

Plug-In Frequency Mixer

Level 10 (LO Power +10 dBm) 0.05 to 2000 MHz

SRA-220+



Generic photo used for illustration purposes only

CASE STYLE: A01

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.

Pin Connections

LO	8
RF	1
IF	3
GROUND	2,5,6,7
CASE GROUND	2,5,6,7
NOT USED	4

Features

- wideband, 0.05 to 2000 MHz
- low conversion loss, 5.59 dB typ.
- high L-R isolation, L-I isolation, 40 dB typ.
- hermetic, metal case

Applications

- GPS
- cellular
- defense & aeronautical systems
- military, hi-rel applications

+RoHS Compliant

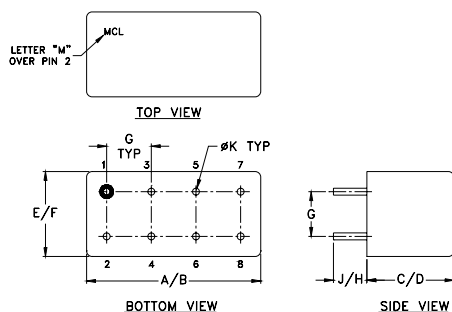
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

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	Max.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.
0.05-2000	.05-500	5.59	.11	8.0	9.0	25	20	40	30	30	20	25	20	40	30	25	15

1 dB COMP.: +5 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 [$2 f_L$ to $f_U/2$]

Outline Drawing



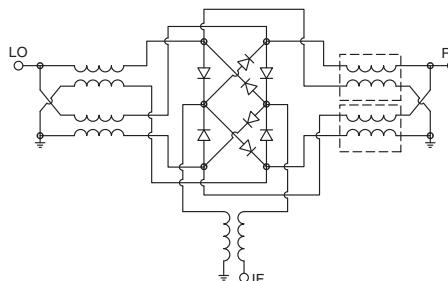
Outline Dimensions (inch/mm)

A	B	C	D	E	F
.770	.800	.385	.400	.370	.400
19.56	20.32	9.78	10.16	9.40	10.16
G	H	J	K	wt	
.200	.20	.14	.031	grams	
5.08	5.08	3.56	0.79	5.2	

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 +10dBm	LO +10dBm	LO +10dBm	LO +10dBm	LO +10dBm
0.05	30.05	6.31	20.56	20.32	1.42	1.38
1.00	31.00	5.23	37.02	35.22	1.42	1.38
5.00	35.00	5.34	41.42	40.80	1.44	1.34
20.00	50.00	5.57	42.73	42.42	1.45	1.41
50.00	80.00	5.59	42.75	42.09	1.44	1.37
100.00	70.00	5.50	42.49	40.87	1.49	1.34
153.89	123.89	5.49	42.03	38.92	1.63	1.30
230.81	200.81	5.78	41.75	36.48	2.03	1.24
307.73	277.73	5.75	41.49	34.62	2.73	1.22
500.00	470.00	5.97	38.13	32.70	3.06	1.24
615.42	585.42	6.37	40.61	34.50	3.23	1.30
692.34	662.34	6.90	42.63	35.22	3.35	1.25
846.18	816.12	7.39	40.51	34.89	2.98	1.34
1076.90	1047.20	7.31	36.30	27.82	2.40	1.38
1230.80	1200.80	6.91	32.05	23.22	1.60	1.36
1307.70	1277.80	6.81	30.96	21.56	1.20	1.31
1461.50	1431.70	7.49	24.40	19.73	1.04	1.35
1615.40	1585.50	7.29	34.31	19.71	1.19	1.37
1769.20	1739.20	7.80	38.84	18.84	1.31	1.43
2000.00	1970.30	8.89	31.97	19.56	1.41	1.56

