Non-Catalog Model

Power Splitter/Combiner

4 Way-0°

ZCSC-4-1W+
ZCSC-4-1W

Important Note

This is a non-catalog model and can be manufactured on specific request. Pricing and delivery information can be supplied upon request.

Please click ”Back”, and then click “Contact Us” for Applications support.

CASE STYLE: UU244
PRICE: Contact Sales Department

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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

ELECTRICAL SPECIFICATIONS 50Ω@ +25ºC					
Parameter		**Min.**	**Typ.**	**Max.**	**Units**
Frequency		10		650	MHz
Isolation	**10-100MHz**	25	31		dB
	100-325MHz	20	25		dB
	325-650MHz	18	21		dB
Insertion Loss Above 6.0 dB	**10-100MHz**		0.5	0.8	dB
	100-325MHz		0.7	1.0	dB
	325-650MHz		1.1	1.5	dB
Phase Unbalance	**10-100MHz**			3	deg.
	100-325MHz			4	deg.
	325-650MHz			6	deg.
Amplitude Unbalance	**10-100MHz**			0.2	dB
	100-325MHz			0.3	dB
	325-650MHz			0.6	dB

MAXIMUM RATINGS	
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C

Electrical Schematic

COAXIAL CONNECTIONS	
SUM PORT	S
PORT 1	1
PORT 2	2
PORT 3	3
PORT 4	4

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. **2.** Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. **3.** The parts covered by this specification sheet 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. OR
M114161
ZCSC-4-1W
071030

4 Way-0° Power Splitter/Combiner ZCSC-4-1W

Typical Performance Data

FREQ. (MHz)	TOTAL LOSS[1] (dB)				AMP. UNBAL. (dB)	ISOLATION (dB)		
	S-1	S-2	S-3	S-4		1-2	2-3	3-4
9.9	6.60	6.60	6.61	6.61	0.01	37.20	35.88	36.34
13.8	6.61	6.61	6.62	6.61	0.01	37.44	35.74	36.34
18.8	6.61	6.61	6.64	6.63	0.03	37.68	35.51	36.32
36.3	6.63	6.63	6.65	6.63	0.02	37.13	34.74	35.47
50.4	6.66	6.65	6.66	6.66	0.01	36.03	34.20	34.31
134.9	6.77	6.79	6.81	6.79	0.03	29.16	31.89	27.58
187.3	6.76	6.78	6.80	6.79	0.04	26.58	30.55	25.01
260.0	6.85	6.88	6.94	6.90	0.08	24.31	29.10	22.79
325.5	6.88	6.91	7.00	6.94	0.12	22.95	28.06	21.49
361.0	6.91	6.94	7.05	6.99	0.14	22.43	27.59	21.03
527.8	6.96	7.04	7.25	7.13	0.29	21.79	26.67	20.92
606.0	7.05	7.15	7.40	7.23	0.35	22.59	27.14	22.67
627.3	7.08	7.19	7.47	7.29	0.39	22.95	27.40	23.55
649.4	7.12	7.22	7.50	7.31	0.38	23.44	27.78	24.63
660.7	7.11	7.22	7.50	7.30	0.39	23.70	27.99	25.32

FREQ. (MHz)	VSWR (:1)				
	S	1	2	3	4
9.9	1.13	1.23	1.23	1.23	1.23
13.8	1.12	1.23	1.23	1.23	1.23
18.8	1.12	1.23	1.22	1.23	1.23
36.3	1.11	1.22	1.22	1.23	1.23
50.4	1.12	1.22	1.22	1.23	1.23
134.9	1.10	1.21	1.21	1.21	1.22
187.3	1.08	1.20	1.19	1.19	1.20
260.0	1.06	1.18	1.17	1.15	1.18
325.5	1.05	1.17	1.14	1.12	1.15
361.0	1.04	1.16	1.13	1.10	1.14
527.8	1.02	1.10	1.06	1.04	1.05
606.0	1.03	1.09	1.05	1.11	1.08
627.3	1.04	1.09	1.05	1.14	1.11
649.4	1.05	1.10	1.06	1.16	1.14
660.7	1.05	1.10	1.07	1.18	1.15

[1] Total Loss = Insertion Loss+ 6dB Splitter Loss

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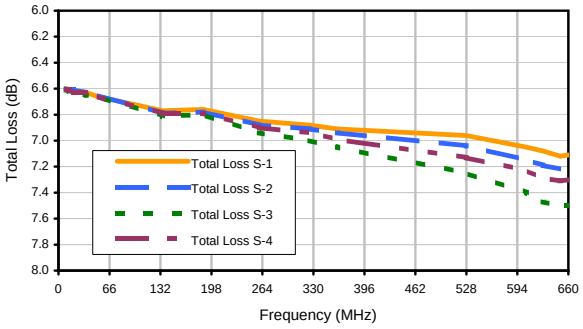
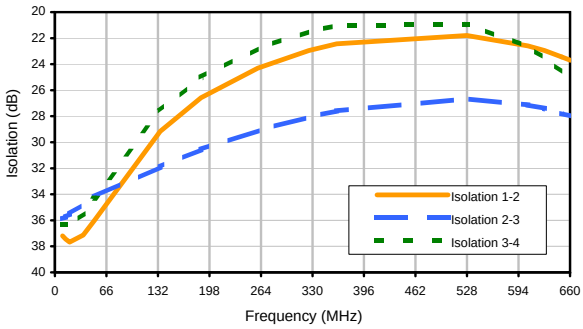
4 Way-0° Power Splitter/Combiner ZCSC-4-1W

