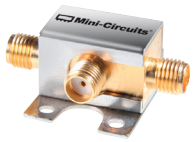
Coaxial

Frequency Mixer

ZX05-10L-S+

Level 4 (LO Power +4 dBm) 10 to 1000 MHz



CASE STYLE: FL905

Connectors	Model
SMA	ZX05-10L-S+

+RoHS Compliant

The +Suffix identifies 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	50mW
IF Current	40mA

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

Coaxial Connections

LO	1
RF	2
IF	3

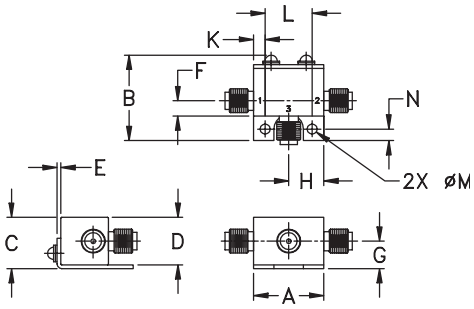
Features

- rugged construction
- small size
- low conversion loss
- high L-R isolation
- protected by US Patents, 6,133,525; 6,790,049 & 6,947,717

Applications

- cellular
- PCS
- instrumentation
- satellite communication

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

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

FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)						IP3 at center band (dBm)
		Mid-Band m			Total Range	L		M		U		L		M		U		
LO/RF f_L-f_U	IF	$\overline{X}$	σ	Max.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.
10-1000	DC-800	7.2	0.1	8.2	8.8	70	55	60	40	47	37	40	26	37	20	24	13	16

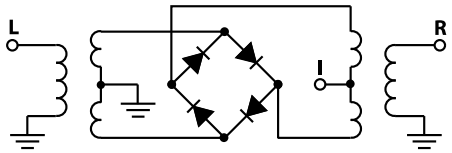
1 dB COMP.: +1 dBm typ.
Conversion Loss increases when IF is above 150 MHz.

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

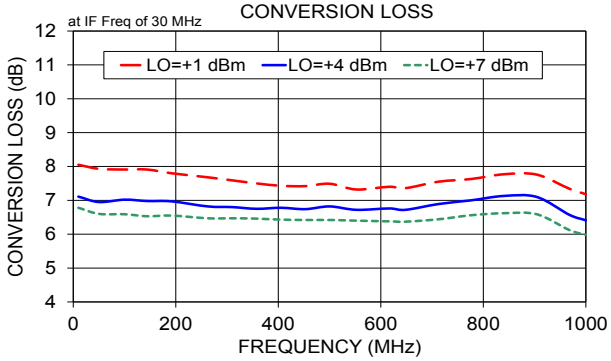
Frequency (MHz)		Conversion Loss (dB)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR RF Port (:1)	VSWR LO Port (:1)
RF	LO	LO +4dBm	LO +4dBm	LO +4dBm	LO +4dBm	LO +4dBm
10.10	40.10	7.11	73.60	61.44	1.50	1.25
50.10	80.10	6.95	64.82	48.24	1.48	1.20
100.10	70.10	7.02	60.58	42.69	1.47	1.19
143.85	113.85	6.98	58.32	40.57	1.45	1.19
191.35	161.35	6.97	56.93	39.20	1.44	1.18
262.60	232.60	6.82	55.91	37.54	1.41	1.20
310.10	280.10	6.80	55.22	36.17	1.39	1.24
357.60	327.60	6.75	54.50	34.01	1.39	1.25
405.10	375.10	6.78	53.05	31.84	1.38	1.27
452.60	422.60	6.74	51.42	30.10	1.37	1.32
500.10	470.10	6.82	49.97	27.89	1.38	1.37
552.10	522.10	6.72	51.89	26.26	1.34	1.36
616.10	586.10	6.76	66.73	24.80	1.30	1.44
648.10	618.10	6.72	57.27	24.21	1.29	1.48
712.10	682.10	6.89	47.16	23.25	1.33	1.52
776.10	746.10	7.00	47.22	22.14	1.38	1.57
840.10	810.10	7.13	50.02	20.82	1.42	1.57
904.10	874.10	7.10	58.49	19.62	1.46	1.49
968.10	938.10	6.57	57.19	18.18	1.42	1.51
1000.10	970.10	6.41	49.70	17.55	1.41	1.54

