

Coaxial

Power Splitter/Combiner

ZC16PD-24-S+

16 Way-0° 50Ω 650 to 2450 MHz

Maximum Ratings

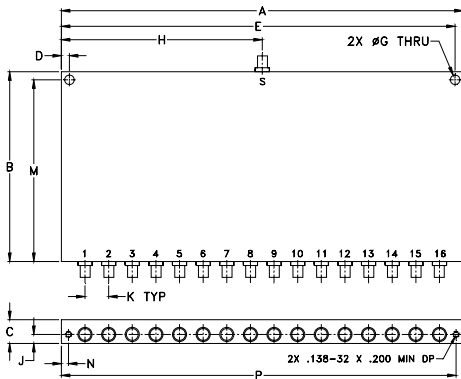
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	10W max.
Internal Dissipation	2.4W max.

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

Coaxial Connections

SUM PORT	S
PORT 1,2,3,.....,16	1,2,3,.....,16

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	G	H
8.50	4.00	.50	.170	8.330	.201	4.25
215.90	101.60	12.70	4.32	211.58	5.11	107.95
J	K	M	N	P	wt	
.19	.500	3.830	.150	8.350	grams	
4.83	12.70	97.28	3.81	212.09	450	

electrical schematic



Features

- wideband, 650 to 2450 MHz
- low insertion loss, 0.8 dB typ.
- good isolation, 25 dB typ.
- excellent output VSWR, 1.1:1 typ.
- up to 10W power input as splitter

Applications

- UHF
- cellular
- GPS
- communication systems
- PCS/DCS
- L-Band



CASE STYLE: UU640

Connectors	Model
SMA	ZC16PD-24-S+

+RoHS Compliant

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

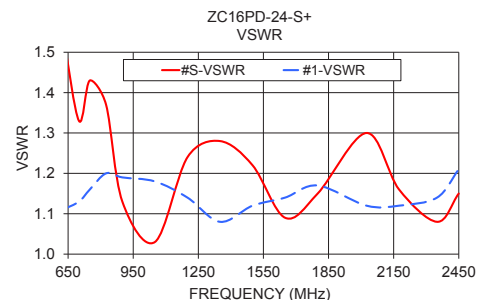
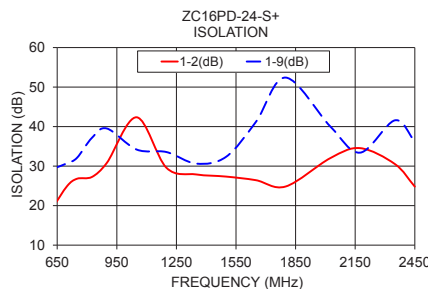
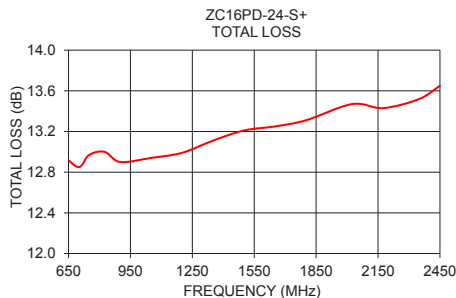
Electrical Specifications at 25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Frequency Range		650		2450	MHz
Insertion Loss Above 12 dB	650 - 2450	—	0.8	2.25	dB
Isolation	650 - 2450	15	20	—	dB
Phase Unbalance	650 - 2450	—	4	14	Degree
Amplitude Unbalance	650 - 2450	—	0.4	0.9	dB
VSWR (Port S)	650 - 950	—	1.3	1.9	:1
VSWR (Port 1-2)	650 - 2450	—	1.15	1.5	:1

Typical Performance Data

Freq. (MHz)	Total Loss ¹ (dB)	Amplitude Unbalance (dB)	Isolation (dB)		Phase Unbalance (deg.)	VSWR S	VSWR 1
			Adjacent	Opposite			
	S-1						
625.00	12.96	0.22	19.28	29.26	1.87	1.55	1.11
700.00	12.85	0.23	24.95	30.71	1.95	1.33	1.13
750.00	12.97	0.27	26.80	32.11	1.96	1.43	1.16
825.00	13.00	0.29	27.25	37.16	2.47	1.37	1.20
900.00	12.90	0.30	30.82	39.51	2.59	1.13	1.19
1050.00	12.94	0.32	42.35	34.18	2.10	1.03	1.18
1200.00	12.99	0.25	29.56	33.55	2.88	1.24	1.14
1350.00	13.11	0.24	27.88	30.62	3.24	1.28	1.08
1500.00	13.21	0.25	27.34	32.34	3.95	1.22	1.12
1650.00	13.25	0.28	26.43	41.17	4.09	1.09	1.14
1800.00	13.31	0.30	24.83	52.40	4.29	1.15	1.17
2025.00	13.47	0.26	32.02	40.01	4.51	1.30	1.12
2175.00	13.43	0.32	34.54	33.40	5.20	1.16	1.12
2350.00	13.52	0.38	30.51	41.58	5.27	1.08	1.14
2450.00	13.65	0.42	24.81	36.25	5.66	1.15	1.21

