

SMA Connectorized Power Splitter/Combiner

ZX10Q-2-5+ ZX10Q-2-5

2 Way-90° 50Ω 330 to 580 MHz

Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	20W* max.

* Derate linearly to 7W at 100°C ambient.
Permanent damage may occur if any of these limits are exceeded.

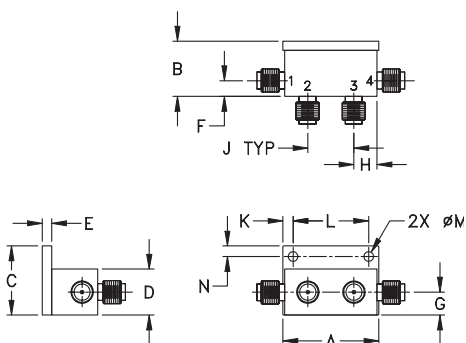
Coaxial Connections

INPUT PORT	1
PORT 1 (+90°)	2
PORT 2 (0°)	3
50 OHM TERM EXTERNAL**	4



** Recommended external termination
Mini-Circuits Part. No. ANNE-50L

Outline Drawing



Outline Dimensions (inch/mm)

	A	B	C	D	E	F	G	
	1.04	.60	.75	.50	.10	.17	.25	
	26.42	15.24	19.05	12.70	2.54	4.32	6.35	
	H	J	K	L	M	N	wt.	
	.25	.50	.11	.820	.106	.12	grams	
	6.35	12.70	2.79	20.83	2.69	3.05	21.0	

Features

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

Applications

- balanced amplifiers
- modulators
- VHF
- defense communications



CASE STYLE: GW1052

Connectors Model
SMA ZX10Q-2-5-S(+)

+RoHS Compliant

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

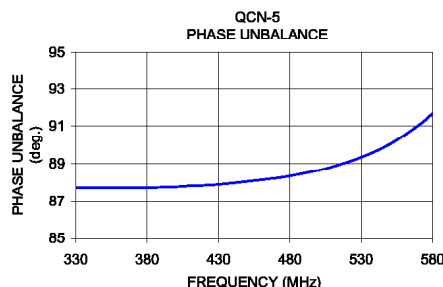
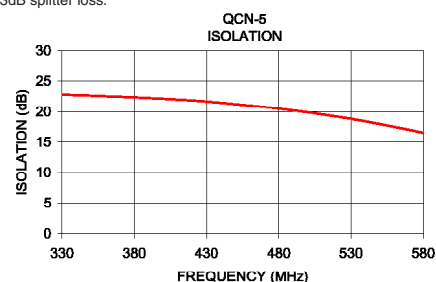
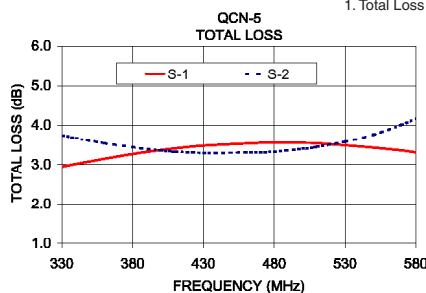
Electrical Specifications (T_{AMB}=25°C)

FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) Avg. of Coupled Outputs ABOVE 3 dB		PHASE UNBALANCE (Degrees)		AMPLITUDE UNBALANCE (dB)	
	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.
f _L -f _U								
330-580								
330-400	20	17	0.3	0.6	2.5	5.0	0.6	1.1
400-525	20	16	0.4	0.7	2.5	4.0	0.2	0.5
525-580	18	14	0.6	0.9	1.0	4.0	0.8	1.3

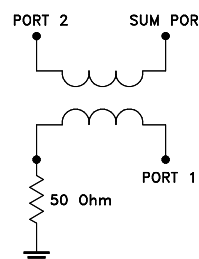
Typical Performance Data

Frequency (MHz)	Total Loss ¹ (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
330.00	2.95	3.75	0.81	22.84	87.70	1.15	1.20	1.13
340.00	3.02	3.67	0.66	22.76	87.70	1.15	1.20	1.14
360.00	3.15	3.54	0.39	22.58	87.71	1.15	1.20	1.14
380.00	3.27	3.44	0.17	22.39	87.72	1.15	1.21	1.15
400.00	3.37	3.36	0.01	22.16	87.76	1.15	1.22	1.16
410.00	3.41	3.33	0.08	22.02	87.81	1.15	1.22	1.17
430.00	3.48	3.30	0.18	21.70	87.89	1.16	1.23	1.19
470.00	3.55	3.31	0.24	20.79	88.22	1.17	1.26	1.23
480.00	3.56	3.33	0.22	20.51	88.34	1.18	1.27	1.24
500.00	3.55	3.40	0.15	19.91	88.64	1.20	1.30	1.28
510.00	3.54	3.45	0.08	19.57	88.84	1.21	1.31	1.30
530.00	3.49	3.58	0.09	18.83	89.34	1.23	1.34	1.34
550.00	3.43	3.76	0.33	17.98	90.03	1.26	1.39	1.39
570.00	3.36	4.01	0.66	17.04	91.03	1.31	1.44	1.46
580.00	3.31	4.17	0.85	16.55	91.66	1.33	1.48	1.50

1. Total Loss = Insertion Loss + 3dB 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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