

Frequency Mixer

Level 13 (LO Power +13 dBm) 1600 to 6000 MHz

ZX05-C60MH+



CASE STYLE: FL905

Connectors	Model	Price	Qty.
SMA	ZX05-C60MH-S+	\$39.95 ea.	(1-24)

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

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	200mW
IF Current	40mA
Permanent damage may occur if any of these limits are exceeded.	

Coaxial Connections

LO	1
RF	2
IF	3

Features

- rugged construction
- small size
- low conversion loss
- high L-R isolation
- protected by US Patents 6,790,049 & 7,027,795

Applications

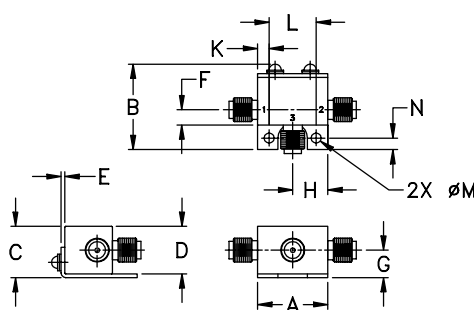
- cellular
- PCS
- instrumentation
- satellite communication

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

FREQUENCY (MHz)		CONVERSION LOSS (dB)			LO-RF ISOLATION (dB)		LO-IF ISOLATION (dB)		IP3 at center band (dBm)
LO/RF	IF	$\bar{X}$	σ	Max.	Typ.	Min.	Typ.	Min.	
$f_L - f_U$									Typ.
1600-6000	DC-2000								
1600-4400	DC-2000	6.9	0.1	8.5	32	25	17	—	15
4400-6000	DC-2000	6.0	0.1	8.5	22	18	15	—	15

1 dB COMP.: +9 dBm typ.
Conversion loss specification at 30 MHz IF

Outline Drawing



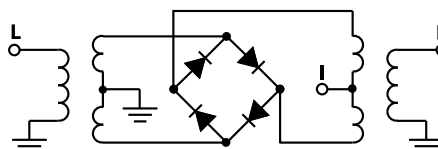
Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
.74	.90	.54	.50	.04	.16	.29
18.80	22.86	13.72	12.70	1.02	4.06	7.37
H	J	K	L	M	N	wt
.37	—	.122	.496	.106	.122	grams
9.40	—	3.10	12.60	2.69	3.10	20.0

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 +13dBm	LO +13dBm	LO +13dBm	LO +13dBm	LO +13dBm
1600.10	1630.11	6.32	32.49	18.14	2.43	4.46
1833.43	1863.44	5.76	41.99	21.78	2.78	2.60
2066.77	2096.78	5.68	35.16	21.70	2.87	2.19
2300.10	2330.11	5.41	31.98	19.36	2.77	1.89
2533.43	2563.44	5.48	32.29	17.36	2.05	1.74
2766.77	2796.78	5.64	34.55	17.21	2.45	2.02
3000.10	3030.11	6.43	33.53	16.81	3.56	2.48
3233.43	3263.44	6.59	35.61	16.53	3.08	3.06
3466.77	3496.78	6.89	38.01	15.49	2.92	2.92
3700.10	3730.11	6.72	44.83	14.89	2.97	3.94
4050.10	4080.11	7.20	39.13	17.66	3.16	4.49
4283.43	4313.44	6.55	37.60	18.76	2.55	7.24
4505.10	4535.11	6.18	34.44	19.30	2.72	7.03
4718.51	4748.52	6.92	34.29	20.17	2.79	3.81
4931.93	4961.94	6.00	28.02	23.23	2.19	1.92
5145.34	5175.35	5.47	23.61	26.95	2.42	1.62
5358.76	5388.77	5.62	20.69	25.90	2.71	1.60
5572.17	5602.18	5.55	19.92	23.53	2.28	2.03
5785.59	5815.60	5.86	20.43	15.76	2.02	4.09
5999.00	5968.99	6.52	20.98	12.45	3.04	8.15

Electrical Schematic



Mini-Circuits®
ISO 9001 ISO 14001 AS 9100 CERTIFIED

For detailed performance specs & shopping online see web site

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at minicircuits.com

IF/RF MICROWAVE COMPONENTS

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. D
M108294
ZX05-C60MH
RVN/TD/CP/AM
091007
Page 1 of 2

