

X2 Frequency Multiplier

50Ω Output 2200 to 3800 MHz

Maximum Ratings

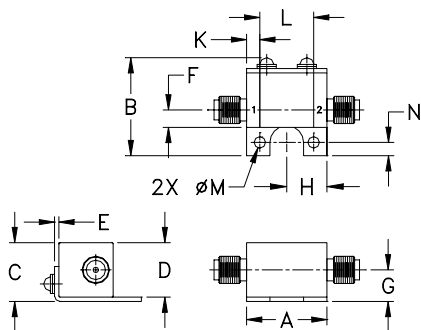
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Input Power, 25°C	23 dBm

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

Coaxial Connections

INPUT	2
OUTPUT	1

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	19.0

Features

- broadband
- low conversion loss, 10.5 dB typ.
- rugged construction
- protected by US Patent 6,790,049

Applications

- synthesizers
- local oscillators

ZX90-2-19+



CASE STYLE: JA1242

Connectors	Model	Price	Qty.
SMA	ZX90-2-19-S+	\$35.95	(1-9)

+ 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.

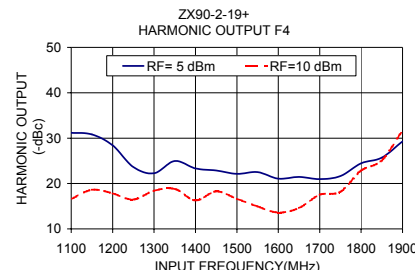
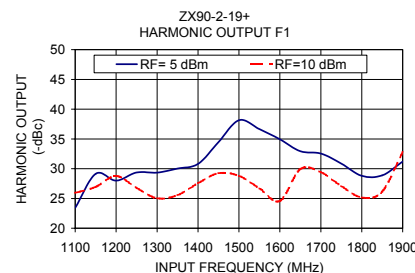
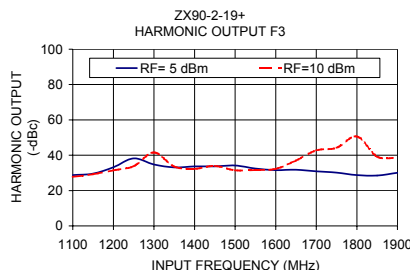
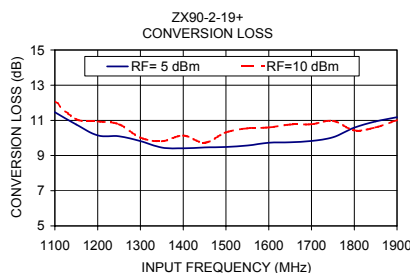
Electrical Specifications

MULTIPLICATION FACTOR	FREQUENCY (MHz)		INPUT POWER (dBm)		CONVERSION LOSS (dB)		*HARMONIC OUTPUT (dBc)					
	F1 Input	F2 Output	Min.	Max.	Typ.	Max.	F1 Typ.	F1 Min.	F3 Typ.	F3 Min.	F4 Typ.	F4 Min.
2	1100-1900	2200-3800	5	10	10.5	14.5	27	20	30	23	17	11

* Harmonics of input frequency below the power level of F2

Typical Performance Data

INPUT RF= 5 dBm					INPUT RF= 10 dBm			
Input Frequency (MHz)	Conversion Loss (dB)	Harmonic Output Below F2 (-dBc)			Conversion Loss (dB)	Harmonic Output Below F2 (-dBc)		
		F1	F3	F4		F1	F3	F4
1100.00	11.46	23.43	28.77	31.18	12.10	25.95	27.81	16.56
1150.00	10.76	29.15	29.59	30.82	11.06	26.94	29.25	18.64
1200.00	10.15	28.00	33.16	28.41	10.94	28.77	31.44	17.83
1250.00	10.10	29.37	38.22	23.66	10.78	26.78	33.74	16.46
1300.00	9.82	29.33	34.73	22.27	10.02	25.03	41.56	18.39
1350.00	9.45	30.03	33.13	24.97	9.81	25.56	33.58	18.82
1400.00	9.41	30.81	33.72	23.31	10.14	27.56	32.27	16.29
1450.00	9.46	34.44	33.65	22.87	9.73	29.23	33.94	18.28
1500.00	9.49	38.13	34.21	22.14	10.31	28.80	31.51	16.64
1550.00	9.57	36.65	32.46	22.53	10.55	26.71	31.65	14.95
1600.00	9.73	34.93	31.55	21.08	10.60	24.56	32.26	13.62
1650.00	9.75	32.94	31.83	21.46	10.76	29.92	36.99	14.61
1700.00	9.83	32.54	30.91	20.96	10.78	29.42	42.75	17.52
1750.00	10.04	30.85	30.19	21.65	10.97	27.09	44.22	18.17
1800.00	10.59	28.81	28.76	24.46	10.43	25.15	50.65	22.83
1850.00	10.94	28.88	28.49	25.71	10.60	26.14	39.20	25.09
1900.00	11.18	31.20	30.07	29.26	11.01	32.76	38.51	31.67



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