

Power Splitter/Combiner

2 Way-0° 50Ω 0.002 to 60 MHz

ZSC-2-2+



Generic photo used for illustration purposes only

CASE STYLE: M22

Connectors Model
BNC ZSC-2-2+
BRACKET (OPTION "B")
BRACKET (OPTION "BR")

+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	0.125W max.

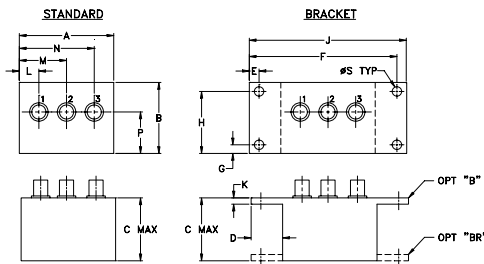
At low range frequency band (f_L to $10 f_L$), linearly derate maximum input power by 13 dB.

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

Coaxial Connections

SUM PORT	2
PORT 1	1
PORT 2	3

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
2.25	1.38	1.24	.50	.150	3.100	.138	1.238
57.15	35.05	31.50	12.70	3.81	78.74	3.51	31.45

J	K	L	M	N	P	S	wt
3.25	.10	.40	1.15	1.86	.64	.150	grams
82.55	2.54	10.16	29.21	47.24	16.26	3.81	74.0

Features

- low insertion loss, 0.3 dB typ.
- high isolation, 30 dB typ.
- excellent amplitude unbalance, 0.1 dB typ.
- excellent phase unbalance, 0.2 deg. typ.
- excellent VSWR, 1.1:1 typ.
- rugged shielded case

Applications

- HF
- amateur radio

Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 3.0 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	L*		M		U		L		M		U		L		M		U	
	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	Max.
f_L - f_U																		
0.002-60	25	20	30	20	27	20	0.3	0.6	0.3	0.6	0.6	1.0	2	3	4	0.15	0.25	0.30

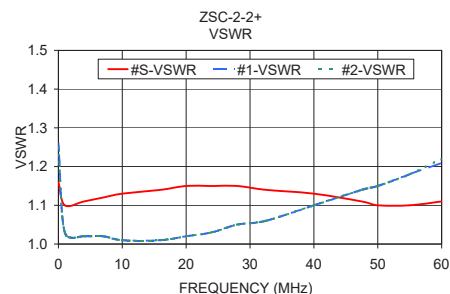
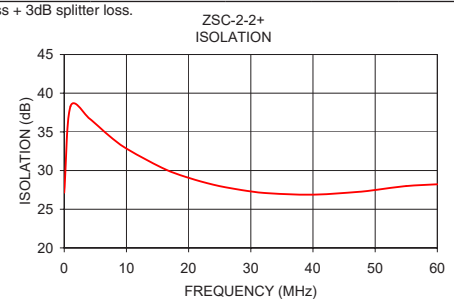
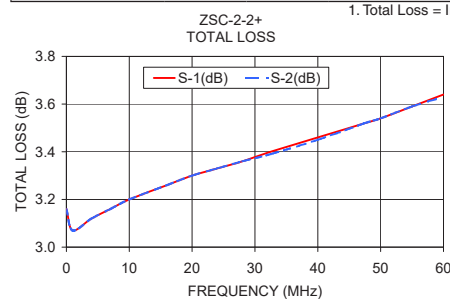
L = low range [f_L to $10 f_L$] M = mid range [$10 f_L$ to $f_U/2$] U = upper range [$f_U/2$ to f_U]

* Isolation specified to 0.006 MHz.

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						
0.002	3.16	3.16	0.00	27.14	0.02	1.16	1.26	1.25
1.000	3.07	3.07	0.00	38.30	0.00	1.10	1.03	1.03
4.000	3.12	3.12	0.00	36.75	0.00	1.11	1.02	1.02
7.000	3.16	3.16	0.00	34.64	0.01	1.12	1.02	1.02
10.000	3.20	3.20	0.00	32.84	0.02	1.13	1.01	1.01
16.000	3.26	3.26	0.00	30.25	0.03	1.14	1.01	1.01
20.000	3.30	3.30	0.00	29.06	0.03	1.15	1.02	1.02
24.000	3.33	3.33	0.00	28.17	0.03	1.15	1.03	1.03
28.000	3.36	3.36	0.00	27.55	0.03	1.15	1.05	1.05
32.500	3.40	3.39	0.00	27.09	0.03	1.14	1.06	1.06
40.000	3.46	3.45	0.00	26.88	0.04	1.13	1.10	1.10
47.500	3.52	3.52	0.00	27.26	0.04	1.11	1.14	1.14
50.000	3.54	3.54	0.00	27.49	0.04	1.10	1.15	1.15
55.000	3.59	3.59	0.00	27.99	0.04	1.10	1.18	1.18
60.000	3.64	3.63	0.00	28.23	0.04	1.11	1.21	1.22

1. Total Loss = Insertion Loss + 3dB splitter loss.



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.
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