

Coaxial

Power Splitter/Combiner

ZX10-2-12+

2 Way-0° 50Ω 2 to 1200 MHz

Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	0.5W max.
Internal Dissipation (as a combiner)	0.125W max.

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

Coaxial Connections

SUM PORT	3
PORT 1	1
PORT 2	2

Features

- low insertion loss, 0.5 dB typ.
- excellent amplitude unbalance
- very good phase unbalance
- small size
- low cost
- protected under U.S. Patent 6,790,049 & 6,963,255

Applications

- cellular
- VHF/UHF receivers/transmitters
- radio
- defense



CASE STYLE: FL905

Connectors	Model
SMA	ZX10-2-12-S+

+RoHS Compliant

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

Electrical Specifications (T_{AMB}=25°C)

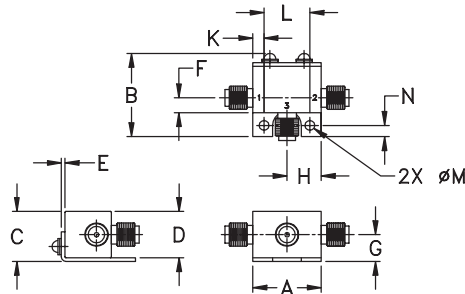
FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 3.0 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)
	Typ.	Min	Typ.	Max.	Max.	Max.
2-1200	21	16	0.5	1.5	3.0	0.5
2-20	29	21	0.3	0.7	3.0	0.5
20-600	25	18	0.3	0.8	2.0	0.4
600-1000	21	18	0.5	1.0	2.0	0.5

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						
2.00	3.30	3.12	0.18	27.33	0.75	1.03	1.22	1.16
5.00	3.25	3.11	0.14	31.03	0.34	1.02	1.16	1.12
14.00	3.24	3.11	0.13	32.84	0.11	1.02	1.14	1.11
32.00	3.25	3.11	0.13	32.75	0.02	1.02	1.14	1.10
50.00	3.26	3.13	0.13	32.34	0.01	1.02	1.13	1.10
140.00	3.28	3.15	0.13	30.09	0.17	1.03	1.12	1.10
320.00	3.32	3.21	0.12	26.11	0.34	1.05	1.10	1.09
410.00	3.36	3.25	0.11	24.65	0.39	1.06	1.08	1.08
500.00	3.39	3.29	0.10	23.47	0.48	1.07	1.06	1.08
740.00	3.49	3.43	0.06	21.36	0.43	1.08	1.06	1.09
900.00	3.57	3.53	0.04	20.62	0.32	1.09	1.11	1.11
950.00	3.62	3.61	0.01	20.51	0.29	1.09	1.12	1.12
1000.00	3.65	3.62	0.03	20.38	0.27	1.09	1.14	1.13
1100.00	3.75	3.74	0.01	20.29	0.07	1.09	1.18	1.15
1200.00	3.86	3.88	0.02	20.33	0.02	1.08	1.22	1.18

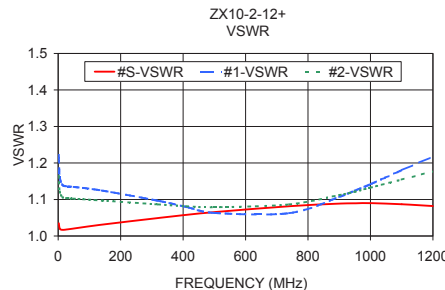
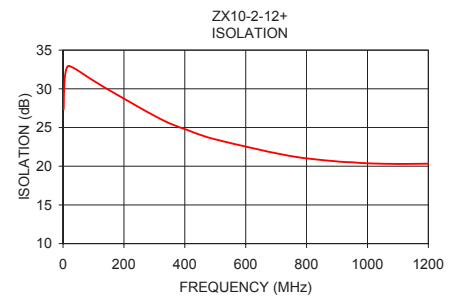
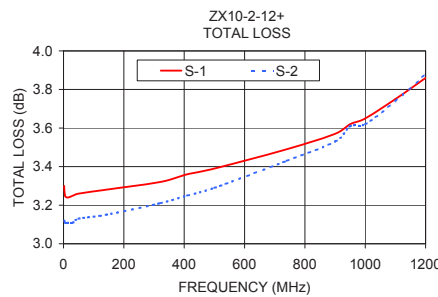
1. Total Loss = Insertion Loss + 3dB splitter loss.

Outline Drawing



Outline Dimensions (inch mm)

A	B	C	D	E	F	G
.74	.90	.54	.50	.04	.16	.29
18.80	22.86	13.72	12.70	1.02	4.06	7.37
H	J	K	L	M	N	wt
.37	--	.122	.496	.106	.122	grams
9.40	--	3.10	12.60	2.69	3.10	20.0



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-Circuit's 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-Circuit's website at www.minicircuits.com/MCLStore/terms.jsp

