

**1. Electrical characteristics** : -33°C to +75°C

Ref	CHARACTERISTIC	CONDITIONS	Notes	Min.	Typ.	Max.	Units
1.	Frequency Range UL			1710		2170	MHz
2.	Insertion loss Incl. Ripple, Unbalance + Coupling Loss	Output 2, 4 Output 1, 3 @ extreme temperature		5,7 5,9	6,5 6,5	7,3 7,1	dB
3.	Isolation	Output 1 to 2 Output 3 to 4 Between any other outputs		18 18 25			dB
4.	Return loss	@ +25°C @ extreme temperature		18 18			dB
5.	Power Handling (common-port / Spitter usage)	@ CW Peak @ 1ys/10ms		20 100			W
6.	Power Handling (per port / Combiner usage)	- w/o cooling - with adequate Heatsink		1 5			W
7.	Nominal Impedance				50		Ohm

## 4-way Power-divider 1710 – 2170 MHz



ID-No.: 7615789-00

### 2. DC specification :

Not applicable

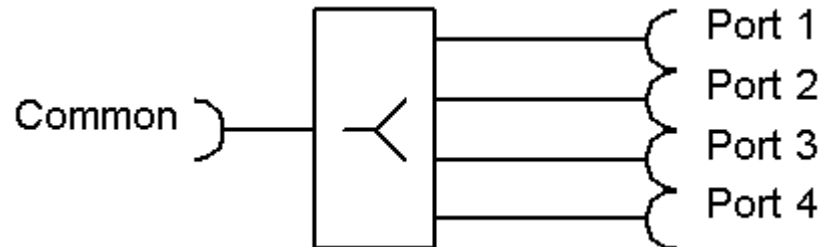
### 3. Mechanical specification :

Ref.	CHARACTERISTIC	DESCRIPTION
1.	Dimensions	See drawing G3169Z310
2.	Connector Common	SMA female
3.	Connector Port 1 - 4	SMA female
4.	Outside finish	Chromium plating,

### 4. Environmental characteristics :

Ref.	OPERATING OUTDOOR	CONDITIONS	ETS 300019-2-4 Class 4.1
1.	Temperature low	-33°C	IEC 60068-2-1
	Operating temperature	+10°C	
2.	Temperature high	+75°C	IEC 60068-2-2
	Operating temperature	+65°C	
3.	Humidity steady	93% / 30°C	IEC 60068-2-56
4.	Humidity cycle	90-100% / 30°C, 6 cycles	IEC 60068-2-30
5.	Vibration sinus	1.2mm for 5 to 9Hz & 0.4g for 9 to 200Hz duration according applicable spec.	IEC 60068-2-6
6.	Vibration random IEC 60721-3-4 class 4M5	0.04m <sup>2</sup> /s <sup>3</sup> shape according applicable spec.	IEC 60068-2-64
7.	Shock	5g / 11ms / 6x100	IEC 60068-2-27
8.	Bumps		Not applicable
	TRANSPORT	CONDITIONS	ETS 300019-2-2 Class 2.3
9.	Temperature low	-40°C	IEC 60068-2-1
10.	Temperature high	+85°C	IEC 60068-2-2
11.	Humidity steady	93% / 40°C – 4 days	IEC 60068-2-56
12.	Humidity cycle	90-100% / 40°C, 2 cycles	IEC 60068-2-30
13.	Rain	0.01m <sup>3</sup> /min	IEC 60068-2-18
14.	Vibration random	1 m <sup>2</sup> /s <sup>3</sup> shape according applicable spec.	IEC 60068-2-64
15.	Bumps	18g / 6ms / 6x100	IEC 60068-2-29
16.	Free full	1.2m	IEC 60068-2-32
	STORAGE	CONDITIONS	ETS 300019-2-1 Class 1.2
17.	Temperature low	-25°C	IEC 60068-2-1
18.	Temperature high	+75°C	IEC 60068-2-2
19.	Humidity steady	93% / 30°C – 4 days	IEC 60068-2-56
20.	Humidity cycle	90-100% / 30°C, 2 cycles	IEC 60068-2-30
21.	Vibration sinus	5 mm/s for 5<Hz<62 0,2g for 62<62 Hz < 200 duration according applicable spec	IEC 60068-2-6
22.	Random Vibration	0,02m <sup>2</sup> /s <sup>3</sup> , 3*30 min	IEC 60068-2-64

5. Schematic Diagramm



### 6. Qualification

The following points have to be tested and presented in the test report:

- measurements at -33°C, +25°C and + 75°C
- all points are presented in specification
- all measurements have to be presented in the test report
- the test report consist of a table with spec-values, measured-values and plots
- for the DC- and Mechanical-values plots are not necessary; have to be shown only in table if each point is correct or not
- if there are no plots available for extreme temperature, the responsible person have to guarantee that all values are measured and in spec; have to be documented in test report
- each 100 pieces a completely qualification is necessary

### 7. Verification / Measurement

#### 7.1 RF-Performance

Measure gain, NF, and IICP at normal temperature.

Each 10<sup>th</sup> piece have to measured at extreme temperature.

#### 7.2 DC-Performance

Measure current consumption with max. and min. supply voltage with / without load

# 4-way Power-divider 1710 – 2170 MHz



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B			Max. Combining Power inserted	22.04.2010	J. Gebhard
A			First edition	03.12.2009	J. Gebhard
Datasheet Rev	Prod. Rev Mikom	Prod. Rev Supplier	Description	Date	Full name

**D7615789-00B**

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Date, Mikom

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Date, customer/supplier