Electrical Schematic

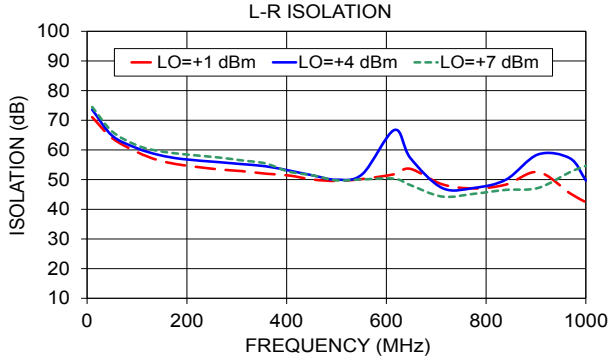


Notes
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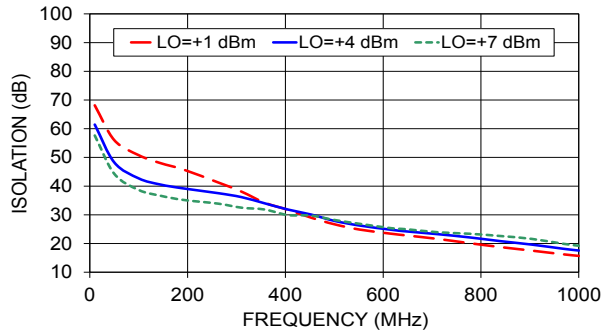
ZX05-10L-S+
CONVERSION LOSS



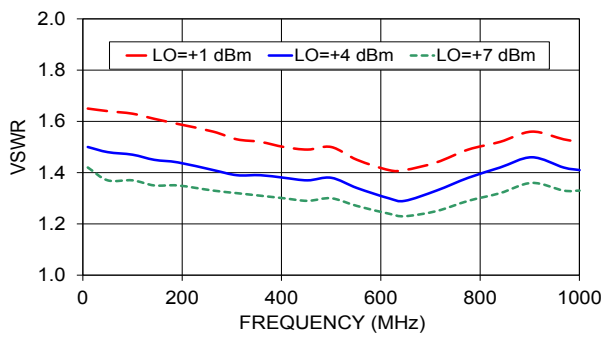
ZX05-10L-S+
L-R ISOLATION



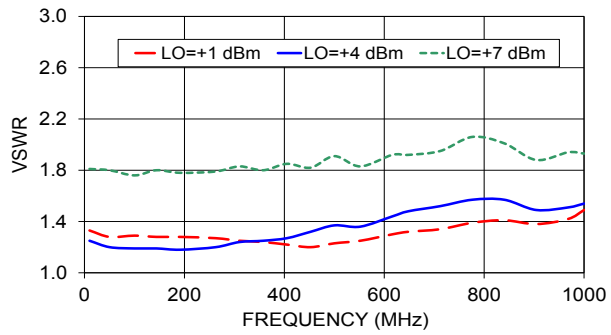
ZX05-10L-S+
L-I ISOLATION



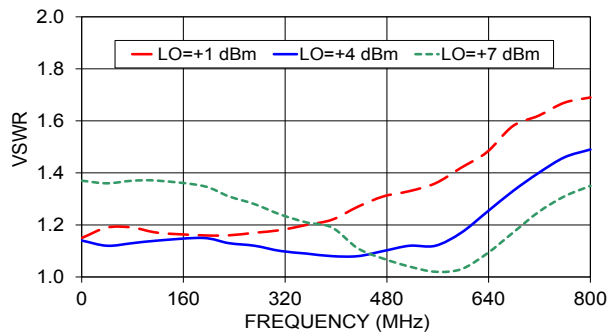
ZX05-10L-S+
RF VSWR



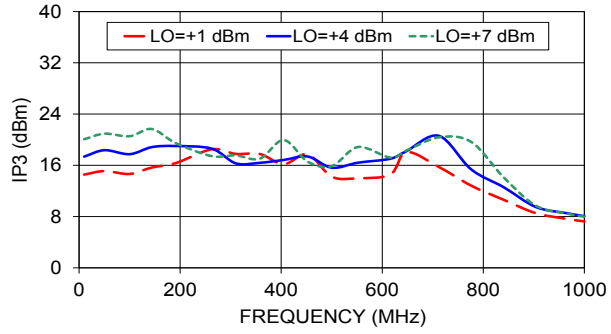
ZX05-10L-S+
LO VSWR



ZX05-10L-S+
IF VSWR



ZX05-10L-S+
IP3



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