1. Total Loss = Insertion Loss + 12dB splitter loss.



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.
- 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



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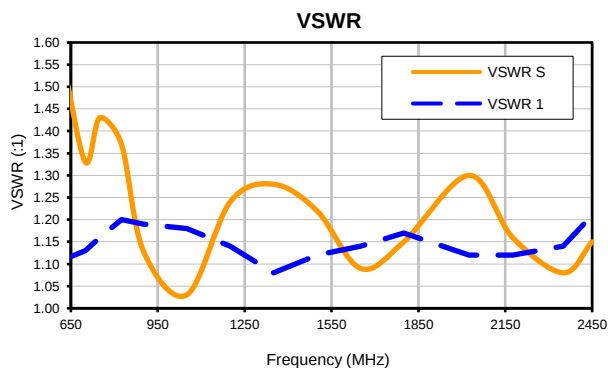
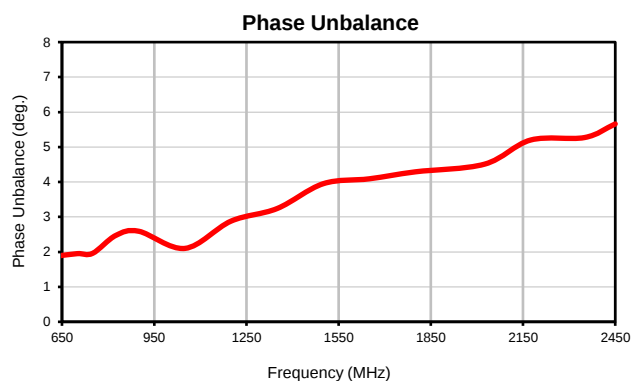
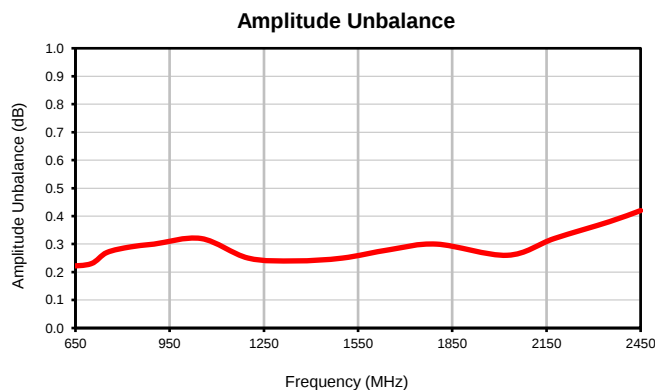
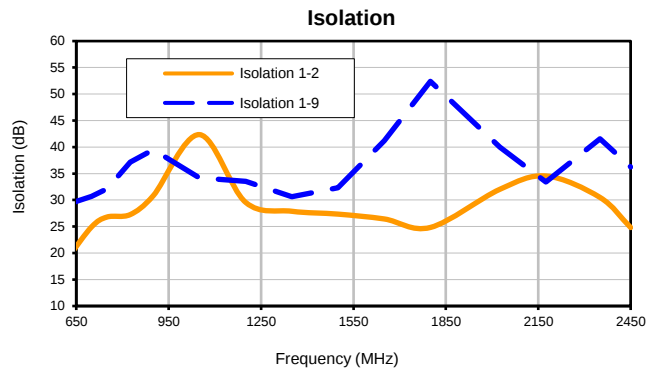
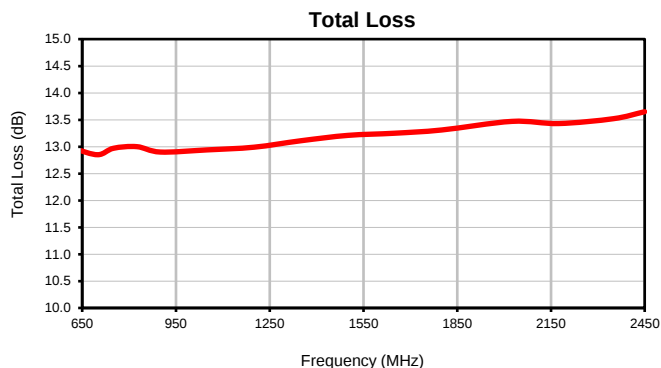
REV. G
M171494
ZC16PD-24+
HY/TD/CP/AM
181226