Electrical Schematic



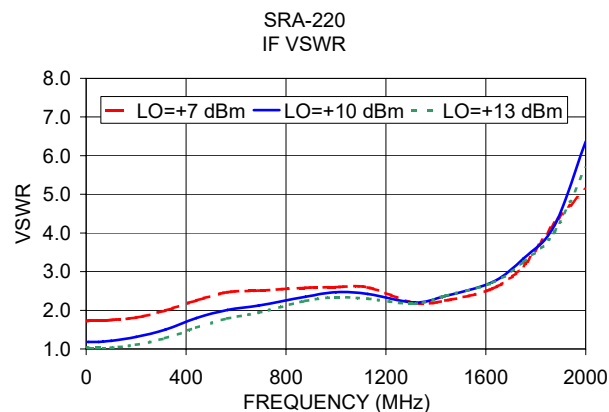
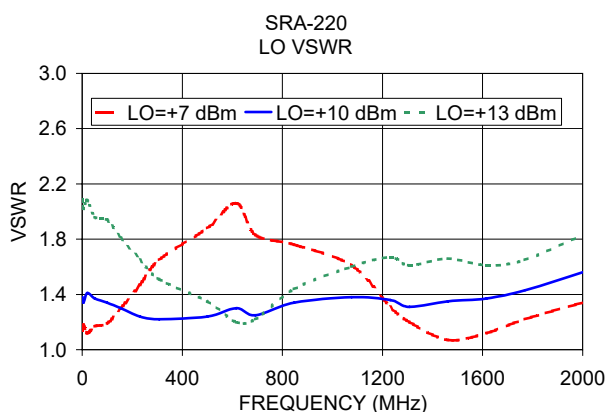
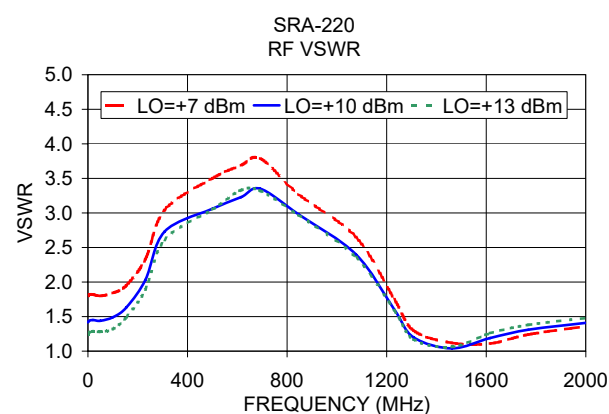
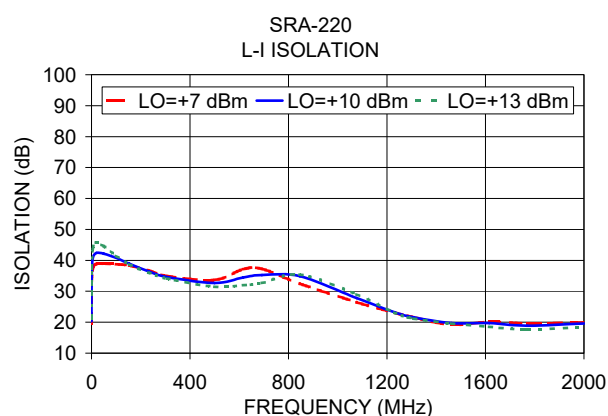
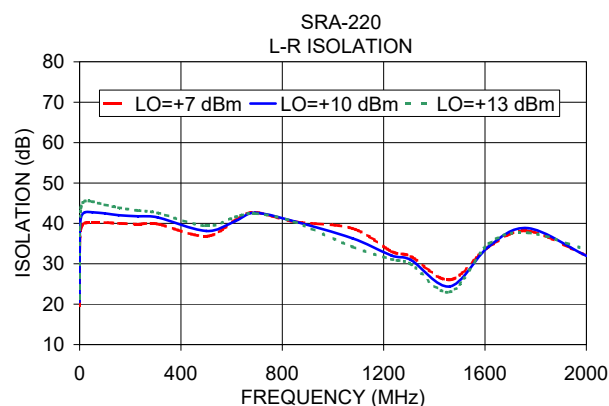
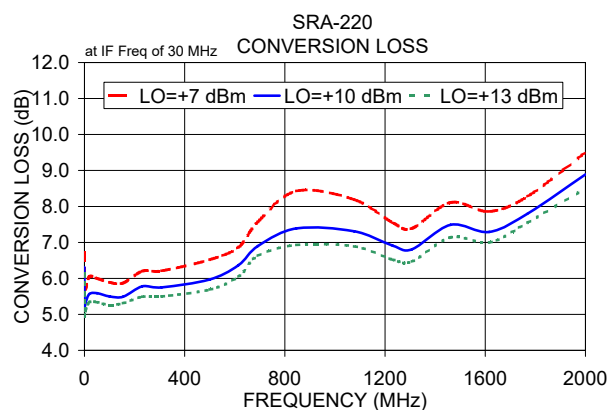
Notes

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