

# Coaxial Power Splitter/Combiner

## ZCSC-3-R3+

3 Way-0° 50Ω 2 to 300 MHz

### Maximum Ratings

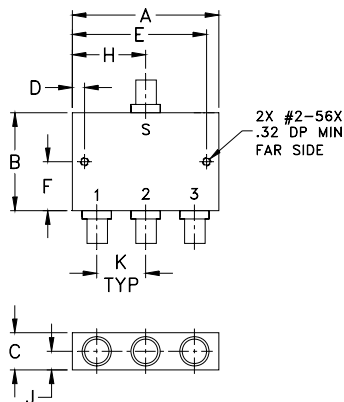
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.375W max.

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

### Coaxial Connections

SUM PORT	S
PORT 1	1
PORT 2	2
PORT 3	3

### Outline Drawing



### Outline Dimensions (inch/mm)

A	B	C	D	E	F
1.50	1.00	.38	.125	1.375	5.70
38.10	25.40	9.65	3.18	34.93	12.70

G	H	J	K	wt
--	.75	.19	.50	grams
--	19.05	4.83	12.70	28

### Features

- low insertion loss, 0.4 dB typ.
- high isolation, 31 dB typ.
- excellent VSWR, 1.1:1 typ.
- excellent phase unbalance 1 deg. typ.
- rugged shielded case

### Applications

- VHF/UHF
- instrumentation
- communication system

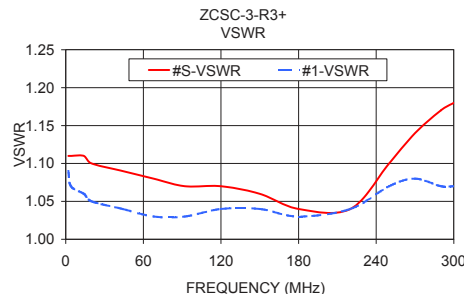
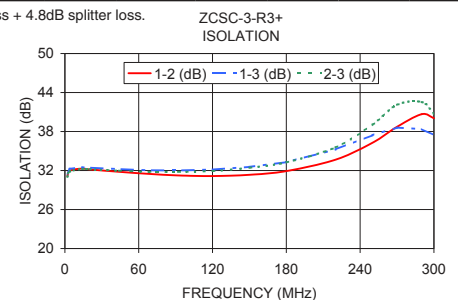
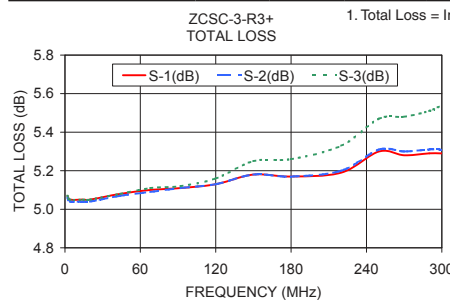
### Electrical Specifications at 25°C

FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 4.8 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	L		M		U		L		M		U		L	M	U	L	M	U
$f_L$ - $f_U$	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	
2-300	32	26	31	28	32	22	0.3	0.8	0.4	1.0	0.8	1.2	1.0	2.0	3.0	0.1	0.3	0.3

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)			Amp. Unbal. (dB)	Isolation (dB)			Phase Unbal. (deg.)	VSWR S	VSWR 1	VSWR 2	VSWR 3
	S-1	S-2	S-3		1-2	1-3	2-3					
2.00	5.07	5.06	5.07	0.00	31.14	31.55	31.03	0.03	1.11	1.09	1.09	1.09
4.00	5.05	5.04	5.05	0.01	31.99	32.25	31.85	0.02	1.11	1.07	1.07	1.07
14.00	5.05	5.04	5.05	0.01	32.30	32.50	32.24	0.05	1.11	1.06	1.06	1.06
20.00	5.05	5.04	5.05	0.01	32.17	32.44	32.21	0.04	1.10	1.05	1.05	1.05
44.00	5.08	5.07	5.08	0.01	31.81	32.22	31.97	0.09	1.09	1.04	1.04	1.04
68.00	5.10	5.09	5.11	0.01	31.49	32.04	31.82	0.23	1.08	1.03	1.04	1.03
92.00	5.11	5.11	5.12	0.01	31.25	32.01	31.79	0.32	1.07	1.03	1.04	1.02
120.00	5.13	5.13	5.16	0.03	31.15	32.15	31.93	0.33	1.07	1.04	1.05	1.04
150.00	5.18	5.18	5.25	0.06	31.34	32.56	32.42	0.42	1.06	1.04	1.05	1.05
180.00	5.17	5.17	5.26	0.09	31.91	33.29	33.26	0.45	1.04	1.03	1.03	1.04
220.00	5.19	5.20	5.33	0.14	33.67	35.24	35.57	0.56	1.04	1.04	1.04	1.04
250.00	5.30	5.31	5.47	0.18	36.27	37.44	39.06	0.68	1.10	1.07	1.07	1.09
270.00	5.28	5.30	5.48	0.21	38.73	38.61	42.11	0.76	1.14	1.08	1.08	1.10
290.00	5.29	5.31	5.51	0.23	40.66	38.38	42.54	0.72	1.17	1.07	1.08	1.11
300.00	5.29	5.31	5.54	0.25	40.04	37.45	40.72	0.81	1.18	1.07	1.07	1.10



### 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-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/WCLStore/terms.jsp](http://www.minicircuits.com/WCLStore/terms.jsp)