Typical Performance Data

FREQUENCY (MHz)	TOTAL LOSS ¹ (dB) S-1	AMPLITUDE UNBALANCE (dB)	ISOLATION (dB)		PHASE UNBALANCE (deg.)	FREQUENCY (MHz)	VSWR (:1)	
			1-2	1-9			S	1
625	12.96	0.22	19.28	29.26	1.87	625	1.55	1.11
700	12.85	0.23	24.95	30.71	1.95	700	1.33	1.13
750	12.97	0.27	26.80	32.11	1.96	750	1.43	1.16
825	13.00	0.29	27.25	37.16	2.47	825	1.37	1.20
900	12.90	0.30	30.82	39.51	2.59	900	1.13	1.19
1050	12.94	0.32	42.35	34.18	2.10	1050	1.03	1.18
1200	12.99	0.25	29.56	33.55	2.88	1200	1.24	1.14
1350	13.11	0.24	27.88	30.62	3.24	1350	1.28	1.08
1500	13.21	0.25	27.34	32.34	3.95	1500	1.22	1.12
1650	13.25	0.28	26.43	41.17	4.09	1650	1.09	1.14
1800	13.31	0.30	24.83	52.40	4.29	1800	1.15	1.17
2025	13.47	0.26	32.02	40.01	4.51	2025	1.30	1.12
2175	13.43	0.32	34.54	33.40	5.20	2175	1.16	1.12
2350	13.52	0.38	30.51	41.58	5.27	2350	1.08	1.14
2450	13.65	0.42	24.81	36.25	5.66	2450	1.15	1.21

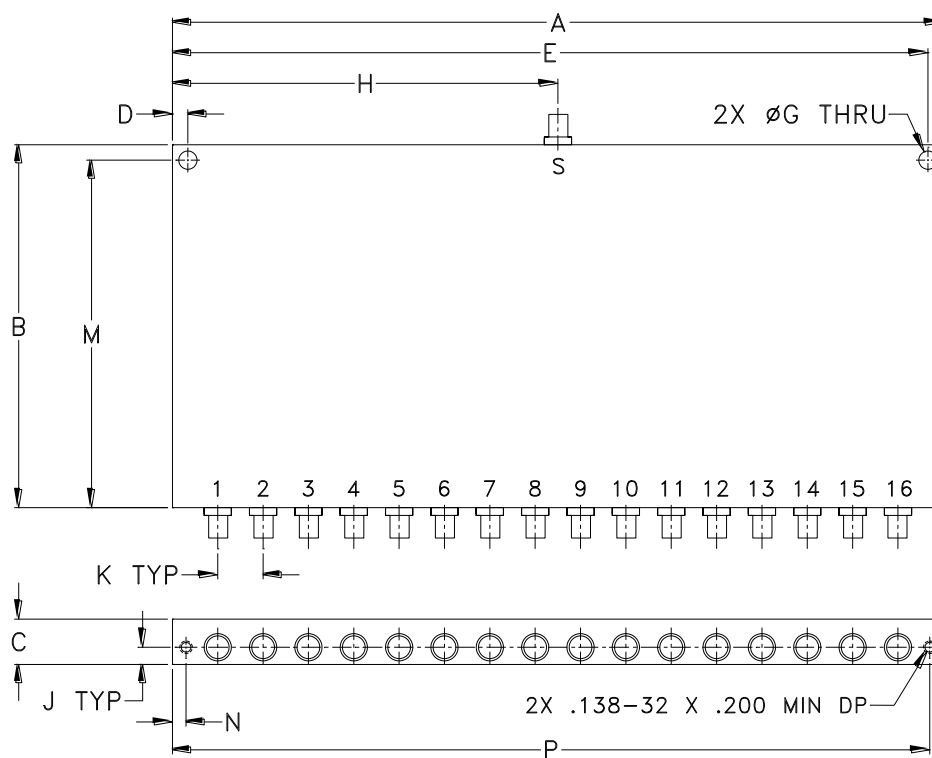
¹Total Loss = Insertion Loss + 12dB Splitter Loss

Typical Performance Curves



Outline Dimensions

UU640



CASE#	A	B	C	D	E	F	G	H	J	K	L	M
UU640	8.50 (215.90)	4.00 (101.60)	.50 (12.70)	.170 (4.32)	8.330 (211.58)	--	.201 (5.11)	4.25 (107.95)	.19 (4.83)	.500 (12.70)	--	3.830 (97.28)

CASE#	N	P	WT. GRAMS
UU640	.150 (3.81)	8.350 (212.09)	450

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

Notes:

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



P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site



Provides ACTUAL Data Instantly From MINI-CIRCUITS At: www.minicircuits.com

RF/IF MICROWAVE COMPONENTS



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