

# VOLTAGE CONTROLLED OSCILLATORS

Click package to view outline drawing



165S

## SURFACE-MOUNT PACKAGE

FREQUENCY RANGE (MHz)	NOMINAL TUNING VOLTAGE (Volts)	DC BIAS REQUIREMENTS		OUTPUT POWER		AVERAGE TUNING SENSITIVITY MHz/Volt	TYPICAL PHASE NOISE dBc/Hz Offset at 10 KHz/100 KHz	TYPICAL HARMONIC SUPPRESSION (dBc)	PUSHING (MHz/Volt) (Typ)	PULLING (@ 1.75:1 VSWR) MHz (Typ)	MODEL
		VOLTAGE (Volts)	CURRENT (mA)	dBm	Tolerance (dB)						
180 - 260	0 - 10	+12	<30	+7.5	+2	8 - 15	-95/-120	10	1	15	VFC180SA
200 - 400	0 - 17	+12	<35	+14	+2.5	10 - 20	-90/-115	10	5	15	VFC-S-200
210 - 270	1 - 12	+5.0	<35	0	+2	5 - 6	-90/-115	10	5	15	VFC210SA
219 - 256	1 - 4.5	+5	<20	0	+2	12 - 20	-100/-120	10	5	5	VFC219SA
250 - 500	0 - 22	+12	<35	+12	+2.5	10 - 20	-95/-115	10	5	15	VFC-S-250
400 - 800	0 - 15	+12	<35	+12	+2.5	20 - 30	-95/-115	10	5	15	VFC-S-400
425 - 500	1 - 12	+12	<35	+10	+3	5 - 10	-95/-120	10	5	15	VFC-S-A05
490 - 560	0 - 4.5	+8	<20	0	+2	17 - 25	-100/-125	10	1	2	VFC490SA
500 - 1000	0.5 - 25	+12	<35	+14	+2.5	25 - 50	-95/-120	10	1	15	VFC-S-500
600 - 1200	0.5 - 25	+12	<35	+15	+3	25 - 45	-95/-115	10	1	15	VFC-S-600
700 - 1400	0.5 - 25	+12	<35	+15	+3	35 - 60	-95/-120	10	5	15	VFC-S-700
800 - 1600	0 - 25	+12	<35	+14	+3.5	40 - 60	-95/-120	10	5	15	VFC-S-800
900 - 1200	2.5 - 10.5	+12	<35	+6	+1.5	40 - 60	-95/-120	10	5	15	VFC900SB
900 - 1735	0 - 18	+15	<45	+13	+1.5	40 - 60	-95/-120	10	5	16	VFC900SA
900 - 1800	0.5 - 20	+12	<35	+11	+3	40 - 60	-95/-120	10	5	15	VFC-S-900
920 - 1455	0 - 12	+12	<35	+13	+3	45 - 60	-95/-120	10	5	15	VFC920SA
936 - 1636	0 - 20	+12	<35	+10	+3	20 - 50	-90/-115	10	5	15	VFC 936SA
1000 - 2000	0.5 - 22	+12	<35	+13	+3	40 - 60	-95/-120	10	5	15	VFC-S-1000
1200 - 1600	2.5 - 11	+12	<35	+6	+1.5	50 - 70	-95/-120	10	5	15	VFC1200SA
1225 - 2375	0 - 25	+11	<35	+12	+4	50 - 70	-95/-120	10	2	30	VFC1225SA
1300 - 2300	0 - 24	+15	<40	+12	+3	40 - 60	-90/-110	10	1	15	VFC1300SA
1305 - 1512	2 - 10	+12	<30	+10	+1	20 - 40	-95/-120	20	5	15	VFC-S-A07
1355 - 1595	2 - 10	+12	<30	+10	+1	25 - 45	-95/-115	10	1	15	VFC-S-A06
1500 - 2100	1 - 12	+12	<35	+6	+2.5	40 - 60	-92/-112	10	5	15	VFC-S-A02
1850 - 1950	0.5 - 6.5	+8	<40	+8	+2	20 - 30	-95/-122	12	3.5	15	VFC1850SA
2300 - 2450	0.5 - 7	+8	<35	+8	+2	25 - 35	-95/-120	12	3.5	20	VFC2300SA
2355 - 2528	0.5 - 4.5	+12	<35	+5	+3	50 - 60	-90/-115	10	5	10	VFC2355SA
2530 - 2730	1 - 9	+12	<35	+10	+2	30 - 45	-90/-120	20	5	15	VFC2530SA

### COMMON SPECIFICATIONS

Output Impedance:

50 ohms

Operating Temperature:

-30°C to +70°C

VSWR:

1.5:1 (Typ)

**Contact the factory for more stringent operating temperature range**

Specifications are at +25°C

For pin location and package outline drawings, see back pages.

# VOLTAGE CONTROLLED OSCILLATORS

## PLUG-IN PACKAGE



165

FREQUENCY RANGE (MHz)	NOMINAL TUNING VOLTAGE (Volts)	DC BIAS REQUIREMENTS		OUTPUT POWER		AVERAGE TUNING SENSITIVITY MHz/Volt	TYPICAL PHASE NOISE dBc/Hz Offset at 10 KHz/100 KHz	TYPICAL HARMONIC SUPPRESSION (dBc)	PUSHING (MHz/Volt) (Typ)	PULLING (@ 1.75:1 VSWR) MHz (Typ)	MODEL
		VOLTAGE (Volts)	CURRENT (mA)	dBm	Tolerance (dB)						
200 - 400	0 - 17	+12	<35	+14	+2.5	10 - 20	-90/-115	10	5	15	VFC-P-200
250 - 500	0 - 22	+12	<35	+12	+2.5	10 - 20	-95/-115	10	5	15	VFC-P-250
400 - 800	0.5 - 15	+12	<35	+15	+2.5	20 - 30	-95/-115	10	1	15	VFC-P-400
500 - 1000	0.5 - 25	+12	<35	+14	+2.5	25 - 50	-95/-120	10	1	15	VFC-P-500
600 - 1200	0.5 - 25	+12	<35	+15	+3	25 - 45	-95/-115	10	1	15	VFC-P-600
700 - 1400	0.5 - 25	+12	<35	+15	+3	35 - 60	-95/-120	10	5	15	VFC-P-700
800 - 1600	0 - 25	+5	<35	+10	+3	40 - 60	-95/-120	10	1	15	VFC-P-800
900 - 1800	0.5 - 20	+12	<35	+11	+3	40 - 60	-95/-120	10	5	15	VFC-P-900
1000 - 2000	0.5 - 22	+12	<35	+11	+3	40 - 60	-95/-120	10	5	15	VFC-P-1000
1630 - 1930	2 - 22	+10	<50	+10	+2	15 - 30	-95/-115	10	5	15	VFC-P-A02

### COMMON SPECIFICATIONS

Output Impedance: 50 ohms  
 VSWR: 1.5:1 (Typ)  
 Specifications are at +25°C

Operating Temperature: -30°C to +70°C  
**Contact the factory for more stringent operating temperature range**

For pin location and package outline drawings, see back pages.