

High Power Combiner

ZA2CS-10-20W

2 Way-0° 50Ω 900 to 1000 MHz

Maximum Ratings

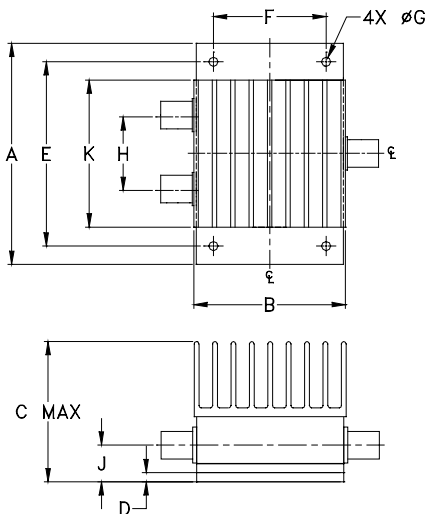
Operating Temperature	-55°C to 90°C
Storage Temperature	-55°C to 100°C
DC Current	1.0 A (500mA for each port)

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

Coaxial Connections

SUM PORT	S
PORT 1	1
PORT 2	2

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	
3.00	2.06	1.92	.100	2.500	1.525	
76.20	52.32	48.77	2.54	63.50	38.74	
G	H	J	K			wt
.125	1.000	.50	2.00			grams
3.18	25.40	12.70	50.80			330

Features

- high power, up to 20W input power
- low insertion loss, 0.2 dB typ.
- high isolation, 38 dB typ.
- excellent VSWR, 1.1:1 typ.

Applications

- cellular
- instrumentation
- communication transmitters & receivers



Generic photo used for illustration purposes only

CASE STYLE: AW254

Connectors	Model
N-TYPE	ZA2CS-10-20W-N

Electrical Specifications

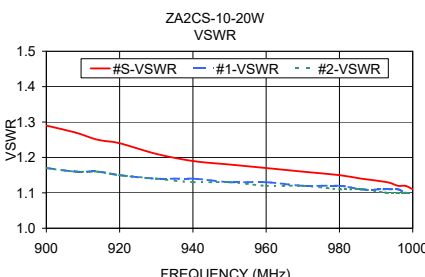
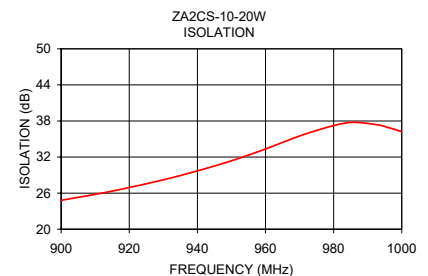
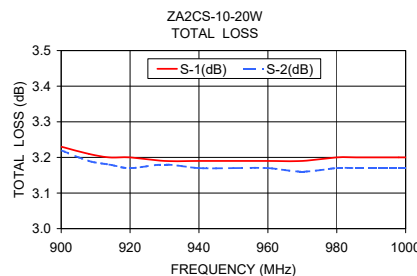
FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 3.0 dB		PHASE UNBALANCE (Degrees)		AMPLITUDE UNBALANCE (dB)		POWER INPUT ¹ (W)	
	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	as combiner ² Max.	as splitter Max.
f _L -f _U										
900-1000	38	20	0.2	0.5	0.5	3.0	0.11	0.3	20	20

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

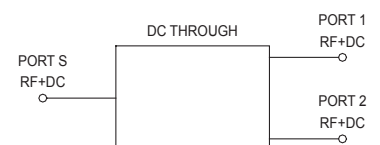
Typical Performance Data

Frequency (MHz)	Total Loss ¹ (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
900.00	3.23	3.22	0.01	24.81	0.25	1.29	1.17	1.17
908.00	3.21	3.19	0.02	25.59	0.27	1.27	1.16	1.16
914.00	3.20	3.18	0.02	26.22	0.27	1.25	1.16	1.16
920.00	3.20	3.17	0.02	26.94	0.26	1.24	1.15	1.15
930.00	3.19	3.18	0.02	28.21	0.27	1.21	1.14	1.14
940.00	3.19	3.17	0.02	29.70	0.23	1.19	1.14	1.13
950.00	3.19	3.17	0.02	31.38	0.29	1.18	1.13	1.13
960.00	3.19	3.17	0.02	33.33	0.28	1.17	1.13	1.12
970.00	3.19	3.16	0.03	35.50	0.24	1.16	1.12	1.12
980.00	3.20	3.17	0.03	37.24	0.25	1.15	1.12	1.11
986.00	3.20	3.17	0.03	37.77	0.23	1.14	1.11	1.11
993.00	3.20	3.17	0.03	37.35	0.27	1.13	1.11	1.10
996.00	3.20	3.17	0.03	36.92	0.25	1.12	1.11	1.10
998.00	3.20	3.17	0.03	36.59	0.23	1.12	1.10	1.10
1000.00	3.20	3.17	0.03	36.22	0.25	1.11	1.10	1.10

1. Total Loss = Insertion Loss + 3dB 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.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
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