

Coaxial

Power Splitter/Combiner

ZBSC-413+

4 Way-0° 50Ω 10 to 800 MHz

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	0.250W max.

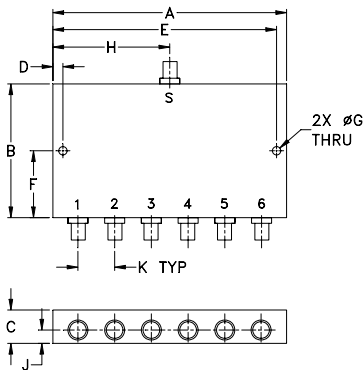
Permanent damage may occur if any of these limits are exceeded.

Coaxial Connections

SUM PORT	S
PORT 1	2
PORT 2	3
PORT 3	4
PORT 4	5
NOT USED	1,6

Ports 1,2,3,4 occupy positions 2,3,4,5 in outline drawing; positions 1,6 not occupied.

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F
3.50	2.00	.50	.150	3.350	1.00
88.90	50.80	12.70	3.81	85.09	25.40
G	H	J	K		wt
.125	1.75	.20	.55		grams
3.18	44.45	5.08	13.97		120

Features

- wideband, 10 to 800 MHz
- rugged, shielded case

Applications

- VHF/UHF
- receivers/transmitters



CASE STYLE: UU102

Connectors	Model
SMA	ZBSC-413+

+RoHS Compliant

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

Electrical Specifications

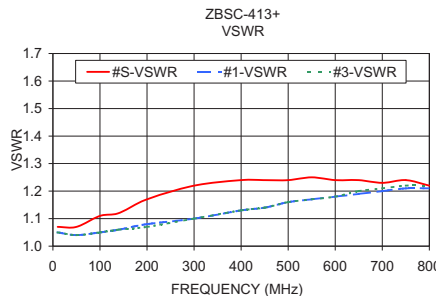
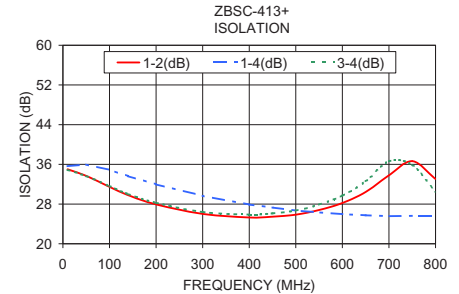
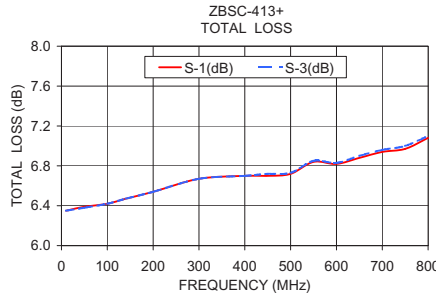
FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 6.0 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	L		M		U		L		M		U		L	M	U	L	M	U
	Typ.	Min	Typ.	Min	Typ.	Min	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	Max.
f _L -f _U																		
10-800	26	20	18	15	18	15	0.6	1.0	1.0	1.5	1.6	2.0	4	8	8	0.2	0.4	0.6

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]

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	VSWR 4
	S-1	S-2	S-3	S-4		1-2	1-4	3-4						
10.00	6.35	6.36	6.35	6.34	0.01	35.02	35.64	34.88	0.05	1.07	1.05	1.05	1.05	1.05
50.00	6.39	6.38	6.38	6.39	0.01	33.68	35.96	33.63	0.06	1.07	1.04	1.04	1.04	1.05
100.00	6.42	6.41	6.42	6.42	0.00	31.47	34.89	31.62	0.14	1.11	1.05	1.05	1.05	1.04
140.00	6.47	6.47	6.47	6.47	0.00	29.80	33.64	30.02	0.22	1.12	1.06	1.06	1.06	1.07
200.00	6.54	6.54	6.54	6.55	0.01	27.93	31.98	28.25	0.12	1.17	1.08	1.07	1.07	1.08
300.00	6.67	6.67	6.67	6.66	0.01	26.02	29.66	26.40	0.24	1.22	1.10	1.10	1.10	1.11
400.00	6.70	6.71	6.70	6.71	0.01	25.30	27.90	25.88	0.29	1.24	1.13	1.13	1.13	1.15
450.00	6.70	6.71	6.72	6.71	0.01	25.45	27.31	26.13	0.41	1.24	1.14	1.14	1.14	1.14
500.00	6.72	6.72	6.73	6.73	0.01	25.86	26.70	26.70	0.46	1.24	1.16	1.16	1.16	1.19
550.00	6.84	6.84	6.85	6.84	0.01	26.81	26.31	27.88	0.48	1.25	1.17	1.17	1.17	1.18
600.00	6.82	6.83	6.83	6.83	0.01	28.21	25.97	29.70	0.45	1.24	1.18	1.19	1.18	1.21
650.00	6.88	6.88	6.90	6.90	0.02	30.44	25.73	32.60	0.51	1.24	1.19	1.20	1.20	1.22
700.00	6.94	6.95	6.96	6.96	0.02	33.79	25.57	36.63	0.80	1.23	1.20	1.21	1.21	1.23
750.00	6.97	6.98	7.00	6.99	0.03	36.64	25.63	35.87	0.73	1.24	1.21	1.22	1.22	1.23
800.00	7.08	7.07	7.10	7.10	0.03	33.06	25.63	30.50	0.73	1.22	1.21	1.22	1.22	1.24

1. Total Loss = Insertion Loss + 6dB 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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