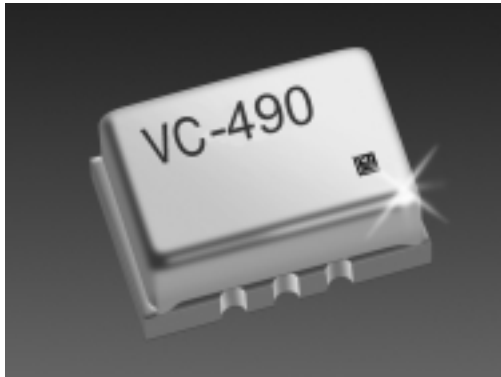


# Voltage Controlled Crystal Oscillators

## VC-490/495



### Description

precision 14 x 9 mm VCXO with high frequency crystal, standard footprint.

### Features

- Small SMD HFF VCXO
- 50.0MHz to 170MHz
- 3.3V supply voltage
- -20 to +70°C / -40 to 85°C
- LVPECL / HCMOS / LVDS output
- Complementary outputs available

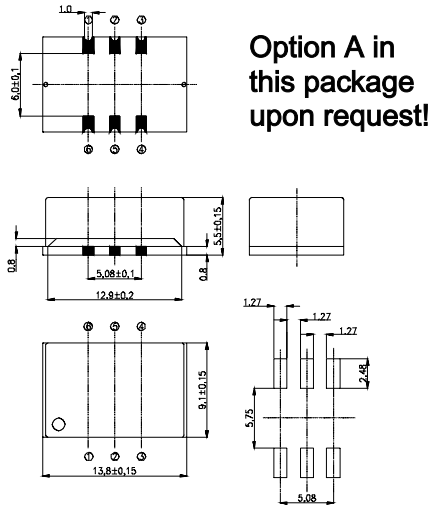
### Performance Characteristics

Parameter	Symbol	Minimum	Typical	Maximum	Units
Frequency:	$f_o$	50.0		170.0	MHz
Supply Voltage:	VCC	3.135	3.3	3.465	V
Output option <b>A</b> LVHCMOS: option <b>F</b> compl. LVPECL: option <b>P</b> compl. LVDS:	I <sub>cc</sub> I <sub>cc</sub> I <sub>cc</sub>		20.0 50.0 15.0	40.0 70.0 40.0	mA mA mA
Output option <b>A</b> option <b>F</b> : option <b>P</b> :		LVHCMOS complementary. LVPECL complementary. LVDS			
Output load option <b>A</b> : option <b>F</b> : option <b>P</b> :		1 kOhm // 15pF 50 Ohm 100 Ohm differential			
Rise/Fall Time tr/TF: option <b>A</b> : option <b>F</b> : option <b>P</b> :	t <sub>R</sub> / t <sub>F</sub> t <sub>R</sub> / t <sub>F</sub> t <sub>R</sub> / t <sub>F</sub>			3.0 1.0 1.0	ns ns ns
Symmetry (Duty/Cycle):	SYM	40		60	%
Temp. stab. <b>D - 205</b> -20 to +70°C: <b>F - 305</b> -40 to +85°C:	F <sub>TEMP</sub> F <sub>TEMP</sub>	-20.0 -30.0		+20.0 +30.0	ppm ppm
Accuracy @ +25C after reflow:	FCAL	-15.0		+15.0	ppm
Aging first year: Aging per year thereafter:	F <sub>FIRST</sub> F <sub>FAGING</sub>	-3.0 -2.0		+3.0 +2.0	ppm ppm
Freq. vs. supply for ±5% change:	F <sub>SUP</sub>	-3.0		+3.0	ppm
Freq. vs. load for ±10% change:	F <sub>LOAD</sub>	-1.0		+1.0	ppm
Deviation:	F <sub>PULL</sub>	±100			ppm
Control voltage:	V <sub>C</sub>	0.3		3.0	V
Transfer Function:		positive			
Linearity:	Lin			±10	%
Storage Temperature:	TS	-45		+95	°C
Package Size:		13.8 x 9.1 x 5.5 mm			

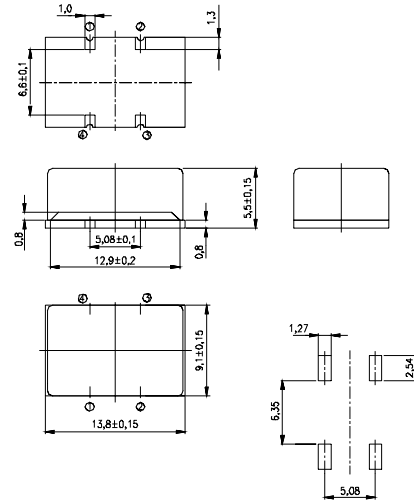
# Voltage Controlled Crystal Oscillators

## VC-490/495

### Option A outline drawing/pad layout



### Option F, P outline drawing/pad layout



VCXO

### Pin Out Information, VC-490

Pin	Function
1	Control Voltage
2	N.C. (Output Enable/Disable)
3	GND, Case
4	RF Output
5	Complementary RF-output
6	Supply Voltage

### Pin Out Information, VC-495

Pin	Function
1	Control Voltage
2	GND, Case
3	RF Output
4	Supply voltage

### Standard Frequencies

61.44MHz	77.76MHz	125.0MHz	155.52MHz	166.6286MHz	167.331645MHz
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### Ordering Information

