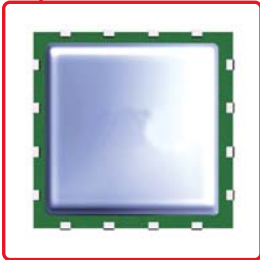




Voltage Controlled Oscillators



Abracon designs and manufactures custom, high performance **Voltage Controlled Oscillators (VCO)** and **Coaxial Resonator Oscillators (CRO)** for commercial communications systems.

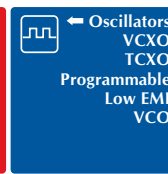
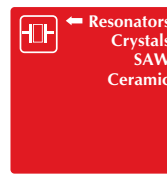
ACV2 Series

Abracon's ACV2 series of oscillator covers **both narrow band and octave bandwidths**. Designed for a variety of applications, these units provide excellent phase noise and linearity with a range of package styles, supply voltages, and tuning sensitivities. Fully automated assembly and strict process controls ensure the highest level of quality and reliability, with complete characterization available for each part.



ACV2 Series 0.3 x 0.3 x 0.8 / 0.5 x 0.5 x 0.22in / 0.91 x 0.91 x 0.22in
NEW • 100MHz - 7.5GHz

ACV2 Series Part Number	Freq. (MHz)	Tuning Voltage (Vdc)	Tuning Sens (MHz/V)	VCC (V)	ICC (mA)	POUT (dBm)	2ND Harm. (dBc)	TYP PN @ 10KHz (dBc/Hz)
ACV2-100-42	42-46	0.5-4.5V	3	+5	8	-1+/-2	-25	-122
ACV2-100-85	85-88	1.0-4.0V	2-4	+8	20	9+/-2	-10	-144
ACV2-100-130	130-150	0.5-6V	4-8	+9	18	6+/-2	-10	-102 to -107
ACV2-100-400	400-800	0-12V	43	+5	15	5+/-3	-7	-104
ACV2-100-502	502-529	0.5-4.5V	10	+5	11	0+/-3	-10	-116
ACV2-100-660	660	1-4V	12	8	20	7+/-2	-10	-111
ACV2-100-800	800-1600	0-20V	25-65	+12	35	15+/-3	-10	-100
ACV2-100-950	950-1900	0-12V	91	+10	15	5.5+/-2.5	-8	-97
ACV2-100-1000	1000-2000	0-20V	47-78	+10	30	12+/-2	-10	-101
ACV2-100-1015	1015-1051	0.5-2.5V	30-40	+3	10	10+/-2	-10	-101
ACV2-100-1190	1190-1610	0.5-8.5V	80	+10	23	10+/-2	-10	-101
ACV2-100-1200	1200-2100	0.5-25V	20-70	+12	32	6+/-3	-10	-100
ACV2-100-1250	1250-1500	0-12V	32	+12	40	6+/-2	-10	-105
ACV2-101-1250	1250-2500	0.5-27V	80	+8	28	9+/-2	-10	-97
ACV2-100-1600	1600-2700	0-17V	45-90	+12	25	5+/-2	-10	-98
ACV2-100-1750	1750-2500	0-30V	45-90	+12	40	5+/-2	-10	-105
ACV2-200-2100	2100-2830	0.5-25V	45-90	+12	25	4.5+/-2	-10	-97
ACV2-200-2140	2140-3700	0.5-24V	45-90	+12	27	4+/-2	-10	-90 to -96
ACV2-700-7875	7875	0.5-2.7V	45-90	+3.3	12	0+/-2	-10	-76



ACRO Series

Abracon's ACRO series of **coaxial resonator based oscillators** is designed for narrow band applications and offers frequencies with frequencies through 4GHz. It offers very low harmonics with excellent linearity throughout its tuning range. Superb phase noise, low tuning sensitivity and a variety of package styles and supply voltages.



ACRO Series 0.5 x 0.5 x 0.22in / 0.91 x 0.91 x 0.22in
NEW • 1.2GHz - 5.5GHz • Narrow Bandwidth, Very Low Phase Noise

ACV2 Series	Freq.	Tuning Voltage	Tuning Sens	VCC	ICC	POUT	2ND Harm.	TYP PN @ 10KHz
Part Number	(MHz)	(Vdc)	(MHz/V)	(V)	(mA)	(dBm)	(dBc)	(dBc/Hz)
ACRO-100-1200	1200	1-4V	2.5-7.5	8	28	7+/-2	-15	-120
ACRO-100-1280	1280-1320	0-10V	6	8	30	6+/-2	-15	-114
ACRO-100-1370	1370	0-4V	3-5	11	21	7+/-2	-15	-117
ACRO-100-1500	1500-1540	1-10V	5-10	8	30	8+/-2	-12	-119
ACRO-100-1600	1600-1650	0-15V	3-7	11	25	12+/-2	-10	-112
ACRO-100-1680	1680-1720	1-10V	4-8	8	22	6+/-2	-12	-119
ACRO-200-2085	2085-2210	0-12V	18	12.5	24	3+/-2	-10	-110
ACRO-200-2243	2243-2399	0-12V	20	12.5	30	0+/-2	-10	-110
ACRO-200-2436	2436-2590	0-12V	24	12.5	35	0+/-2	-10	-108
ACRO-200-2488	2488-2685	0-20V	30	10	30	0+/-3	-10	-107
ACRO-200-2565	2565-2575	0-5V	6	8	28	-1+/-2	-10	-120
ACRO-200-2600	2600-2741	0-12V	23	12.5	30	1.5+/-2	-10	-106
ACRO-200-2810	2810	0-4.5V	8	11	26	8+/-2	-10	-114
ACRO-200-2877	2877-3273	0-15V	40	8	27	3+/-2	-10	-106
ACRO-300-3050	3050	0-5V	7	11	24	7+/-2	-10	-115
ACRO-300-3640	3640-4044	0.5-15V	27-54	+7	60	-1+/-2	-10	-99 to -103
ACRO-400-4750	4750-5050	0.5-15V	23-46	+7	70	-2+/-2	-10	-100 to -103

ACV3 Series

Abracon's ACV3 series of "next generation of voltage controlled oscillators" are **simply the widest band, lowest noise vco's available**. Covering over half a GHz of bandwidth, these fundamental mode devices offer 10dB lower phase noise than our ACV2 series. Operating over the full industrial temperature range, these vco's offer outstanding phase noise, ultra low pulling and pushing, with high immunity to vibration and phase hits.



ACV3 Series 0.91 x 0.91 x 0.22in
NEW • Wide Bandwidth, Very Low Phase Noise

ACV3 Series	Freq.	Tuning Voltage	Tuning Sens	VCC	ICC	POUT	2ND Harm.	TYP PN @ 10KHz
Part Number	(MHz)	(Vdc)	(MHz/V)	(V)	(mA)	(dBm)	(dBc)	(dBc/Hz)
AVC3-200-2488	2488-2845	0-15V	30	+12	30	4+/-2	-20	-104
AVC3-201-2488	2488-2845	0-30	12-24	+12	39	7+/-2	-20	-107
AVC3-200-2845	2845-3160	0-18V	20	+12	28	0+/-2	-20	-104
AVC3-300-3193	3193-3447	0-18V	32	+12	30	0+/-2	-20	-104