

# Coaxial Power Splitter/Combiner

## ZX10-4-27+

4 Way-0° 50Ω 2225 to 2700 MHz

### Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	2.5W max.*
Power Input (as a combiner)	0.125W max.

\*maximum VSWR at output 1.2:1  
Permanent damage may occur if any of these limits are exceeded.

### Coaxial Connections

SUM PORT	S
PORT 1	1
PORT 2	2
PORT 3	3
PORT 4	4

### Features

- low insertion loss, 1.0 dB typ.
- high isolation, 20 dB typ.
- rigid unibody construction
- gold plated connectors; nickel plated body
- low cost
- small size
- protected by US patent 6,790,049

### Applications

- MMDS
- ISM
- antenna arrays
- signal distribution
- test bench

### Electrical Specifications (T<sub>AMB</sub>=25°C)

FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 6 dB		PHASE UNBALANCE (Deg.)	AMPLITUDE UNBALANCE (dB)	INPUT VSWR (:1)	OUTPUT VSWR (:1)
	Typ.	Min.	Typ.	Max.				
2225-2700	20	16	1.0	1.5	9.0	1.2	1.4	1.25
2400-2600	25	20	0.8	1.3	9.0	1.2	1.4	1.25

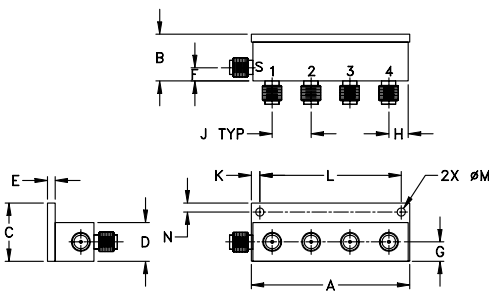


CASE STYLE: GR1026

Connectors	Model
SMA	ZX10-4-27-S+

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

### Outline Drawing



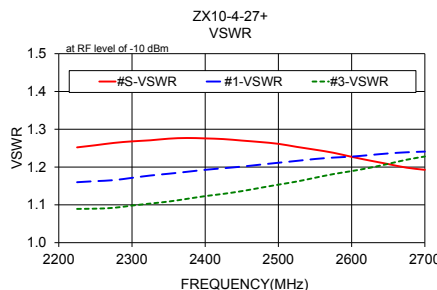
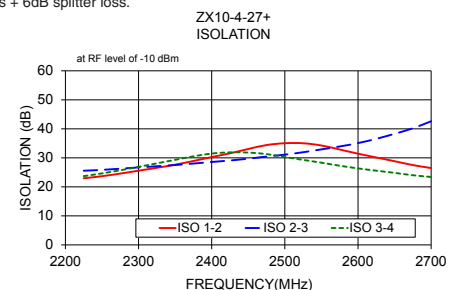
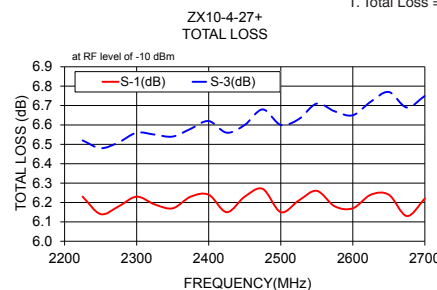
### Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
2.04	.60	.75	.50	.10	.17	.25	.25
51.82	15.24	19.05	12.70	2.54	4.32	6.35	6.35
J	K	L	M	N			wt
.50	.11	1.820	.106	.12			grams
12.70	2.79	46.23	2.69	3.05			60.0

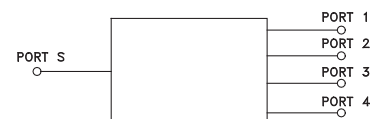
### Typical Performance Data

Freq. (MHz)	Total Loss <sup>1</sup> (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	2-3	3-4						
2225.00	6.23	6.78	6.52	6.68	0.55	22.96	25.56	23.70	3.54	1.25	1.16	1.16	1.09	1.09
2250.00	6.14	6.69	6.48	6.64	0.55	23.68	25.86	24.64	3.61	1.26	1.16	1.17	1.09	1.09
2300.00	6.23	6.77	6.56	6.72	0.54	25.58	26.70	26.90	3.92	1.27	1.17	1.18	1.10	1.10
2325.00	6.19	6.73	6.55	6.72	0.54	26.57	27.10	28.10	3.93	1.27	1.18	1.19	1.10	1.11
2350.00	6.17	6.69	6.54	6.72	0.55	27.65	27.53	29.32	4.16	1.28	1.18	1.20	1.11	1.12
2400.00	6.24	6.77	6.62	6.81	0.57	30.27	28.58	31.48	4.21	1.28	1.19	1.21	1.12	1.13
2425.00	6.15	6.66	6.56	6.76	0.61	31.57	29.09	31.90	4.40	1.27	1.20	1.22	1.13	1.14
2450.00	6.23	6.71	6.60	6.81	0.58	33.06	29.72	31.82	4.70	1.27	1.20	1.23	1.14	1.15
2500.00	6.15	6.63	6.60	6.81	0.67	35.04	31.10	30.29	4.69	1.26	1.21	1.24	1.15	1.17
2525.00	6.21	6.68	6.63	6.85	0.64	35.03	31.94	29.29	4.97	1.25	1.22	1.25	1.16	1.18
2550.00	6.26	6.74	6.71	6.94	0.68	34.26	32.92	28.33	4.85	1.25	1.22	1.26	1.17	1.19
2600.00	6.17	6.62	6.65	6.90	0.72	31.44	35.09	26.36	5.19	1.23	1.23	1.27	1.19	1.21
2625.00	6.24	6.69	6.72	6.98	0.74	30.13	36.56	25.58	5.25	1.22	1.23	1.28	1.20	1.22
2650.00	6.24	6.69	6.77	7.03	0.79	28.84	38.29	24.83	5.22	1.21	1.24	1.28	1.21	1.23
2700.00	6.22	6.64	6.75	7.03	0.82	26.48	42.62	23.41	5.57	1.19	1.24	1.30	1.23	1.25

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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