

# Coaxial Power Splitter/Combiner

16 Way-0° 50Ω 1 to 30 MHz

ZFSC-16-3+  
ZFSC-16-3



Generic photo used for illustration purposes only

BNC version shown  
CASE STYLE: R30

Connectors Model

BNC ZFSC-16-3(+)  
SMA ZFSC-16-3-S

**+RoHS Compliant**

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

## Maximum Ratings

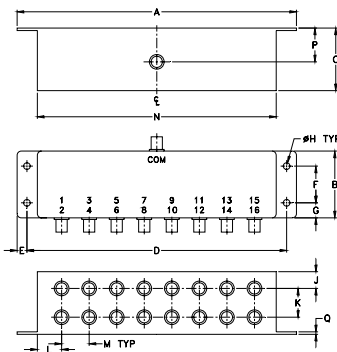
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.87W max.

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

## Coaxial Connections

SUM PORT	S(COM)
PORT 1,2,3,.....,16	1,2,3,.....,16

## Outline Drawing



## Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
6.69	1.60	1.50	6.22	.24	.88	.36	.160
169.93	40.64	38.10	157.99	6.10	22.35	9.14	4.06
J	K	L	M	N	P	Q	wt.
.40	.69	.55	.66	5.72	.81	.06	grams
10.16	17.53	13.97	16.76	145.29	20.57	1.52	320

## Features

- high isolation, 45 dB typ.
- rugged shielded case

## Applications

- HF/VHF
- test set-ups
- instrumentation

## Electrical Specifications at 25°C

FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 12 dB		PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)
	Typ.	Min.	Typ.	Max.	L	M	U	
$f_L$ - $f_U$					Max.	Max.	Max.	Max.
1-30	45	26	0.5	0.9	1	2	3	0.15

L = low range [ $f_L$  to  $10 f_L$ ] M = mid range [ $10 f_L$  to  $f_U/2$ ] U = upper range [ $f_U/2$  to  $f_U$ ]

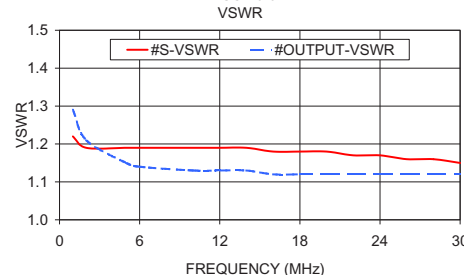
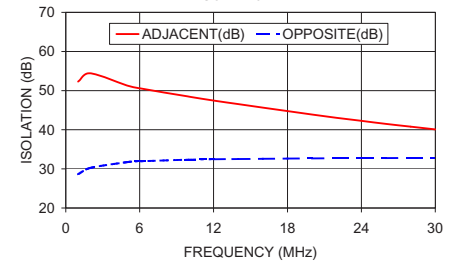
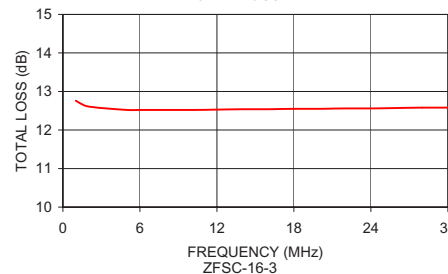
## Typical Performance Data

Freq. (MHz)	Total Loss <sup>1</sup> (dB)	Amplitude Unbalance (dB)	Isolation (dB)		Phase Unbalance (deg.)	VSWR S	VSWR OUTPUT
			S-1	Adjacent Opposite			
			1.00	12.76			
2.00	12.61	0.05	54.44	30.25	0.41	1.19	1.21
5.00	12.52	0.02	51.27	31.74	0.23	1.19	1.15
6.00	12.52	0.02	50.59	31.94	0.21	1.19	1.14
10.00	12.52	0.01	48.46	32.35	0.18	1.19	1.13
12.00	12.53	0.01	47.47	32.46	0.19	1.19	1.13
14.00	12.54	0.01	46.55	32.52	0.20	1.19	1.13
16.00	12.54	0.01	45.66	32.58	0.22	1.18	1.12
18.00	12.55	0.01	44.76	32.63	0.24	1.18	1.12
20.00	12.55	0.01	43.89	32.67	0.26	1.18	1.12
22.00	12.56	0.01	43.05	32.71	0.29	1.17	1.12
24.00	12.56	0.01	42.27	32.74	0.31	1.17	1.12
26.00	12.57	0.02	41.50	32.76	0.34	1.16	1.12
28.00	12.58	0.01	40.79	32.79	0.40	1.16	1.12
30.00	12.58	0.01	40.09	32.81	0.40	1.15	1.12

ZFSC-16-3  
TOTAL LOSS

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

ZFSC-16-3  
ISOLATION



## 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)

