

Coaxial Frequency Mixer

ZAY-2

Level 23 (LO Power +23 dBm) 10 to 1000 MHz



Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	350mW
IF Current	40mA

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

Coaxial Connections

LO	1
RF	3
IF	2

Features

- low conversion loss, 6.89 dB typ.
- good L-R isolation, 40 dB typ.; L-I isolation, 35 dB typ.
- wideband, 10 to 1000 MHz
- rugged shielded case

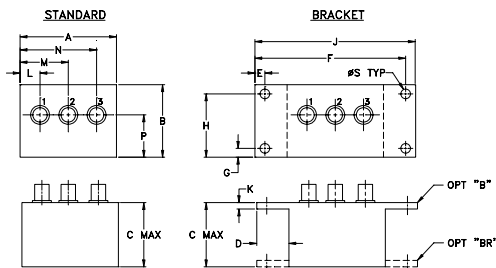
Applications

- VHF/UHF
- cellular
- instrumentation

CASE STYLE: M22

Connectors	Model	Price	Qty.
BNC	ZAY-2	\$84.95	(1-9)
BRACKET (OPTION "B")		\$5.00	(1+)
BRACKET (OPTION "BR")		\$1.50	(1+)

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
2.25	1.38	1.24	.50	.150	3.100	.138	1.238
57.15	35.05	31.50	12.70	3.81	78.74	3.51	31.45

J	K	L	M	N	P	S	wt
3.25	.10	.40	1.15	1.86	.64	.150	grams
82.55	2.54	10.16	29.21	47.24	16.26	3.81	74.0

Electrical Specifications

FREQUENCY (MHz)	CONVERSION LOSS (dB)	LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)												
		Mid-Band m			Total Range			L		M		U		L		M		U		
L.O/RF f_L - f_U	IF \bar{X} σ Max.	\bar{X}	σ	Max.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	
10-1000	DC-1000	6.89	0.22	8.5	10.0	50	35	40	30	35	25	50	35	35	25	25	20			

1 dB COMP: +15 dBm typ.

L = low range [f_L to 10 f_L]

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

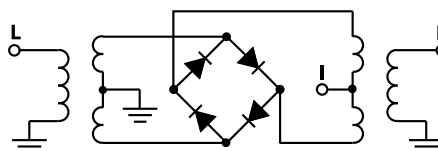
U = upper range [$f_U/2$ to f_U]

m = mid band [$2f_L$ to $f_U/2$]

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 +23dBm	LO +23dBm	LO +23dBm	LO +23dBm	LO +23dBm
10	40	6.13	65.06	52.21	1.23	2.58
46	76	6.14	59.96	46.11	1.24	2.50
82	112	6.12	58.44	44.51	1.26	2.27
100	130	6.25	55.09	43.78	1.26	2.77
140	110	6.17	57.24	43.46	1.30	2.28
220	190	6.22	53.40	40.24	1.34	2.77
260	230	6.30	51.55	39.88	1.35	2.46
300	270	6.30	52.05	39.57	1.36	2.58
380	350	6.49	49.73	38.39	1.42	3.31
420	390	6.53	48.08	35.26	1.40	2.06
460	430	6.69	47.93	34.15	1.42	3.71
550	520	6.80	46.48	34.77	1.54	3.78
600	570	6.62	48.09	35.02	1.70	2.25
700	670	6.71	48.67	29.48	2.47	2.58
750	720	7.29	51.34	31.67	2.93	2.87
800	770	7.73	52.36	32.74	3.20	3.29
850	820	8.52	52.45	40.90	3.61	2.54
900	870	8.39	53.03	41.98	3.82	4.19
950	920	9.05	59.51	44.76	4.33	2.46
1000	970	9.18	52.01	46.23	4.19	3.20

Electrical Schematic



Mini-Circuits
ISO 9001 ISO 14001 AS 9100 CERTIFIED

For detailed performance specs & shopping online see web site

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IF/RF MICROWAVE COMPONENTS

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