

Coaxial

# Voltage Controlled Oscillator

## ZX95-675+

Wide Band 500 to 750 MHz

### Features

- low phase noise
- low pushing
- low pulling
- protected by US patent 6,790,049

### Applications

- r & d
- lab
- instrumentation
- wireless communications
- mobile TV



CASE STYLE: GB956

Connectors	Model	Price	Qty.
SMA	ZX95-675-S+	\$49.95 ea.	(1-9)

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

### Electrical Specifications

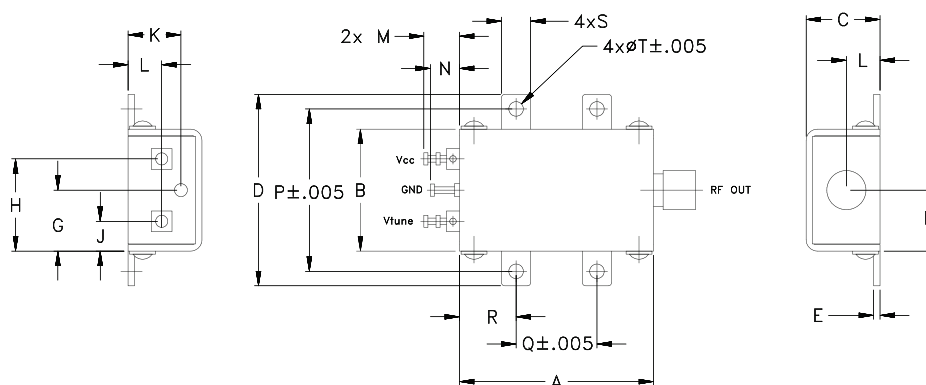
MODEL NO.	FREQ. (MHz)		POWER OUTPUT (dBm)	PHASE NOISE dBc/Hz SSB at offset frequencies, kHz				TUNING					NON HARMONIC SPURIOUS (dBc)	HARMONICS (dBc)		PULLING pk-pk @ 12 dB (MHz)	PUSHING (MHz/V)	DC OPERATING POWER				
	Min.	Max.		Typ.	1	10	100	1000	VOLTAGE RANGE (V)		SENSI- TIVITY (MHz/V)	PORT CAP (pF)		3 dB MODULATION BANDWIDTH (MHz)	Typ.			Typ.	Typ.	Typ.	Vcc (volts)	Current (mA)
	Min.	Max.							Min.	Max.												
ZX95-675+	500	750	+6	-88	-113	-136	-156	0.5	28	5-14	85	25	-90	-20	-	0.8	1.5	5	37			

### Maximum Ratings

Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	7V
Absolute Max. Tuning Voltage (Vtune)	30V
All specifications	50 ohm system

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

### Outline Drawing



### Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	wt.
1.20	.75	.46	1.18	.04	.38	.38	.57	.18	.33	.21	.22	.18	1.00	.50	.35	.18	.106	grams
30.48	19.05	11.68	29.97	1.02	9.65	9.65	14.48	4.57	8.38	5.33	5.59	4.57	25.40	12.70	8.89	4.57	2.69	35.0



For detailed performance specs & shopping online see web site

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**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](http://www.minicircuits.com/MCLStore/terms.jsp).

