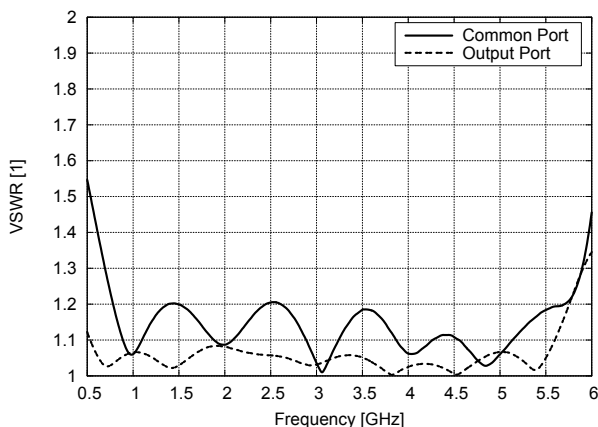


Fig. 3: VSWR for common and output ports

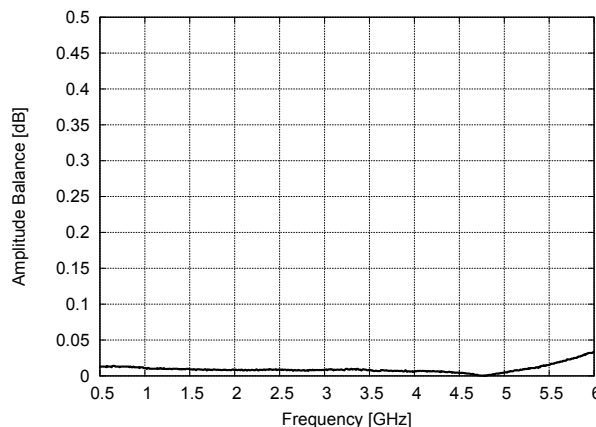


Fig. 4: Amplitude balance between output ports

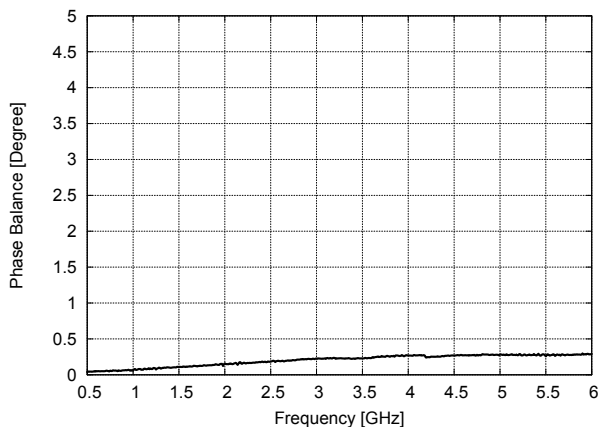
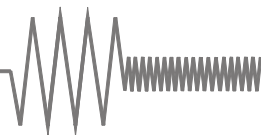


Fig. 5: Phase balance between output ports



## Power Divider LT2-544P-6G

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### Power ratings:

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

### Views:

