

Coaxial

# Power Splitter/Combiner

## ZC16PD-2185-S+

16 Way-0° 50Ω 1800 to 2600 MHz

### Maximum Ratings

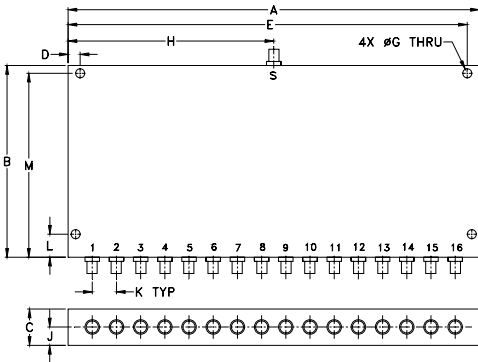
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	10W max.
Internal Dissipation	1.75W max.

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

### Coaxial Connections

SUM PORT	S
PORT 1,2,3,.....,16	1,2,3,.....,16

### Outline Drawing



### Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
8.50	3.95	.75	.250	8.250	-	.187
215.90	100.33	19.05	6.35	209.55	-	4.75
H	J	K	L	M	wt	
4.250	.38	.500	.475	3.475	grams	710
107.95	9.65	12.70	12.07	88.27		

### Features

- excellent VSWR, 1.1:1 typ.
- low insertion loss, 0.5 dB typ.
- high isolation, 30 dB typ.
- up to 10W power input as splitter
- rugged shielded case

### Applications

- PCS/DCS
- UMTS
- ISM
- communication systems



CASE STYLE: UU179

Connectors	Model
SMA	ZC16PD-2185-S+

**+RoHS Compliant**

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

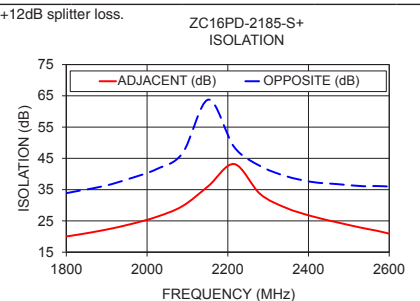
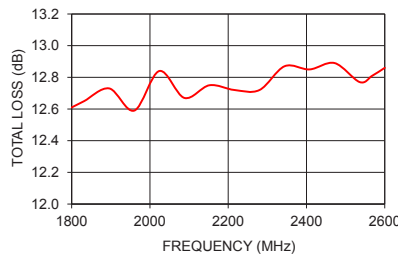
### Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 12 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)	VSWR (:1)			
	Typ.	Min.	Typ.	Max.			S		OUT	
$f_c-f_u$					Max.	Max.	Typ.	Max.	Typ.	Max.
1800-2600	30	16	0.5	1.4	6	0.7	1.15	1.6	1.05	1.3

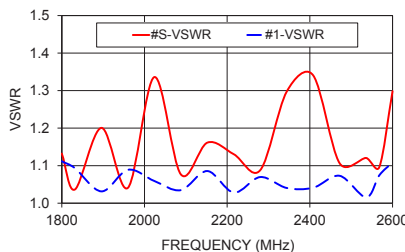
### Typical Performance Data

Freq. (MHz)	Total Loss <sup>1</sup> (dB)	Amplitude Unbalance (dB)	Isolation (dB)		Phase Unbalance (deg.)	VSWR S	VSWR 1
			Adjacent	Opposite			
			S-1				
1800.00	12.61	0.19	20.04	33.87	4.68	1.13	1.11
1832.00	12.65	0.13	20.67	34.66	3.93	1.04	1.09
1896.00	12.73	0.12	22.14	36.22	3.65	1.20	1.03
1960.00	12.59	0.16	23.99	38.65	3.98	1.04	1.09
2024.00	12.84	0.14	26.31	41.58	3.27	1.34	1.06
2088.00	12.67	0.17	29.75	46.68	4.02	1.08	1.03
2152.00	12.75	0.23	36.16	63.79	3.92	1.16	1.09
2216.00	12.72	0.15	43.18	48.61	4.30	1.13	1.03
2280.00	12.72	0.28	33.63	42.58	4.66	1.09	1.07
2344.00	12.87	0.22	29.19	39.32	4.40	1.30	1.04
2408.00	12.85	0.23	26.51	37.47	4.27	1.34	1.04
2472.00	12.89	0.21	24.51	36.76	3.86	1.11	1.07
2536.00	12.77	0.26	22.68	36.09	4.78	1.12	1.02
2568.00	12.81	0.45	21.89	36.16	4.55	1.10	1.07
2600.00	12.86	0.28	20.92	35.99	3.31	1.30	1.11

ZC16PD-2185-S+ 1. Total Loss = Insertion Loss +12dB splitter loss.



ZC16PD-2185-S+ VSWR



### electrical schematic



### Notes

- 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.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- The parts covered by this specification document are subject to Mini-Circuit's 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-Circuit's website at [www.minicircuits.com/WCLStore/terms.jsp](http://www.minicircuits.com/WCLStore/terms.jsp)



# 16 Way-0° Power Splitter/Combiner

# ZC16PD-2185-S+

## Typical Performance Data

FREQUENCY (MHz)	TOTAL LOSS <sup>1</sup> (dB) S-1	AMPLITUDE UNBALANCE (dB)	ISOLATION (dB)		PHASE UNBALANCE (deg.)	FREQUENCY (MHz)	VSWR (:1)	
			ADJACENT	OPPOSITE			S	1
1800	12.61	0.19	20.04	33.87	4.68	1800	1.13	1.11
1832	12.65	0.13	20.67	34.66	3.93	1832	1.04	1.09
1896	12.73	0.12	22.14	36.22	3.65	1896	1.20	1.03
1960	12.59	0.16	23.99	38.65	3.98	1960	1.04	1.09
2024	12.84	0.14	26.31	41.58	3.27	2024	1.34	1.06
2088	12.67	0.17	29.75	46.68	4.02	2088	1.08	1.03
2152	12.75	0.23	36.16	63.79	3.92	2152	1.16	1.09
2216	12.72	0.15	43.18	48.61	4.30	2216	1.13	1.03
2280	12.72	0.28	33.63	42.58	4.66	2280	1.09	1.07
2344	12.87	0.22	29.19	39.32	4.40	2344	1.30	1.04
2408	12.85	0.23	26.51	37.47	4.27	2408	1.34	1.04
2472	12.89	0.21	24.51	36.76	3.86	2472	1.11	1.07
2536	12.77	0.26	22.68	36.09	4.78	2536	1.12	1.02
2568	12.81	0.45	21.89	36.16	4.55	2568	1.10	1.07
2600	12.86	0.28	20.92	35.99	3.31	2600	1.30	1.11

<sup>1</sup>Total Loss = Insertion Loss + 12dB Splitter Loss



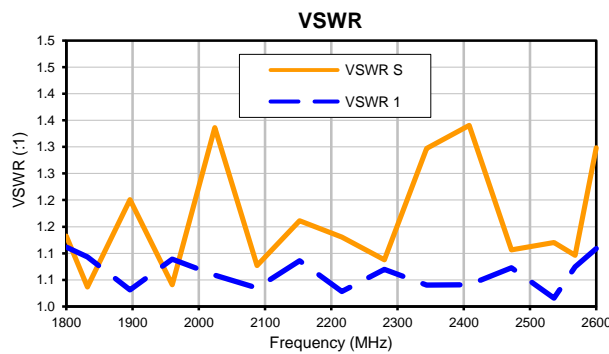
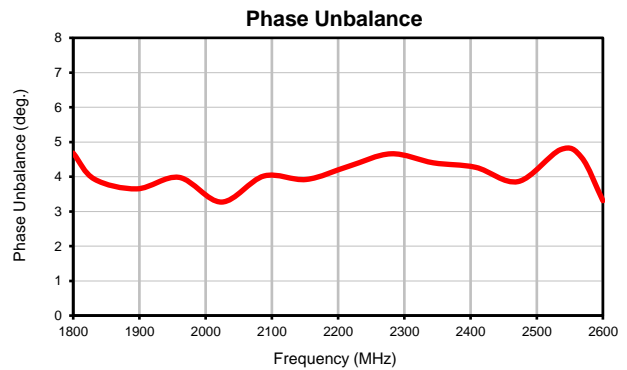
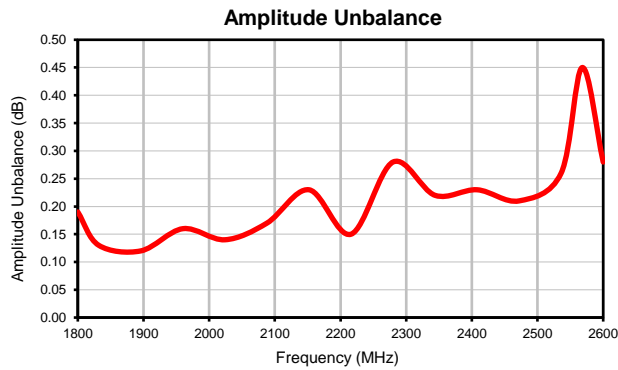
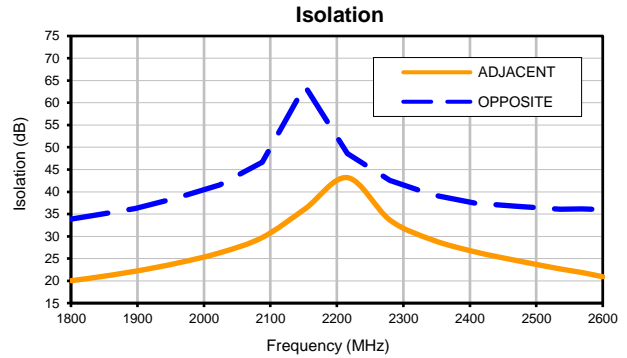
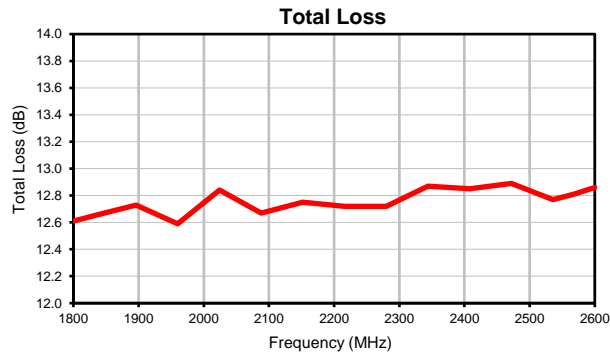
P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 • Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site  
 The Design Engineers Search Engine Provides ACTUAL Data Instantly From MINI-CIRCUITS At: [www.minicircuits.com](http://www.minicircuits.com)



