

## Power Divider LT4-544P-8G

**MTS-No.: 30030**

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### Description

The LT4-544P-8G is a ultra-wideband 4-way 0° high-power divider/combiner which provides up to 40 W power handling as a divider.

The coverage from 500 MHz to 8 GHz supports a wide range of applications including GSM, Bluetooth, Wi-Fi 7 and all LTE+ as well as 5G frequency bands.

Its unique design maintains a very low insertion loss, minimizing power dissipation and excellent signal power transmission from input to output.



### Technical data:

#### 1 RF-specifications:

|                                                                     |                                                       |                    |                    |
|---------------------------------------------------------------------|-------------------------------------------------------|--------------------|--------------------|
| 1.1 Divider type                                                    | LT4, 4-way                                            |                    |                    |
| 1.2 Impedance                                                       | 50 $\Omega$                                           |                    |                    |
| 1.3 Input power (see table)<br>@ common port<br>@ output ports 1, 4 | 40 W max. @ VSWR $\leq$ 2.0 : 1<br>1 W max. each port |                    |                    |
| 1.4 Frequency range                                                 | 500 - 8000 MHz                                        |                    |                    |
|                                                                     | <b>min.</b>                                           | <b>typ.</b>        | <b>max.</b>        |
| 1.5 VSWR in                                                         |                                                       | 1.15               | 1.50               |
| VSWR out                                                            |                                                       |                    |                    |
| @ 500 - 7200 MHz                                                    |                                                       | 1.10               | 1.25               |
| @ 7200 - 8000 MHz                                                   |                                                       | 1.25               | 1.90               |
| 1.6 Insertion loss (+6 dB)<br>@ 500 - 4000 MHz<br>@ 4000 - 8000 MHz |                                                       | 0.50 dB<br>0.90 dB | 1.00 dB<br>1.50 dB |
| 1.7 IL derating / 200 MHz                                           |                                                       | 0.02 dB            |                    |
| 1.8 Isolation (see plot)<br>@ 700 - 7200 MHz<br>@ 500 - 8000 MHz    | 19 dB<br>13 dB                                        | 25 dB<br>18 dB     |                    |
| 1.9 Amplitude balance<br>@ 500 - 4000 MHz<br>@ 4000 - 8000 MHz      |                                                       | 0.05 dB<br>0.15 dB | 0.15 dB<br>0.30 dB |
| 1.10 Phase balance<br>@ 500 - 4000 MHz<br>@ 4000 - 8000 MHz         |                                                       | 1.0°<br>2.0°       | 2.0°<br>4.0°       |

#### 2 Connections:

|                        |                                                              |
|------------------------|--------------------------------------------------------------|
| 2.1 RF-in- and outputs | 5x SMA female<br>(5x N female available<br>@ MTS-No.: 30031) |
|------------------------|--------------------------------------------------------------|

#### 3 General specifications:

|                                             |                                   |
|---------------------------------------------|-----------------------------------|
| 3.1 Operating temperature                   | -40 °C - +85 °C                   |
| 3.2 Reference temperature of specifications | +25 °C                            |
| 3.3 Dimensions (without connections)        | 131 mm x 90 mm x 16 mm<br>(LxWxH) |
| 3.4 Case style                              | Milled aluminium enclosure        |
| 3.5 Colour                                  | SurTec650 (Chrome alloy)          |
| 3.6 Weight                                  | 475 grams                         |

#### 4 Delivered parts:

LT4-544P-8G  
Datasheet

#### 5 Comments:

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

#### 6 Recommended accessories:

RF-cables  
Attenuators series PAH

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### Typical measurements:

