Power Splitter/Combiner zc16PD-06263-S+

16 Way-0° 6000 to 26500 MHz 50Ω

The Big Deal

- Super wideband, 6 to 26.5 GHz
- Low insertion loss, 2.2 dB typ.
- High Isolation, 24 dB typ.
- 20W power handling
- Low amplitude unbalance, 0.2 dB typ.



CASE STYLE: UU640-1

Product Overview

Mini-Circuits' ZC16PD-06263-S+ is a super wideband 16-way 0° splitter/combiner providing coverage from 6 to 26.5 GHz, supporting a wide range of applications including Ku-Band, 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 ZC16PD-06263-S+ comes housed in a case measuring 8.27 x 1.75 x 0.5" with super SMA connectors.

Key Features

Feature	Advantages
Super wideband, 6 to 26.5 GHz	Extremely wide frequency range supports many broadband applications in a single model.
Low insertion loss, 2.2 dB typ.	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, 24 dB typ.	Minimizes interference between ports.
High power handling: • 20W as a splitter at 25°C • 2W as a combiner	The ZC16PD-06263-S+ is suitable for systems with a wide range of power requirements.
Low amplitude unbalance, 0.2 dB	Produces nearly equal output signals, ideal for parallel path and multichannel systems.
DC Passing, 530mA	Supports applications where DC power is needed through the RF line.

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.

C. The parts covered by this specification document are subject to Mini-Circuit standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits website at www.minicircuits.com/MCLStore/terms.jsp

Power Splitter/Combiner

ZC16PD-06263-S+

16 Way-0° 50Ω 6000 to 26500 MHz

Maximum Ratings

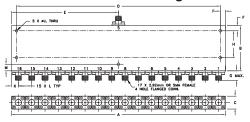
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	20W* max.
Internal Dissipation	2W max.
DC Current	530 mA

Permanent damage may occur if any of these limits are exceeded. * Derate linearly to 14W at 100°C

Coaxial Connections

Sum Port	S
Port 1-16	1-16

Outline Drawing

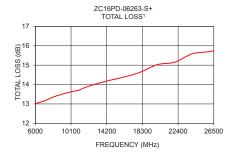


Outline Dimensions (inch)

G . 43 11	F . 197 5.00	E 4.13 105	D 7.874 200.0	C .50 12.70	B 1.75 44.5	A 8.27 210
	wt grams 430	M .256 6.50	L . 52 13.21	.27 6.86	J .10 2.54	H 1. 043 26.5

Electrical Schematic





Features

- Super wideband, 6000 26500 MHz
- · Low insertion loss, 2.2 dB typ.
- Low amplitude unbalance, 0.2 dB typ.
- Excellent VSWR, 1.33:1 typ.
- High isolation, 24 dB typ.

Applications

- Fixed satellite
- Mobile
- · Space research



Generic photo used for illustration purposes only CASE STYLE: UU640-1

Connectors Model

SMA-Fem ZC16PD-06263-S+

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

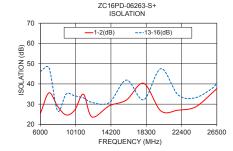
Electrical Specifications at 25°C

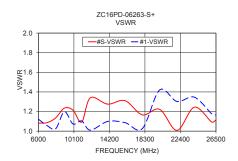
Parameter	Frequency (MHz)	Min.	Тур.	Max.	Unit	
Frequency Range		6000		26500	MHz	
	6000-18000		2.2	3.4	dB	
Insertion Loss Above 12.0 dB	18000-26500		3.6	4.4		
	6000-18000	16	24		dB	
Isolation	18000-26500	18	27			
	6000-18000		3.3	6	Degree	
Phase Unbalance	18000-26500		5.2	8		
	6000-18000		0.2	0.5	dB	
Amplitude Unbalance	18000-26500		0.31	0.7		
VOWD (P+ 0)	6000-18000		1.33	1.6	:1	
VSWR (Port S)	18000-26500		1.4	1.7		
VOWD (Down 1.10)	6000-18000		1.19	1.6	:1	
VSWR (Port 1-16)	18000-26500		1.41	1.7		

Typical Performance Data

Freq. (MHz)	Total Loss¹ (dB)	Amplitude Unbalance (dB)	Isolation (dB)		Phase Unbalance (deg.)	VSWR S	VSWR 1
	S-1		1-2	13-16			
6000	13.02	0.13	25.29	46.10	2.48	1.08	1.12
7000	13.15	0.13	35.60	47.98	2.64	1.09	1.06
8000	13.35	0.16	28.96	26.76	2.94	1.14	1.03
9000	13.49	0.20	24.66	34.99	3.25	1.23	1.20
10000	13.61	0.24	27.08	34.07	3.57	1.21	1.07
11000	13.71	0.24	34.90	33.09	3.79	1.09	1.10
12000	13.89	0.28	23.67	30.85	3.81	1.34	1.01
14000	14.16	0.30	29.17	30.73	4.45	1.28	1.10
16000	14.37	0.34	32.05	41.89	4.84	1.31	1.09
18000	14.63	0.42	40.31	32.17	5.21	1.17	1.03
20000	15.03	0.49	26.65	47.50	5.61	1.22	1.42
22000	15.15	0.56	27.03	34.62	5.68	1.01	1.30
24000	15.58	0.59	28.56	33.17	5.83	1.24	1.35
26000	15.70	0.65	35.68	37.95	6.04	1.09	1.18
26500	15.74	0.64	37.75	40.67	6.24	1.12	1.16

1. Total Loss = Insertion Loss +12dB splitter loss.





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