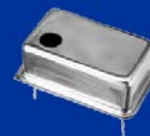




# BVTA16xxCS SERIES VCTCXO

## BROOKDALE FREQUENCY CONTROLS, INC.



### FEATURES:

- DIL-14 THRU-HOLE PACKAGE (W/ACCESS HOLE)
- CLIPPED SINEWAVE OUTPUT
- RoHS Compliant; Pb FREE
- REQUEST A CERTIFICATE OF COMPLIANCE
- FREQUENCY ADJUSTMENT  $\pm 3$ ppm MIN (W/INTERNAL TRIM)
- FREQUENCY STABILITY AS TIGHT AS  $\pm 1.0$  ppm
- -40 to +85°C TEMPERATURE RANGE AVAILABLE
- REQUEST A QUOTE ON THIS DEVICE

### BVTA16xxCS VCTCXO SERIES

Frequency Range	8 to 35.0MHz						
Output Wave Form	Clipped Sinewave						
Frequency Adjustment	$\pm 3$ ppm Min (With Internal Trimmer)						
Frequency Tolerance	$\pm 1.0$ ppm @25°C $\pm 2$ °C	$\pm 1.5$ ppm@25°C $\pm 2$ °C	$\pm 2.0$ ppm@25°C $\pm 2$ °C	$\pm 2.5$ ppm@25°C $\pm 2$ °C	$\pm 3.0$ ppm	$\pm 4.0$ ppm	$\pm 5.0$ ppm
Frequency Stability	$\pm 1.0$ ppm	$\pm 1.5$ ppm	$\pm 2.0$ ppm	$\pm 2.5$ ppm	$\pm 3.0$ ppm	$\pm 4.0$ ppm	$\pm 5.0$ ppm
Supply Current	3mA Max						
Output Load	10k $\Omega$ /10pF						
Pull Range	$\pm 5.0$ ppm / $\pm 10.0$ ppm / $\pm 15.0$ ppm / $\pm 20.0$ ppm / $\pm 30.0$ ppm / $\pm 40.0$ ppm / $\pm 50.0$ ppm						
Supply Voltage (Vcc)	5Vdc $\pm 5\%$			3.3Vdc $\pm 5\%$			
Control Voltage(Vcon)	2.5Vdc			1.65Vdc			
Control Voltage Range	0.5~4.5V (Suffix Blank)			0.3~3.0V ( suffix E)			
	0~5.0V (Suffix A)			0.5~2.5V (suffix F)			
	0.5~4.75V ( Suffix C)			0~3.3V ( suffix G)			
	0.5~5.0V ( Suffix D)						
Output Level	1.0Vpp min			0.8Vpp Min.			
Aging	$\pm 1.0$ ppm Max / Year						
Storage Temperature	-40 to 85°C						
MSL Level	MSL 1 per IPC/JEDEC-STD-020C						
Humidity	85% $\pm 3\%$ RH, 85°C, 168 Hours						
Hermeticity	Leak rate $2 \times 10^{-8}$ ATM-cm <sup>3</sup> /sec max.						
Solderability	MIL-STD-202F method 208E						
Vibration	MIL-STD-202F method 204, (500 to 2000Hz 6g)(10-500Hz 5g)						
Shock	MIL-STD-202F method 213B, test conditions E, 1000GG 1/2sine wave						
SSB Phase Noise At 25°C	Offset	10 Hz	100Hz	1 kHz	10 kHz	100 kHz	1 MHz
	3.3V-10.0MHz	98.42dBc/Hz	124.8dBc/Hz	145.3dBc/Hz	156.8 dBc/Hz	159.4 dBc/Hz	159.7dBc/Hz
	3.3V-146.2857MHz	48.72dBc/Hz	80.17dBc/Hz	106.7dBc/Hz	118.94dBc/Hz	139.85dBc/Hz	150.5dBc/Hz
Frequency Stability (max)	$\pm 1.0$ ppm	$\pm 1.5$ ppm	$\pm 2.0$ ppm	$\pm 2.5$ ppm	$\pm 3.0$ ppm	$\pm 4.0$ ppm	$\pm 5.0$ ppm
Temperature Range (°C)	0 to 60°C	Contact us	YES	YES	YES	YES	YES
	0 to 70°C	Contact us	YES	YES	YES	YES	YES
	-10 to 60°C	N/A	Contact us	YES	YES	YES	YES
	-10 to 70°C	N/A	Contact us	YES	YES	YES	YES
	-20 to 70°C	N/A	Contact us	YES	YES	YES	YES
	-30 to 75°C	N/A	N/A	Contact us	YES	YES	YES
-40 to 85°C	N/A	N/A	N/A	Contact us	YES	YES	YES

### BVTA16xxT VCTCXO SERIES PART NUMBER GUIDE

MODEL	STABILITY	Output	Voltage	Control Voltage(Range)	OPER. TEMP. (°C)	Freq. Tolerance	Pull Range	FREQ.
BVTA16	01= $\pm 1$ ppm	CS=Clipped	33=3.3V	Blank=2.5V(0.5~4.5V)	B=0°C TO 60°C	Blank= $\pm 1.0$ ppm@25°C	05= $\pm 5$ ppm	
	15= $\pm 1.5$ ppm	Sinewave	5=5.0V	A=2.5V(0~5.0V)	A=0°C TO 70°C	A = $\pm 1.5$ ppm@25°C	10= $\pm 10$ ppm	
	02 = $\pm 2$ ppm			C=2.5V(0.5~4.75V)	C =-10 to 60°C	B = $\pm 2.0$ ppm@25°C	15= $\pm 15$ ppm	
	25 = $\pm 2.5$ ppm			D=2.5V(0.5~5.0V)	H=-10°C TO 70°C	C = $\pm 2.5$ ppm@25°C	20= $\pm 20$ ppm	
	03 = $\pm 3$ ppm			E=1.65V(0.3~3.0V)	D=-20°C TO 70°C		30= $\pm 30$ ppm	
	04 = $\pm 4$ ppm			F=1.65V(0.5~2.5V)	E=-30°C TO 75°C		40= $\pm 40$ ppm	
	05 = $\pm 5$ ppm			G=1.65V(0~3.3V)	M=-40°C TO 85°C		50= $\pm 50$ ppm	

### PART NUMBER EXAMPLE

BVTA16	02	CS	33	A	A		15	10.0
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# BVTA16xxCS SERIES VCTCXO

BROOKDALE FREQUENCY CONTROLS, INC.



## PACKAGE DIMENSIONS