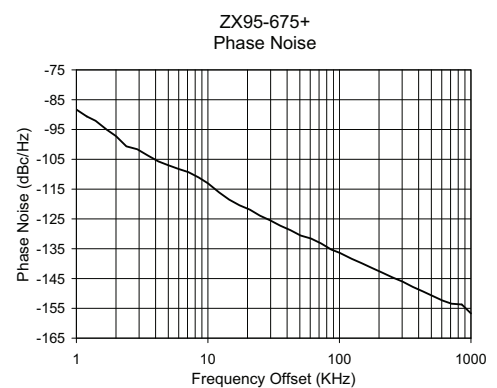
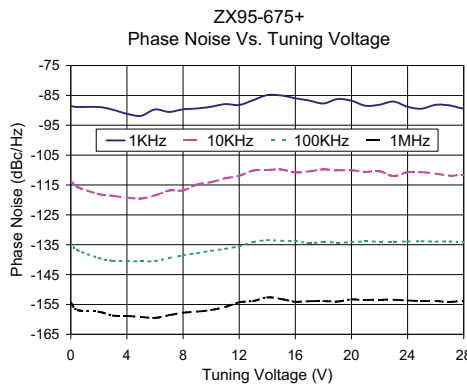
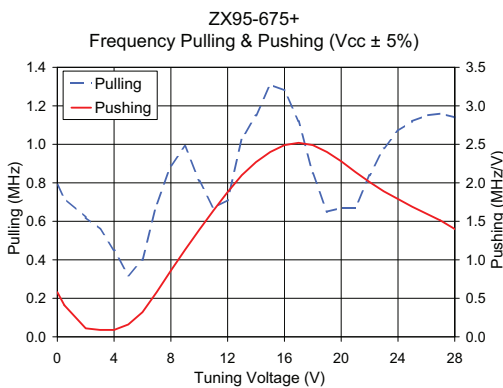
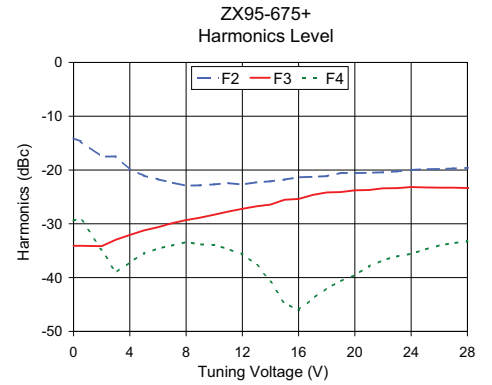
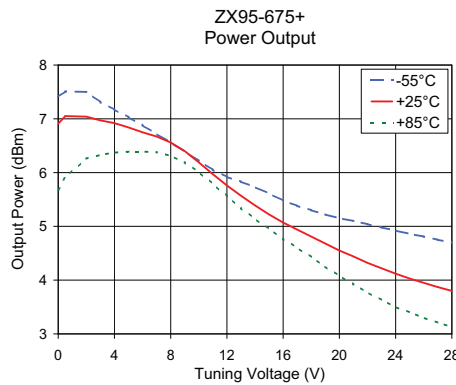
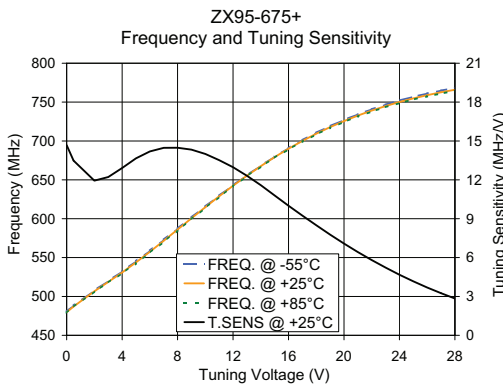
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M113462  
EDR-8789F2  
ZX95-675+  
RAV  
120830  
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# Performance Data & Curves\*