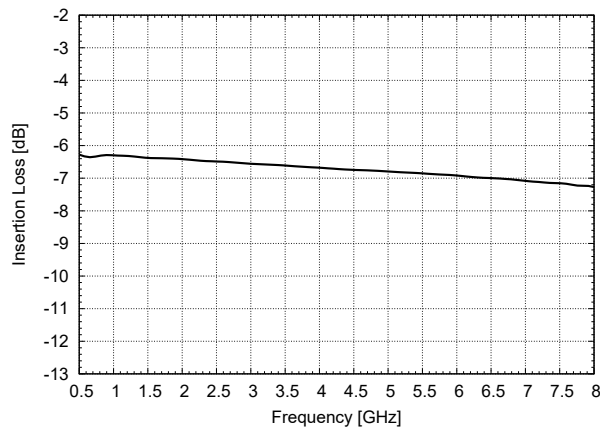


Fig. 1: Common port to output port insertion loss

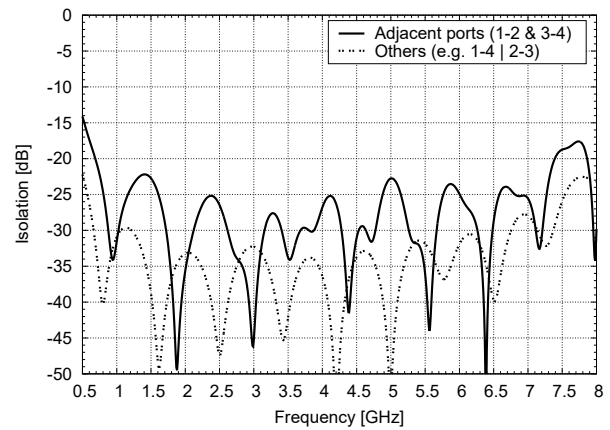


Fig. 2: Isolation between output ports

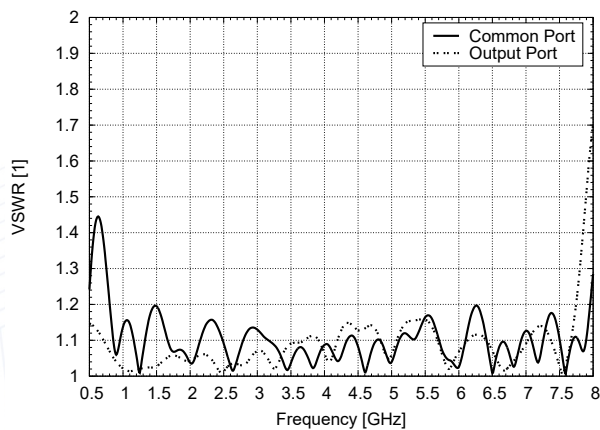


Fig. 3: VSWR for common and output ports

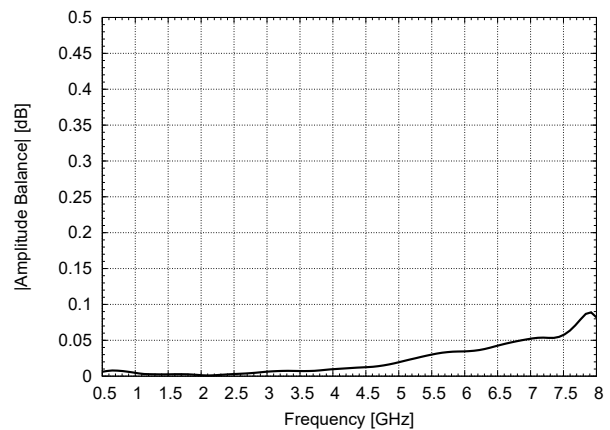


Fig. 4: Amplitude balance between output ports

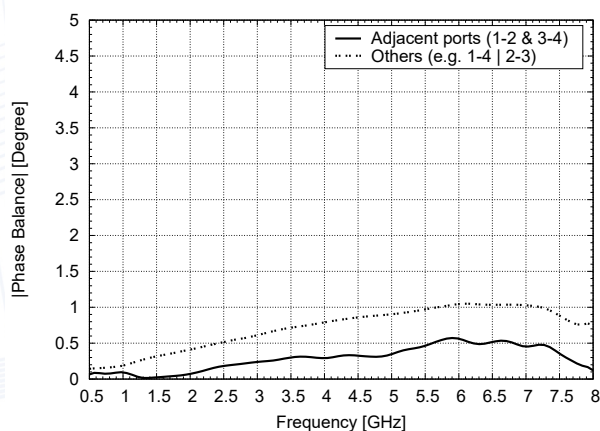


Fig. 5: Phase balance between output ports

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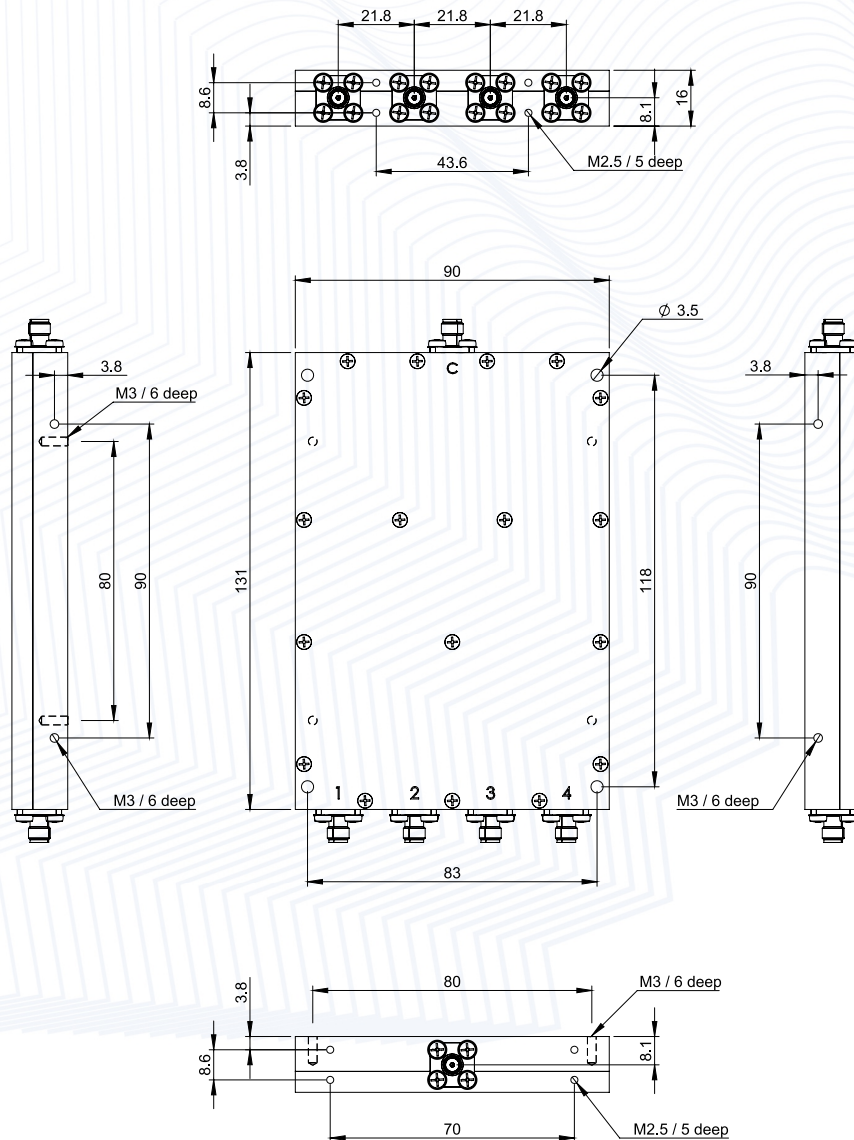
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### Power ratings:

| 4-way Power Divider input ratings (common port)   |                     |                       |
|---------------------------------------------------|---------------------|-----------------------|
| Load VSWR                                         | In-phase (0°)       | Out-of-phase (180°)   |
| $\leq 1.2 : 1$                                    | 40 Watts            | 40 Watts              |
| $\leq 2.0 : 1$                                    | 40 Watts            | 40 Watts              |
| $\infty$                                          | 20 Watts            | 4 Watts               |
| 4-way Power Combiner input ratings (output ports) |                     |                       |
| Input signals                                     | 0° Phase Difference | 180° Phase Difference |
| Coherent                                          | 4 x 10 Watts        | 4 x 1 Watt            |
| Non-coherent                                      | 4 x 2 Watts         |                       |

### Views:



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Technical subject to change