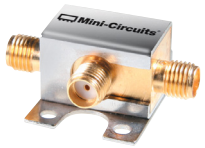
Coaxial

Power Splitter/Combiner

ZX10-2-442+

2 Way-0° 50Ω 1550 to 4400 MHz



CASE STYLE: FL905

Connectors	Model
SMA	ZX10-2-442-S+

+RoHS Compliant

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

Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1.5W max.
Internal Dissipation (as a combiner)	0.75W max.

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

Coaxial Connections

SUM PORT	3
PORT 1	1
PORT 2	2

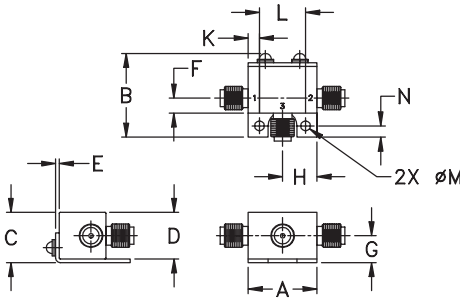
Features

- wide bandwidth, 1550 to 4400 MHz
- excellent amplitude unbalance, 0.02 dB typ.
- very good phase unbalance, 1 deg. typ.
- small size
- low cost
- protected under U.S. Patent 6,790,049

Applications

- WCDMA
- DCS
- PCS
- WiMax
- radar
- instrumentation
- navigation

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

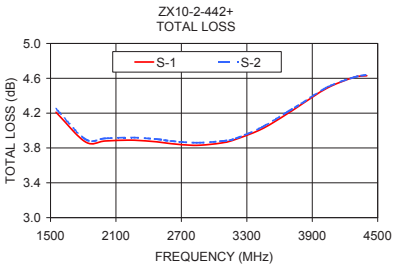
Electrical Specifications

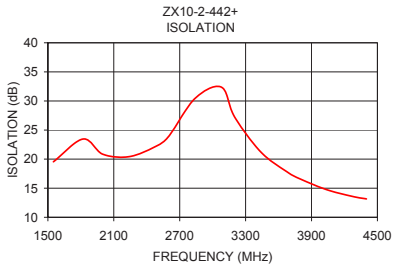
FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 3.0 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)
f_L-f_U	Typ.	Min.	Typ.	Max.	Max.	Max.
1550-4400	20	11	1.0	2.1	6.0	0.3

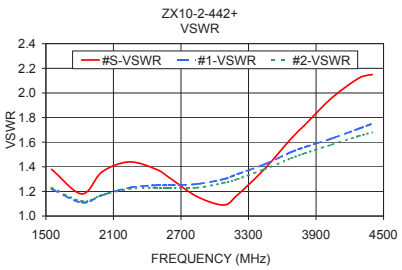
Typical Performance Data

Frequency (MHz)	Total Loss[1] (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
1550.0	4.21	4.25	0.04	19.54	0.85	1.38	1.22	1.23
1820.0	3.87	3.90	0.03	23.46	0.91	1.18	1.11	1.12
2000.0	3.88	3.91	0.03	20.84	0.99	1.36	1.17	1.17
2240.0	3.89	3.92	0.03	20.43	1.15	1.44	1.23	1.22
2480.0	3.87	3.90	0.03	22.17	1.31	1.38	1.25	1.23
2600.0	3.85	3.88	0.03	23.91	1.38	1.31	1.25	1.23
2840.0	3.83	3.86	0.02	30.45	1.53	1.16	1.26	1.23
3080.0	3.86	3.88	0.02	32.37	1.73	1.09	1.30	1.27
3200.0	3.90	3.91	0.02	27.25	1.90	1.17	1.34	1.30
3440.0	4.02	4.04	0.02	21.20	2.19	1.38	1.42	1.38
3680.0	4.20	4.22	0.03	17.78	2.42	1.63	1.52	1.47
3800.0	4.30	4.31	0.01	16.56	2.56	1.74	1.56	1.51
4040.0	4.49	4.50	0.00	14.74	2.89	1.96	1.63	1.58
4280.0	4.61	4.61	0.00	13.56	3.31	2.12	1.71	1.65
4400.0	4.63	4.64	0.01	13.16	3.59	2.15	1.75	1.68

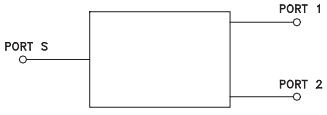
1. Total Loss = Insertion Loss + 3dB splitter loss.







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.
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

REV. B
M151107
ZX10-2-442+
ED-13246A/2
DY/CP/AM
151019