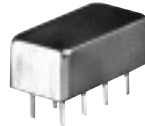


# VOLTAGE CONTROLLED OSCILLATORS

Plug-In

LINEAR TUNING 15 to 2000 MHz



POS

MODEL NO.	FREQ. (MHz)		POWER OUTPUT (dBm)	TUNE VOLTAGE (V)		PHASE NOISE (dBc/Hz) SSB@ offset frequencies: Typ.				PULLING (MHz) pk-pk @12 dB	PUSHING (MHz/V)	TUNING SENSITIVITY (MHz/V)	HARMONICS (dBc)		3 dB MOD. BANDWIDTH (kHz)	POWER SUPPLY		CASE STYLE	CONNECTOR	PRICE \$
	Min.	Max.	Typ.	Min.	Max.	1 kHz	10 kHz	100 kHz	1 MHz	Typ.	Typ.	Typ.	Typ.	Max.	Typ.	Voltage (V) Nom.	Current (mA) Max.	Note B		Qty. (5-49)
POS-25	15-25		+7.0	1	11	-86	-105	-125	-145	0.06	0.04	1-4	-26	-15	60	12	20	A06	hx	16.95
POS-50	25-50		+8.5	1	16	-88	-110	-130	-150	0.06	0.04	2.0-2.6	-19	-12	100	12	20	A06	hx	11.95
POS-75	37.5-75		+8.0	1	16	-87	-110	-130	-150	0.15	0.11	3.1-3.8	-27	-16	100	12	20	A06	hx	11.95
POS-100	50-100		+8.3	1	16	-83	-107	-130	-150	0.6	0.2	4.2-4.8	-23	-18	100	12	20	A06	hx	11.95
POS-150	75-150		+9.5	1	16	-80	-103	-127	-147	0.8	0.3	5.8-6.7	-23	-17	100	12	20	A06	hx	11.95
POS-200	100-200		+10.0	1	16	-80	-102	-122	-142	1.0	0.2	7.1-8.6	-24	-20	100	12	20	A06	hx	11.95
POS-300	150-280		+10.0	1	16	-78	-100	-120	-140	1.8	0.3	9.5-13	-30	-20	100	12	20	A06	hx	13.95
POS-400	200-380		+9.5	1	16	-76	-98	-120	-140	1.8	0.3	13.7-16.9	-28	-20	100	12	20	A06	hx	13.95
POS-535	300-525		+8.8	1	16	-70	-93	-116	-139	2.0	0.4	10.5-24	-26	-20	100	12	20	A06	hx	13.95
POS-765	485-765		+9.5	1	16	-61	-85	-108	-129	5.0	0.4	18-27	-21	-17	100	12	22	A06	hx	14.95
POS-1025	685-1025		+9.0	1	16	-65	-84	-104	-124	5.0	0.6	21-36	-23	-18	100	12	22	A06	hx	16.95
POS-1060	750-1060		+12.0	1	20	-65	-90	-112	-132	50	3.0	18-32	-11	—	1000	8	30	A06	hx	14.95

NOTES:

- A. General Quality Control Procedures, Environmental specifications, Hi-Rel, and MIL description are given in General Information (Section 0).
- B. Connector types and case mounted options, case finishes are given in section 0, see "Case Styles & Outline Drawings".
- C. Prices and Specifications subject to change without notice.
  1. Operating Temperature: -55°C to +85°C
  2. Absolute Maximum Supply Voltage ( $V_{CC}$ ) & Tuning Voltage ( $V_{tune}$ ):

Model	( $V_{CC}$ )	( $V_{tune}$ )	Model	( $V_{CC}$ )	( $V_{tune}$ )
POS-25	+15V	+12V	POS-765	+16V	+18V
POS-50	+16V	+17V	POS-800W	+12V	+20V
POS-75	+16V	+18V	POS-900W	+15V	+25V
POS-100	+16V	+18V	POS-1000W	+15V	+20V
POS-150	+16V	+18V	POS-1025	+16V	+18V
POS-200	+16V	+18V	POS-1060	+10V	+22V
POS-300	+16V	+18V	POS-1400A	+10V	+25V
POS-400	+16V	+18V	POS-2000A	+10V	+25V
POS-500W	+15V	+20V	POS-2120W	+15V	+25V
POS-535	+16V	+18V			

designers kits available

KIT No.	No. of Units in KIT	Description	Price \$ per KIT
K-POS1	10	1 of each: POS-50, 75, 100, 150, 200, 300, 400, 535, 765, 1025	124.95
K-POS2	7	1 of each: POS-50, 100, 200, 400, 535, 765, 1025	79.95
K-POS3	6	2 of each: POS-1060, 1400A, 2000A	79.95

## WIDE BAND 250 to 2120 MHz



POS

MODEL NO.	FREQ. (MHz)		POWER OUTPUT (dBm)	TUNE VOLTAGE (V)		PHASE NOISE (dBc/Hz) SSB@ offset frequencies: Typ.				PULLING (MHz) pk-pk @12 dB	PUSHING (MHz/V)	TUNING SENSITIVITY (MHz/V)	HARMONICS (dBc)		3 dB MOD. BANDWIDTH (kHz)	POWER SUPPLY		CASE STYLE	CONNECTION	PRICE \$
	Min.	Max.	Typ.	Min.	Max.	1 kHz	10 kHz	100 kHz	1 MHz	Typ.	Typ.	Typ.	Typ.	Max.	Typ.	Voltage (V) Nom.	Current (mA) Max.	Note B		Qty. (5-49)
POS-500W	250-500		+10.0	1	16	-79	-100	-120	-140	1.5	0.2	17-23	-25	-18	100	12	25	A06	hx	18.95
POS-800W	400-800		+8.0	0.5	18	-71	-93	-115	-137	3.0	0.5	18-50	-26	-18	100	10	25	A06	hx	16.95
POS-900W	500-900		+7.0	1	20	-75	-95	-115	-135	2.0	0.3	16-40	-26	-20	100	12	25	A06	hx	16.95
POS-1000W	500-1000		+7.0	1	16	-73	-93	-113	-133	6.0	1.5	30-42	-26	-20	100	12	20	A06	hx	19.95
<b>NEW</b> POS-1400A	975-1400		+13.0	1	20	-65	-95	-115	-135	14	2.0	25-30	-16	—	4000	8	30	A06	hx	14.95
<b>NEW</b> POS-2000A	1370-2000		+11.8	1	20	-73	-97	-117	-137	12	3.0	30-45	-24	-12	4000	8	30	A06	hx	14.95
POS-2120W	1060-2120		+8.0	0.5	20	-70	-97	-117	-137	27.0	2.5	35-120	-11	—	1000	12	28	A06	hx	21.95

### features

- Octave bandwidth range (typ.)
- Linear tuning
- Low phase noise
- Excellent harmonic suppression
- Output suitable for LO drive to mixers
- Low power consumption, typically 190 mW (most models)
- 12-V parts are usable with +15V supply for higher power output, typically 2 dB

### applications

- digital cordless phones
- cellular up-and-down converters
- catv distribution set top converters
- wideband frequency synthesizers
- test instruments
- signal generators
- agile communications systems

### pin connections

see case style outline drawings

PORT	hx
RF OUT	2
V-CC	1
V-TUNE	8
GND EXT	3,4,5,6,7

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