

Power Splitter/Combiner ZC10PD-26W+

10 Way-0° 50Ω 2250 to 2800 MHz

The Big Deal

- Low insertion loss, 0.7 dB
- High isolation, 25 dB
- Power handling up to 10W as a splitter



CASE STYLE: AB204

Product Overview

Mini-Circuits' ZC10PD-26W+ is a 10-way 0° splitter/combiner providing 10W RF power handling as a splitter across the 2250 to 2800 MHz range, covering a variety of applications including cellular, ISM and more. It provides a high port-count with low insertion loss, high isolation and low amplitude unbalance, making this model ideal for systems requiring distribution of signal into many channels. The splitter/combiner comes housed in a rugged aluminum alloy case (6.13 x 3.00 x 0.53") with SMA connectors.

Key Features

Feature	Advantages
10W power handling as a splitter	Suitable for a variety of system power requirements.
High isolation, 25 dB typ.	Minimizes signal leakage and interference between ports.
Low amplitude unbalance, 0.8 dB	ZC10PD-26W+ produces nearly equal output signals, ideal for parallel path / multichannel systems.
Good VSWR, 1.25:1 typ.	Provides excellent thru-path transmission with low signal reflection

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.
C. The parts covered by this specification document are subject to Mini-Circuits 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



10 Way-0° 50Ω 2250 to 2800 MHz

Maximum Ratings

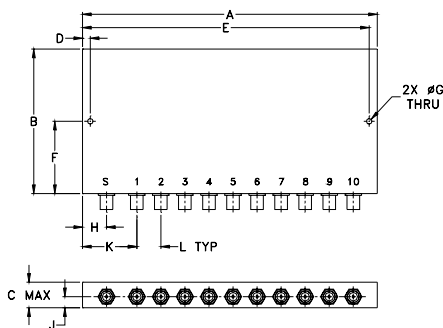
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	10W max.
Internal Dissipation	0.80W max.

Permanent damage may occur if any of these limits are exceeded.

Coaxial Connections

SUM PORT	S
PORT 1,2,3,4,5,6,7,8,9,10	1,2,3,4,5,6,7,8,9,10

Outline Drawing



Outline Dimensions (inch mm)

A	B	C	D	E	F
6.13	3.00	.53	.162	5.962	1.500
155.70	76.20	13.46	4.11	151.43	38.10
G	H	J	K	L	wt
.116	.50	.25	1.13	.50	grams
2.95	12.70	6.35	28.70	12.70	207

electrical schematic



Features

- low insertion loss, 0.7 dB typ.
- high isolation, 25 dB typ.
- good amplitude unbalance. 0.8 dB typ.
- good VSWR, 1.25 typ.
- up to 10W power input as splitter

Applications

- cellular communications
- CATV
- ISM
- wireless communication systems



CASE STYLE: AB204

Connectors	Model
SMA	ZC10PD-26W-S+

+RoHS Compliant

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

Electrical Specifications

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Frequency Range		2250		2800	MHz
Insertion Loss (above theoretical 10 dB)	2300 - 2600 2250 - 2800	— —	0.7 0.9	1.6 1.9	dB
Isolation	2300 - 2600 2250 - 2800	19 18	22 21	—	dB
Phase Unbalance	2300 - 2600 2250 - 2800	— —	8 10	15 17	Degree
Amplitude Unbalance	2300 - 2600 2250 - 2800	— —	0.5 0.6	0.9 1.0	dB
VSWR (Port S)	2250 - 2800	—	1.35	1.6	:1
VSWR (Port 1-10)	2300 - 2600 2250 - 2800	— —	1.30 1.45	1.55 1.6	:1
Power Handling¹	as splitter	—	—	10	W
	as combiner ²	—	—	0.8	

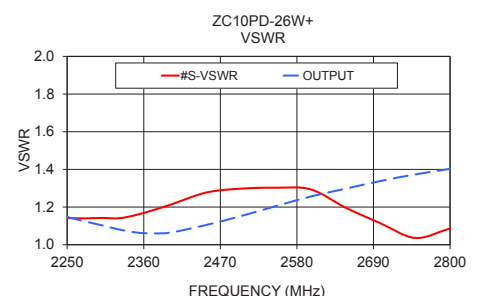
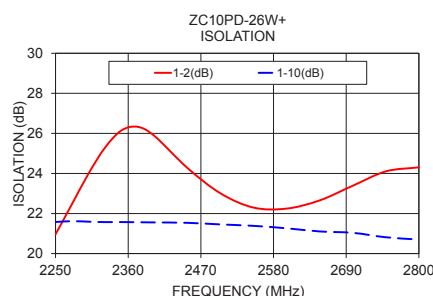
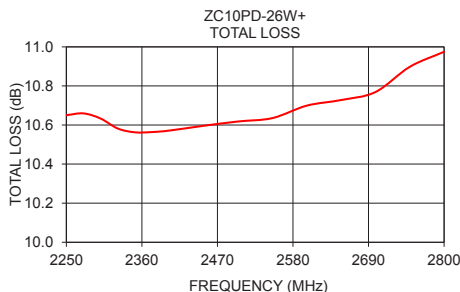
1. Over 25°C to 100°C. Derate linearly to 50% of rating at 100°C.

2. As a combiner of non-coherent signals max power per port is 0.8 Watt power rating divided by number of ports.

Typical Performance Data

Freq. (MHz)	Total Loss ¹ (dB)	Amplitude Unbalance (dB)	Isolation (dB)		Phase Unbalance (deg.)	VSWR S	VSWR 1
			1-2	1-10			
2250	10.65	0.37	20.96	21.58	5.83	1.14	1.15
2275	10.66	0.50	22.47	21.62	6.08	1.14	1.12
2300	10.63	0.49	23.99	21.59	7.06	1.14	1.10
2325	10.58	0.32	25.29	21.57	7.42	1.14	1.08
2350	10.56	0.29	26.15	21.57	7.18	1.16	1.06
2375	10.56	0.27	26.32	21.56	6.93	1.19	1.06
2400	10.57	0.27	25.87	21.56	6.73	1.21	1.07
2450	10.60	0.26	24.26	21.53	6.48	1.28	1.11
2500	10.62	0.27	23.00	21.46	6.80	1.30	1.15
2550	10.64	0.31	22.29	21.38	7.52	1.30	1.21
2600	10.70	0.30	22.25	21.26	8.95	1.29	1.26
2650	10.73	0.35	22.66	21.11	8.39	1.20	1.30
2700	10.77	0.41	23.39	21.04	9.21	1.11	1.34
2750	10.90	0.47	24.10	20.81	10.10	1.04	1.37
2800	10.97	0.50	24.31	20.70	11.05	1.09	1.40

1. Total Loss = Insertion Loss + 10dB splitter loss.



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