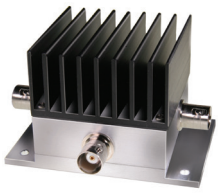
Coaxial

High Power Combiner

ZA3CS-450-9W

3 Way-0° 50Ω 100 to 450 MHz



BNC version shown

CASE STYLE: AX255

Connectors	Model
BNC	ZA3CS-450-9W
N-TYPE	ZA3CS-450-9W-N
SMA	ZA3CS-450-9W-S

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

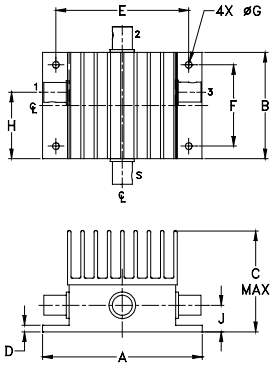
Features

- high power, up to 9W input power
- wideband, 100 to 450 MHz
- low insertion loss, 0.9 dB typ.

Applications

- VHF/UHF
- communication receivers & transmitters

Outline Drawing



Outline Dimensions (inch / mm)

A	B	C	D	E	F
3.00	2.00	1.92	.100	2.500	1.525
76.20	50.80	48.77	2.54	63.50	38.74

G	H	J	wt
.125	1.25	.50	grams
3.18	31.75	12.70	343

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)	
									as combiner[2]	as splitter
f_L-f_U	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.
100-450	22	15	0.9	1.8	2.5	8.0	0.2	0.7	9	12

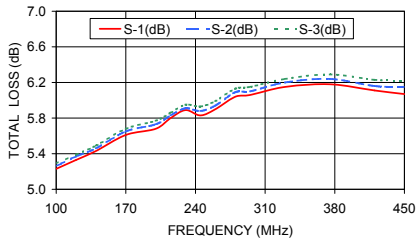
1. Over -55°C to +55°C. Derate linearly to 20% of rating at 90°C
2. As a combiner of non-coherent signals, max. power per port is power rating divided by number of ports.

Typical Performance Data

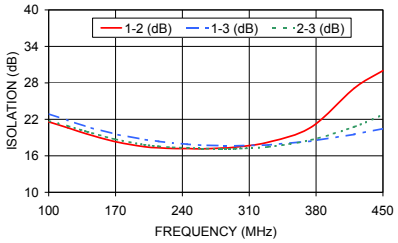
Freq. (MHz)	Total Loss[1] (dB)			Amp. Unbal. (dB)	Isolation (dB)			Phase Unbal. (deg.)	VSWR S	VSWR 1	VSWR 2	VSWR 3
	S-1	S-2	S-3		1-2	1-3	2-3					
100.00	5.23	5.26	5.29	0.07	21.59	22.92	21.77	0.48	1.65	1.37	1.34	1.36
120.00	5.33	5.37	5.39	0.05	20.61	21.81	20.89	0.69	1.73	1.33	1.29	1.30
140.00	5.43	5.46	5.49	0.07	19.60	20.78	19.99	0.79	1.84	1.30	1.26	1.28
170.00	5.61	5.65	5.68	0.07	18.32	19.56	18.71	0.93	1.97	1.29	1.24	1.26
200.00	5.68	5.73	5.77	0.08	17.50	18.69	17.82	1.03	2.09	1.28	1.25	1.25
215.00	5.80	5.83	5.86	0.06	17.32	18.38	17.56	1.07	2.16	1.27	1.25	1.25
230.00	5.89	5.91	5.95	0.06	17.21	18.10	17.39	1.16	2.23	1.26	1.26	1.26
245.00	5.83	5.88	5.93	0.10	17.19	17.91	17.32	1.44	2.26	1.25	1.27	1.27
260.00	5.90	5.94	5.99	0.09	17.15	17.74	17.19	1.48	2.33	1.25	1.28	1.29
280.00	6.04	6.09	6.13	0.09	17.27	17.68	17.16	1.47	2.43	1.26	1.31	1.33
295.00	6.06	6.10	6.15	0.09	17.42	17.65	17.17	1.71	2.47	1.26	1.32	1.36
330.00	6.15	6.20	6.24	0.10	18.25	17.79	17.48	1.89	2.43	1.27	1.36	1.41
375.00	6.18	6.24	6.29	0.11	20.73	18.43	18.62	2.20	2.25	1.24	1.36	1.37
420.00	6.11	6.16	6.23	0.12	27.12	19.54	20.78	2.79	1.97	1.19	1.31	1.29
450.00	6.07	6.15	6.22	0.14	30.02	20.48	22.77	3.26	1.83	1.16	1.25	1.25

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

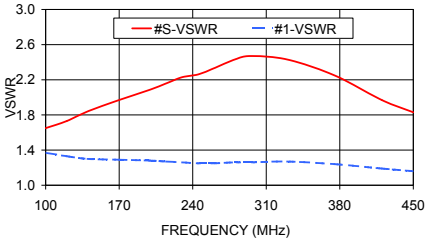
ZA3CS-450-9W
TOTAL LOSS



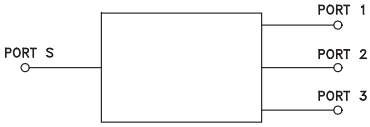
ZA3CS-450-9W
ISOLATION



ZA3CS-450-9W
VSWR



electrical schematic



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