Elektromechanik
Entwicklungs- und Produktions GmbH

RF Power Splitter 2-way 0°/Combiner
PD 20-2

Features:

- ✓ 20 Watts Splitter
- ✓ 2 x 10Watts Combiner
- ✓ 10 MHz - 300 MHz
- ✓ Passive hybrid coupler
- ✓ Full reciprocal
- ✓ Tiny case style

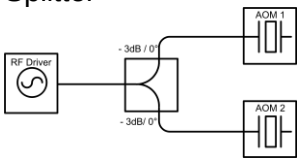
Application:

RF power splitters are mainly used to control two loads (AOMs) from one RF source using the same signal. Due to its passive design as a transformer, it can also be used as a combiner. This allows the controlling of one AOM due two RF sources, which can also differ in phase and frequency.

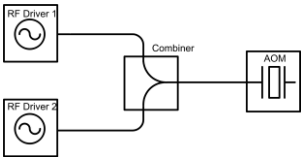
General:

The PD 20 series is designed for a wide operating frequency range. It can convert the RF power from a single 50 Ω source into two outputs, which have - 3dB half of power with the same impedances and phase. The cabling must always be adequately designed for RF applications. Identical output cabling and length ensure correct phasing. In the event of a mismatch, an internal resistor compensates the reflected power from each output port. Based on the passive design, the combination of two independent drivers and frequencies to a single signal output is also possible.

Splitter

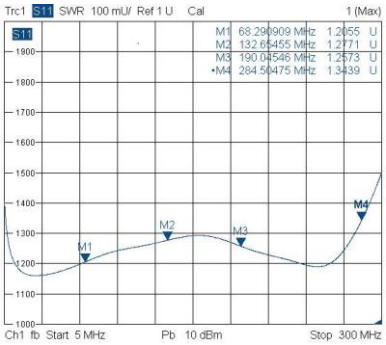


Combiner



Properties:

VSWR

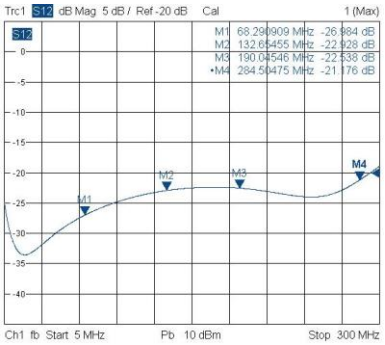


0.1 /Div

Insertion

0.1dB/DIV

Isolation



10 dB/Div

Controls:
Options:
Accessories: Cables and adaptors RF sources and dummy loads

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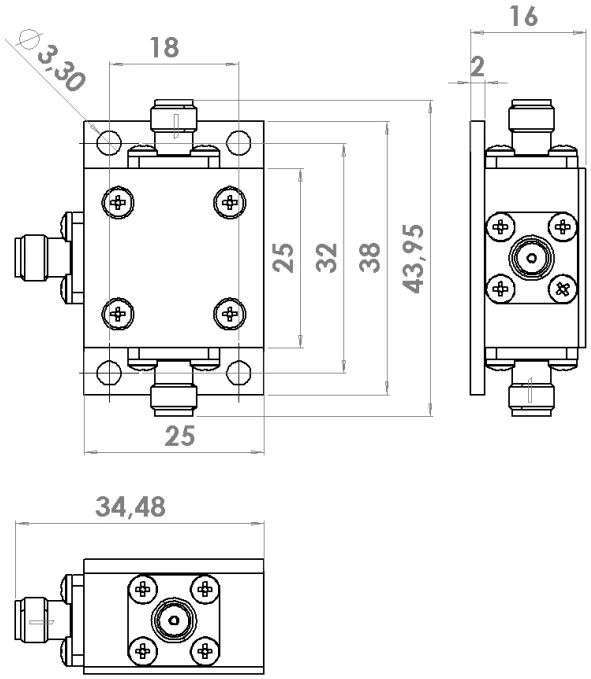
Specification:

Electrical	MIN	Max	Unit
Impedance	Nom. 50		Ω
Input power as Splitter	na	20	W
Output port 1 / port 2		-3.4	dB
Input power as combiner		10	W
Power dissipation (in case of mismatch)	na	5	W
VSWR		1.25	
Operating frequency Item PD50-50	5	300	MHz
RF-Properties			
Insertion loss	0.2	0.4	dB
Isolation	20	30	dB
loss Combiner		3.4	dB
Amplitude Balance		0,3	dB
Phase Balance		4	°
Thermal			
Temperature drift	-	0,051	$^{dB}/_{K}$
Ambiance /Installation/Transport			
Storage temperature	-40	+160	°C
Relative humidity in storage		90	%
Ambient temperature during operation	+5	+45	°C
Relative humidity during operation		75	%
Ambient conditions, room air	Atmospheric AMSL 3000m max.		
Mechanics			
Body Dimensions L x W x H	-	25x 25 x 16	mm
Weight (heat sink dependent)	40	85	g
Connector Input	SMA		
Connector Ports	SMA		

Dimension: (mm)



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