# ZX95-675+

V TUNE	TUNE SENS (MHz/V)	FREQUENCY (MHz)			POWER OUTPUT (dBm)			Icc (mA)	HARMONICS (dBc)			FREQ. PUSH (MHz/V)	FREQ. PULL (MHz)	PHASE NOISE (dBc/Hz) at offsets				FREQ OFFSET (KHz)	PHASE NOISE at 625 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	14.68	480.8	479.7	479.1	7.41	6.91	5.68	26.39	-14.1	-34.1	-29.4	0.58	0.79	-88.6	-113.8	-134.8	-154.4	1.0	-88.32
0.50	13.48	488.2	487.1	486.7	7.51	7.05	5.91	26.61	-14.7	-34.1	-29.0	0.41	0.72	-88.9	-115.8	-136.9	-156.9	2.0	-97.23
2.00	11.94	507.8	506.7	506.3	7.50	7.04	6.26	27.12	-17.5	-34.2	-34.8	0.11	0.62	-88.9	-118.1	-139.4	-157.4	3.5	-103.74
3.00	12.22	520.0	518.6	517.9	7.31	6.97	6.33	27.23	-17.5	-33.0	-39.1	0.09	0.56	-89.8	-118.6	-140.4	-158.7	6.0	-108.25
4.00	12.91	532.4	530.8	529.9	7.17	6.92	6.37	27.27	-19.9	-32.1	-37.2	0.09	0.45	-91.2	-119.3	-140.5	-158.9	8.5	-111.08
5.00	13.66	545.4	543.8	542.6	7.03	6.84	6.39	27.24	-21.1	-31.2	-35.5	0.16	0.32	-91.9	-119.5	-140.6	-159.2	10.0	-113.05
6.00	14.19	559.0	557.4	556.2	6.88	6.75	6.39	27.12	-21.7	-30.6	-34.6	0.32	0.40	-89.7	-118.5	-140.4	-159.5	20.8	-121.88
7.00	14.47	573.0	571.6	570.4	6.72	6.67	6.38	26.95	-22.3	-29.9	-34.1	0.58	0.69	-90.5	-116.9	-139.5	-158.6	35.5	-127.28
9.00	14.33	601.6	600.5	599.4	6.39	6.40	6.19	26.56	-22.8	-28.9	-33.8	1.13	0.99	-89.4	-114.8	-137.9	-157.4	60.7	-131.57
10.00	14.00	615.8	614.9	613.8	6.22	6.19	6.01	26.39	-22.7	-28.3	-33.9	1.39	0.81	-88.8	-114.0	-137.0	-156.8	86.7	-135.28
11.00	13.52	629.6	628.9	627.9	6.05	5.97	5.79	26.26	-22.4	-27.7	-34.7	1.64	0.67	-87.9	-112.8	-136.4	-155.9	100.0	-136.33
13.00	12.32	656.0	655.4	654.7	5.83	5.57	5.34	26.10	-22.3	-26.7	-37.5	2.10	1.03	-86.6	-110.2	-134.1	-153.9	148.1	-139.87
15.00	10.79	679.9	679.3	678.6	5.61	5.22	4.95	26.07	-21.8	-25.5	-44.8	2.40	1.31	-85.0	-109.8	-133.7	-153.2	177.0	-141.47
17.00	9.24	701.1	700.1	699.2	5.38	4.94	4.60	26.01	-21.3	-24.6	-43.9	2.52	1.12	-86.7	-110.4	-134.4	-153.9	211.6	-143.01
19.00	7.77	719.2	717.8	716.8	5.22	4.68	4.25	25.99	-20.5	-24.1	-40.7	2.40	0.65	-86.2	-110.2	-134.3	-154.0	302.4	-146.03
21.00	6.42	734.2	732.7	731.5	5.10	4.44	3.92	26.02	-20.5	-23.7	-38.0	2.14	0.67	-88.5	-110.6	-133.9	-153.5	361.5	-147.80
23.00	5.22	746.7	744.9	743.6	4.98	4.22	3.63	26.06	-20.3	-23.4	-36.1	1.89	0.98	-87.1	-112.0	-134.0	-153.5	507.5	-150.78
25.00	4.17	756.8	754.8	753.3	4.86	4.03	3.40	26.11	-19.8	-23.2	-34.8	1.69	1.12	-89.5	-110.7	-133.8	-153.9	606.7	-152.36
27.00	3.25	764.8	762.6	761.1	4.75	3.87	3.21	26.17	-19.7	-23.3	-33.6	1.51	1.16	-88.4	-111.8	-133.9	-154.2	851.6	-153.71
28.00	2.84	768.1	765.9	764.2	4.70	3.80	3.13	26.20	-19.6	-23.4	-33.3	1.40	1.14	-89.4	-111.6	-134.2	-153.8	1000.0	-156.70

\*at 25°C unless mentioned otherwise



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