

Coaxial Frequency Mixer

Level 7 (LO Power +7 dBm) 0.2 to 500 MHz

ZP-10514+
ZP-10514



Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	50mW
IF Current	40mA

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

Coaxial Connections

LO	L
RF	R
IF	X

Features

- low conversion loss, 5.18 dB typ.
- high L-R isolation, 50 dB typ.
- rugged shielded case

Applications

- VHF/UHF
- instrumentation

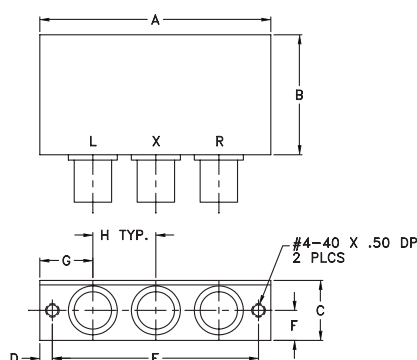
BNC version shown
CASE STYLE: GG60

Connectors	Model	Price	Qty.
BNC	ZP-10514+	\$62.95 ea.	(1-9)
SMB	ZP-10514-SMB(+)	\$62.95 ea.	(1-9)
SMA	ZP-10514-S(+)	\$77.95 ea.	(1-9)

+ 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.

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	wt
2.31	1.20	.60	.125	2.062	.30	.53	.63	grams
58.67	30.48	15.24	3.18	52.37	7.62	13.46	16.00	75.0

Electrical Specifications

FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)					
LO/RF f_L - f_U	IF	Mid-Band m		Total Range Max.		L		M		U		L		M		U	
		$\bar{X}$	σ			Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.
0.2-500	DC-500	5.18	0.10	7.0	8.5	55	45	50	35	35	30	50	40	36	30	30	20

1 dB COMP.: +1 dBm typ.

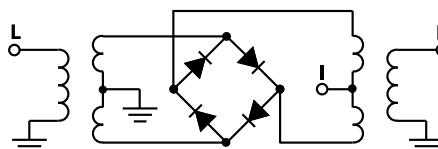
L = low range [f_L to $10 f_L$]
m = mid band [$2f_L$ to $f_U/2$]

M = mid range [$10 f_L$ to $f_U/2$]
U = upper range [$f_U/2$ to f_U]

Typical Performance Data

Frequency (MHz)		Conversion Loss (dB)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR RF Port (:1)	VSWR LO Port (:1)
RF	LO	LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm
0.20	30.20	8.36	59.54	51.65	1.28	1.46
0.50	30.50	6.85	57.86	50.98	1.26	1.41
2.00	32.00	6.13	56.96	50.94	1.25	1.39
10.00	40.00	5.43	55.15	50.65	1.24	1.48
32.45	62.45	5.43	51.84	49.39	1.21	1.45
64.69	94.69	5.61	48.95	47.53	1.20	1.42
100.00	70.00	5.53	47.52	46.53	1.20	1.39
145.30	115.30	5.74	45.03	44.48	1.19	1.38
177.55	147.55	5.41	42.85	42.69	1.17	1.36
200.00	170.00	5.73	41.70	41.72	1.17	1.37
225.92	195.92	5.49	40.73	40.61	1.16	1.36
258.16	228.16	5.71	39.01	39.00	1.16	1.42
290.41	260.41	5.50	38.47	38.33	1.16	1.43
322.65	292.65	5.79	37.73	37.34	1.19	1.51
354.90	324.90	5.52	36.24	35.86	1.20	1.53
387.14	357.14	5.63	35.26	34.80	1.22	1.58
419.39	389.39	5.74	35.03	34.31	1.24	1.58
435.51	405.51	5.66	35.44	34.71	1.26	1.62
467.75	437.75	6.15	35.03	34.13	1.30	1.67
500.00	470.00	5.98	34.57	33.52	1.32	1.65

Electrical Schematic



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IF/RF MICROWAVE COMPONENTS

For detailed performance specs & shopping online see web site

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.

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Performance Charts

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