Typical Performance Curves

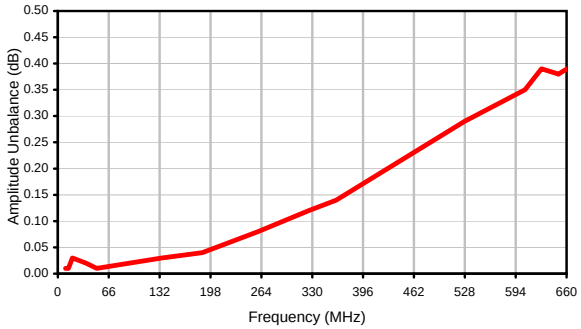
Total Loss



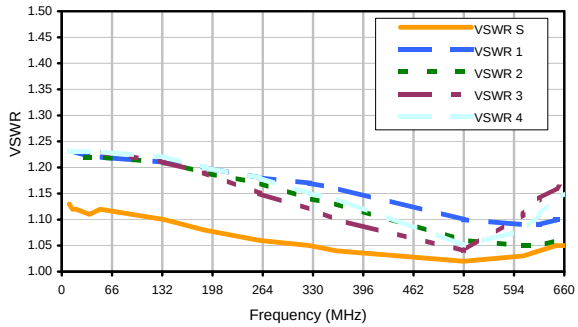
Isolation



Amplitude Unbalance



VSWR



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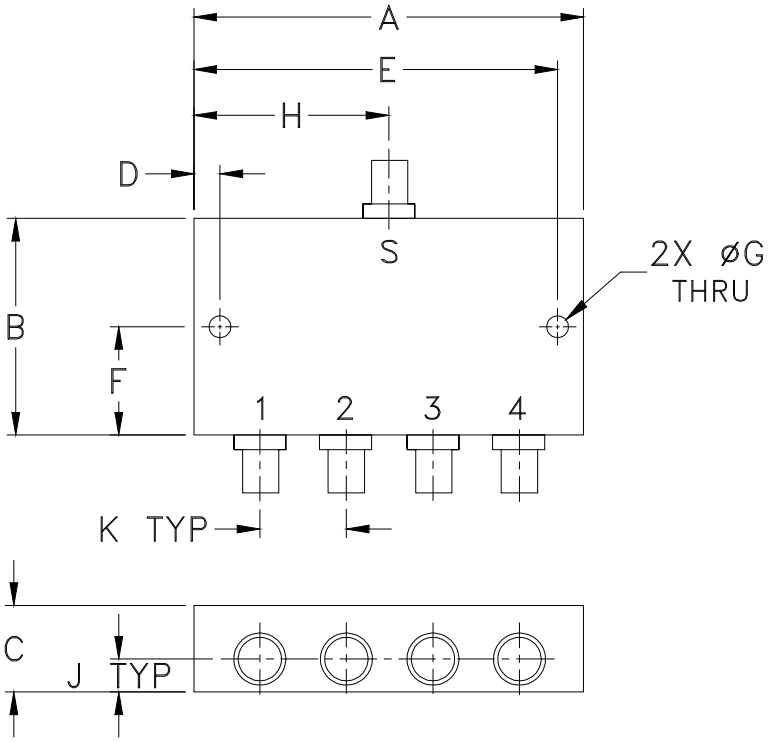
Case Style UU

Outline Dimensions

UU244



CASE#	A	B	C	D	E	F	G	H	J	K	WT. GRAMS
UU244	2.25 (57.15)	1.25 (31.75)	.50 (12.70)	.150 (3.81)	2.100 (53.34)	.62 (15.75)	.125 (3.18)	1.12 (28.45)	.19 (4.83)	.50 (12.70)	70

Dimensions are in inches (mm). Tolerances: 2 Pl. ± .03; 3 Pl. ± .015

Notes:

1. Case material: Aluminum alloy.
2. Case finish:
   For RoHS Case Styles: Clear chemical conversion coating, non-chrome or trivalent chrome based.
3. Refer to the individual model data sheet for the type of connectors available.

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Environmental Specifications ENV28

All Mini-Circuits products are manufactured under exacting quality assurance and control standards, and are capable of meeting published specifications after being subjected to any or all of the following physical and environmental test.

Specification	Test/Inspection Condition	Reference/Spec
Operating Temperature	-55° to 100°C Ambient Environment	Individual Model Data Sheet
Storage Temperature	-55° to 100° C Ambient Environment	Individual Model Data Sheet
Barometric Pressure	100,000 Feet	MIL-STD-202, Method 105, Condition D
Humidity	90% RH, 65°C Units may require bake-out after humidity to restore full performance.	MIL-STD-202, Method 103
Thermal Shock	-65° to 125°C, 5 cycles	MIL-STD-202, Method 107, Condition B
Vibration (High Frequency)	20g peak, 10-2000 Hz, 12 times in each of three perpendicular directions (total 36)	MIL-STD-202, Method 204, Condition D
Mechanical Shock	100g, 6ms sawtooth, 3 shocks each direction 3 axes (total 18)	MIL-STD-202, Method 213, Condition I

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