DC Pass, High Power

Power Splitter/Combiner ZC2PD-18263+

2 Way-0° 50Ω 18000 to 26500 MHz

The Big Deal

- Super wideband, 18 to 26.5 GHz
- Low insertion loss, 0.6 dB typ.
- High Isolation, 29 dB typ.
- 20W power handling
- Low amplitude unbalance, 0.03 dB typ.

CASE STYLE: UU2624-4

Product Overview

Mini-Circuits' ZC2PD-18263+ is a super wideband 2-way 0˚ splitter/combiner providing coverage from 18 to 26.5 GHz, supporting a wide range of applications including K-Band, instrumentation and many more. This model provides 20W power handling as a splitter and very low insertion loss across the entire operating frequency range, minimizing power dissipation and delivering excellent signal power transmission from input to output. The ZC2PD-18263+ comes housed in a case measuring 0.85 x 1.06 x 0.5" with super SMA connectors.

Key Features

Feature	Advantages
Ultra-wideband, 18 to 26.5 GHz	Extremely wide frequency range supports many broadband applications in a single model.
Low insertion loss, 0.6 dB typ. at 22 GHz	The combination of 20W power handling and low insertion loss makes this model a suitable candidate for distributing signals while maintaining excellent transmission of signal power.
High isolation, 29 dB typ. at 22 GHz	Minimizes interference between ports.
Low amplitude unbalance, 0.03 dB at 22 GHz	Produces nearly equal output signals, ideal for parallel path and multichannel systems.
DC Passing, 470mA	Supports applications where DC power is needed through the RF line.

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Connectors	Model
SMA-Fem	ZC2PD-18263-S+

+RoHS Compliant
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	20W* max.
Internal Dissipation	0.8W max.
DC Current	470 mA

Permanent damage may occur if any of these limits are exceeded.
* Derate linearly to 11W at 100°C

Coaxial Connections

Sum Port	S
Port 1	1
Port 2	2

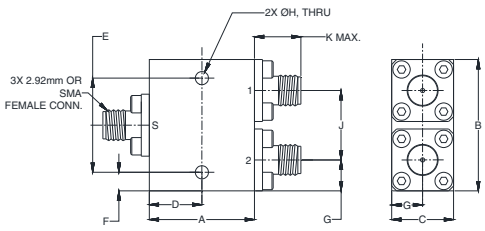
Features

- Super wideband, 18000 - 26500 MHz
- Low insertion loss, 0.6 dB typ.
- Low amplitude unbalance, 0.03 dB typ.
- Excellent VSWR, 1.19:1 typ.
- High isolation, 29 dB typ.

Applications

- Fixed satellite
- K-band
- Mobile
- Space research
- Test Accessory

Outline Drawing

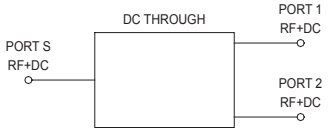


Outline Dimensions (inch / mm)

A	B	C	D	E	F	G
.85	1.06	.50	.425	.760	.150	.25
21.59	26.92	12.70	10.80	19.30	3.81	6.35

H	J	K	wt
.106	.56	.43	grams
2.7	14.22	11	45

Electrical Schematic



Electrical Specifications at 25°C

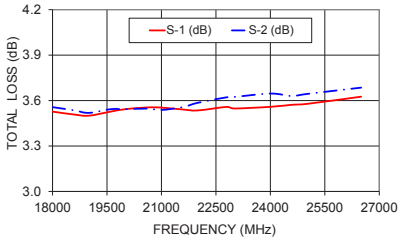
Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Frequency Range		18000		26500	MHz
Insertion Loss Above 3.0 dB	18000 - 26500	--	0.6	1.2	dB
Isolation	18000 - 26500	18	29	--	dB
Phase Unbalance	18000 - 26500	--	1.0	3.0	Degree
Amplitude Unbalance	18000 - 26500	--	0.03	0.3	dB
VSWR (Port S)	18000 - 26500	--	1.14	1.5	:1
VSWR (Port 1-2)	18000 - 26500	--	1.19	1.5	:1

Typical Performance Data

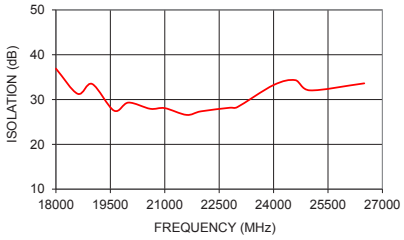
Frequency (MHz)	Total Loss[1] (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
18000	3.53	3.56	0.03	36.90	0.40	1.27	1.25	1.28
18600	3.51	3.54	0.03	31.28	0.60	1.16	1.20	1.17
19000	3.50	3.52	0.02	33.47	0.50	1.09	1.20	1.17
19600	3.53	3.54	0.02	27.53	0.74	1.15	1.21	1.24
20000	3.54	3.54	0.00	29.32	0.75	1.19	1.25	1.22
20600	3.55	3.55	0.01	27.93	0.59	1.18	1.23	1.19
21000	3.55	3.54	0.02	28.08	0.45	1.14	1.21	1.10
21600	3.54	3.56	0.02	26.57	0.27	1.08	1.19	1.15
22000	3.53	3.59	0.05	27.37	0.35	1.10	1.17	1.21
22800	3.56	3.62	0.06	28.17	0.50	1.18	1.20	1.25
23000	3.55	3.62	0.08	28.30	0.70	1.11	1.17	1.27
24000	3.56	3.65	0.09	33.24	0.54	1.11	1.12	1.27
24600	3.57	3.63	0.06	34.32	0.67	1.05	1.08	1.14
25000	3.58	3.64	0.07	32.05	0.69	1.02	1.03	1.14
26500	3.63	3.69	0.06	33.61	0.79	1.13	1.13	1.18

1. Total Loss = Insertion Loss + 3dB splitter theoretical loss.

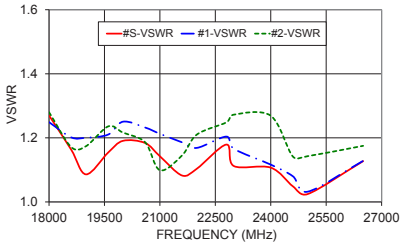
ZC2PD-18263+
TOTAL LOSS



ZC2PD-18263+
ISOLATION



ZC2PD-18263+
VSWR



Notes

A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
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