

Power Divider LT8-544P-8G

MTS-No.: 30050

Page 1 from 3

Description

The LT8-544P-8G is a ultra-wideband 8-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	LT8, 8-way		
1.2 Impedance	50 Ω		
1.3 Input power (see table) @ common port @ output ports 1, 8	40 W max. @ VSWR $\leq$ 2.0 : 1 1 W max. each port		
1.4 Frequency range	500 - 8000 MHz		
	min.	typ.	max.
1.5 VSWR in @ 700 - 8000 MHz @ 500 - 700 MHz		1.20 1.55	1.45 1.80
VSWR out @ 500 - 7200 MHz @ 7200 - 8000 MHz		1.10 1.30	1.30 1.80
1.6 Insertion loss (+9 dB) @ 500 - 4000 MHz @ 4000 - 8000 MHz		1.00 dB 2.00 dB	1.70 dB 3.00 dB
1.7 IL derating / 200 MHz		0.05 dB	
1.8 Isolation (see plot) @ 700 - 7200 MHz @ 500 - 8000 MHz	19 dB 13 dB	25 dB 18 dB	
1.9 Amplitude balance @ 500 - 4000 MHz @ 4000 - 8000 MHz		0.10 dB 0.20 dB	0.20 dB 0.40 dB
1.10 Phase balance @ 500 - 4000 MHz @ 4000 - 8000 MHz		2.0° 4.0°	4.0° 8.0°

2 Connections:

2.1 RF-in- and outputs	9x SMA female (9x N female available @ MTS-No.: 30051)
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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)	138 mm x 137.5 mm x 16 mm (LxWxH)
3.4 Case style	Milled aluminium enclosure
3.5 Colour	SurTec650 (Chrome alloy)
3.6 Weight	920 grams

4 Delivered parts:

LT8-544P-8G
Datasheet

5 Comments:

Warranty	12 months
RoHS-compliant	Yes

6 Recommended accessories:

RF-cables
Attenuators series PAH

Power Divider LT8-544P-8G

MTS-No.: 30050

Page 2 from 3

Typical measurements:

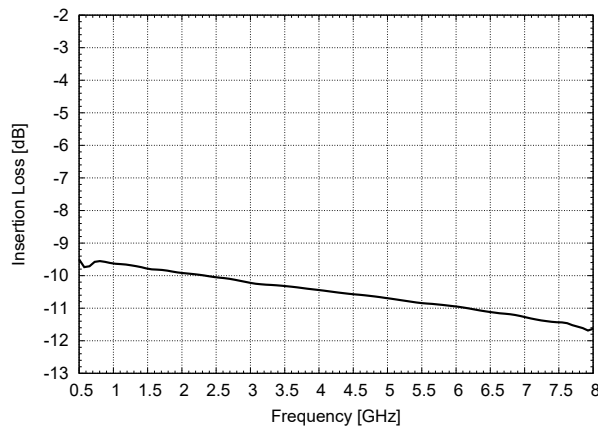


Fig. 1: Common port to output port insertion loss

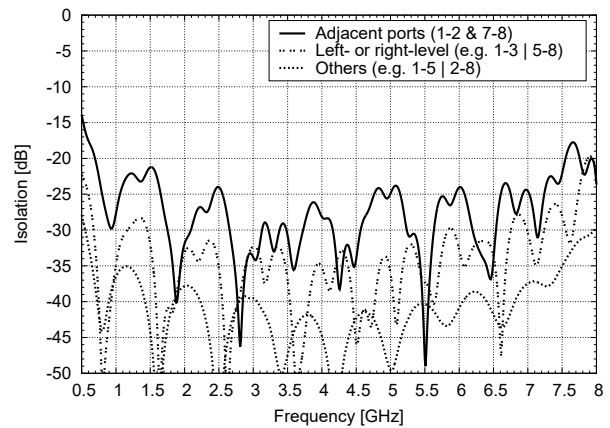


Fig. 2: Isolation between output ports

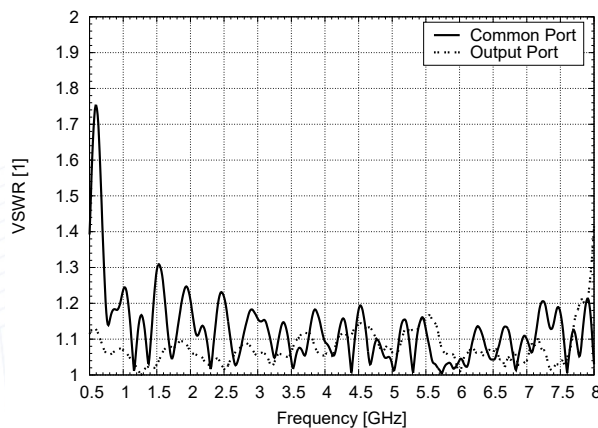


Fig. 3: VSWR for common and output ports

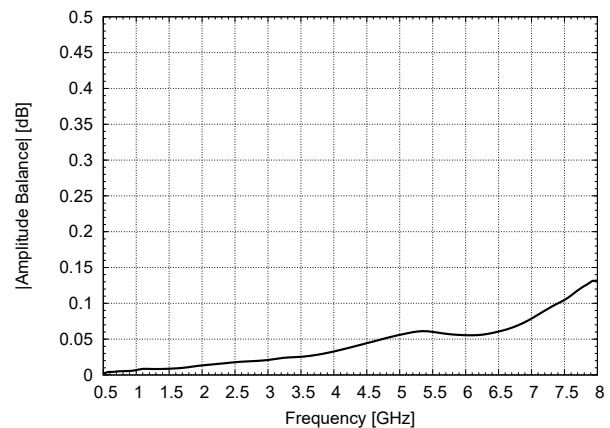


Fig. 4: Amplitude balance between output ports

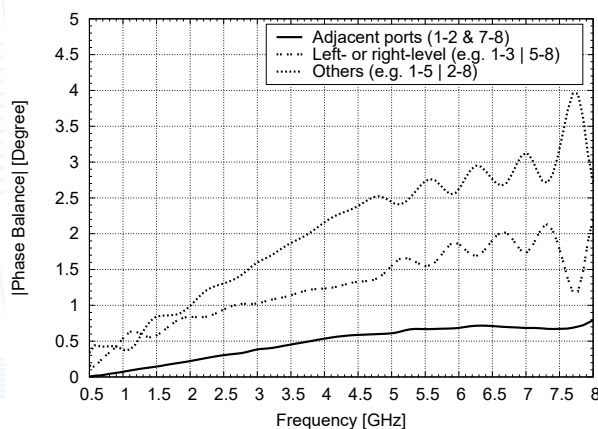


Fig. 5: Phase balance between output ports

Power Divider LT8-544P-8G

MTS-No.: 30050

Page 3 from 3

Power ratings:

8-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
∞	20 Watts	8 Watts
8-way Power Combiner input ratings (output ports)		
Input signals	0° Phase Difference	180° Phase Difference
Coherent	8 x 5 Watts	8 x 1 Watt
Non-coherent	8 x 2 Watts	

Views:

