

Coaxial High Power Combiner

ZA3CS-400-3W+

3 Way-0° 50Ω 2 to 400 MHz

Maximum Ratings

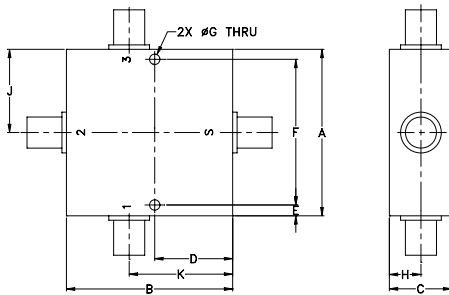
Operating Temperature	-55°C to 90°C
Storage Temperature	-55°C to 100°C

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
2.00	2.00	.75	.938	.13	1.750
50.80	50.80	19.05	23.83	3.30	44.45
G	H	J	K	wt	
.125	.38	1.00	1.25	grams	
3.18	9.65	25.40	31.75	200.0	

Features

- wideband, 2 to 400 MHz
- low insertion loss, 0.5 dB typ.
- good isolation, 25 dB typ.
- very low amplitude, 0.15 dB typ. and phase unbalance, 0.2 deg. typ.

Applications

- VHF/UHF
- communication receivers & transmitters



SMA version shown

CASE STYLE: CC51

Connectors	Model
BNC	ZA3CS-400-3W+
N-TYPE	ZA3CS-400-3W-N+
SMA	ZA3CS-400-3W-S+

+RoHS Compliant

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

High Power Combiner Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 4.8 dB		PHASE UNBALANCE (Degrees)		AMPLITUDE UNBALANCE (dB)		POWER INPUT ¹ (W)	
	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	as combiner ² Max.	as splitter Max.
f _L -f _U										
2-400	25	17	0.5	1.2	0.2	3.0	0.15	0.5	3	10

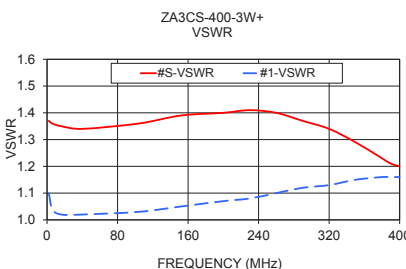
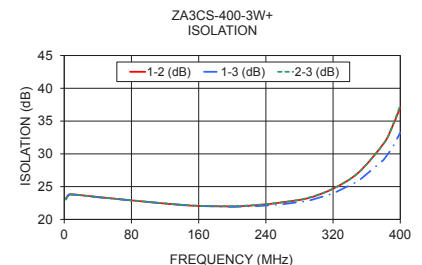
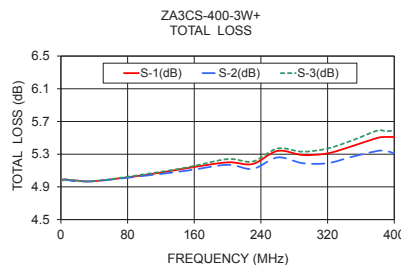
1. Over -55°C to +55°C. Derate linearly to 20% of rating at 90°C

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

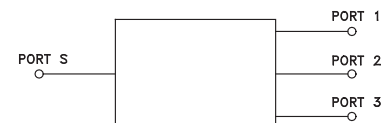
Typical Performance Data

Freq. (MHz)	Total Loss ¹ (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	4.99	4.98	4.98	0.01	23.18	23.18	23.02	0.06	1.37	1.10	1.10	1.11
6.00	4.99	4.99	4.99	0.00	23.80	23.80	23.77	0.11	1.36	1.04	1.04	1.04
16.00	4.98	4.97	4.98	0.01	23.75	23.73	23.74	0.05	1.35	1.02	1.02	1.02
40.00	4.97	4.97	4.97	0.01	23.42	23.38	23.41	0.19	1.34	1.02	1.01	1.01
104.00	5.05	5.04	5.06	0.02	22.61	22.61	22.63	0.50	1.36	1.03	1.03	1.03
152.00	5.13	5.10	5.14	0.05	22.10	22.09	22.13	0.72	1.39	1.05	1.05	1.05
200.00	5.20	5.17	5.24	0.07	21.99	21.91	22.04	0.85	1.40	1.07	1.08	1.08
230.00	5.18	5.12	5.21	0.09	22.19	22.03	22.22	0.98	1.41	1.08	1.10	1.10
260.00	5.34	5.26	5.37	0.11	22.61	22.32	22.62	1.18	1.40	1.10	1.12	1.12
290.00	5.29	5.19	5.33	0.14	23.24	22.81	23.29	1.13	1.37	1.12	1.14	1.14
320.00	5.31	5.19	5.37	0.18	24.69	23.95	24.71	1.21	1.34	1.13	1.17	1.16
350.00	5.40	5.27	5.47	0.20	27.12	25.85	27.11	1.31	1.29	1.15	1.19	1.17
380.00	5.50	5.34	5.59	0.25	31.55	29.07	31.52	1.52	1.23	1.16	1.21	1.19
390.00	5.51	5.34	5.58	0.24	34.00	30.80	34.05	1.50	1.21	1.16	1.22	1.19
400.00	5.51	5.31	5.59	0.28	37.10	33.25	37.43	1.53	1.20	1.16	1.23	1.20

1. Total Loss = Insertion Loss + 4.8dB splitter loss.



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.
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