IF/RF MICROWAVE COMPONENTS

REV. OR  
 ZC16PD-2185-S+  
 12/10/2018  
 Page 1 of 1

## Typical Performance Curves

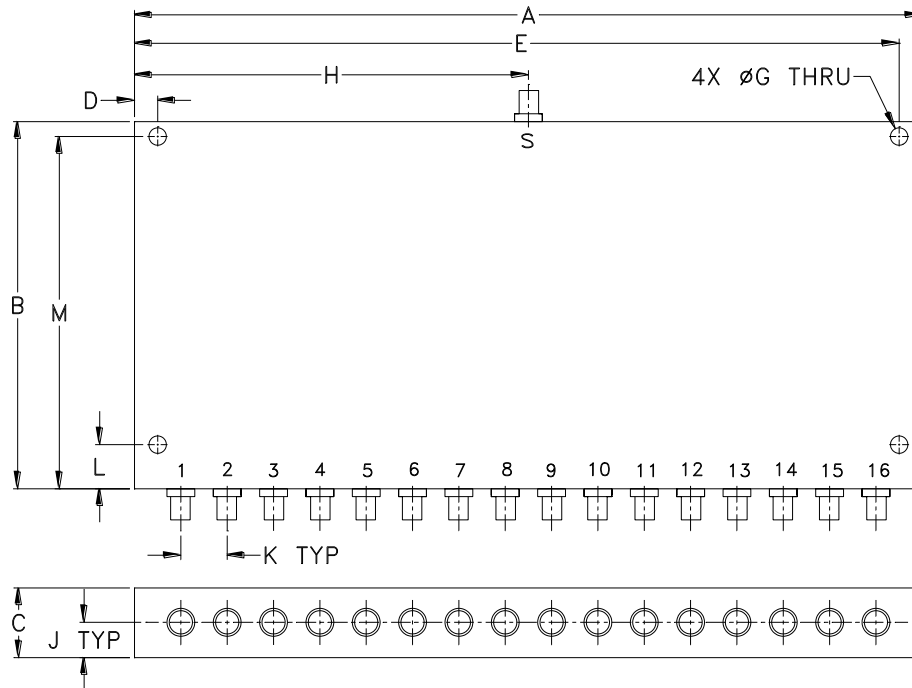


# Case Style

# UU

## Outline Dimensions

## UU179



CASE#	A	B	C	D	E	F	G	H	J	K	L	M	WT. GRAMS
UU179	8.50 (215.90)	3.95 (100.33)	.75 (19.05)	.250 (6.35)	8.250 (209.55)	--	.187 (4.75)	4.250 (107.95)	.38 (9.65)	.500 (12.70)	.475 (12.07)	3.475 (88.27)	710

Dimensions are in inches (mm). Tolerances: 2 Pl.  $\pm .03$ ; 3 Pl.  $\pm .015$

### Notes:

1. Case material: Aluminum alloy.
2. Case finish:  
For RoHS Case Styles: Clear chemical conversion coating, non-chrome or trivalent chrome based.
3. Refer to the individual model data sheet for the type of connectors available.

**Mini-Circuits®**  
ISO 9001 ISO 14001 CERTIFIED

ALL NEW  
minicircuits.com

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site



The Design Engineers Search Engine Provides ACTUAL Data Instantly From MINI-CIRCUITS At: [www.minicircuits.com](http://www.minicircuits.com)

RF/IF MICROWAVE COMPONENTS

UU179 Rev.: AZ (02/25/19) M172688 File: UU179

This document and its contents are the property of Mini-Circuits

Sheet 1 of 1



All Mini-Circuits products are manufactured under exacting quality assurance and control standards, and are capable of meeting published specifications after being subjected to any or all of the following physical and environmental test.

Specification	Test/Inspection Condition	Reference/Spec
Operating Temperature	-55° to 100°C Ambient Environment	Individual Model Data Sheet
Storage Temperature	-55° to 100° C Ambient Environment	Individual Model Data Sheet
Barometric Pressure	100,000 Feet	MIL-STD-202, Method 105, Condition D
Humidity	90% RH, 65°C Units may require bake-out after humidity to restore full performance.	MIL-STD-202, Method 103
Thermal Shock	-65° to 125°C, 5 cycles	MIL-STD-202, Method 107, Condition B