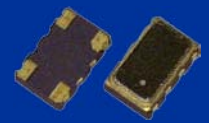




BVT1657CS SERIES VCTCXO

BROOKDALE FREQUENCY CONTROLS, INC.



- MINIATURE 5.0 x 7.0 x 2.5mm SMD PACKAGE
- NO MECHANICAL TRIMMER FOR AQUEOUS WASHING
- ROHS COMPLIANT: PB FREE
- REQUEST A CERTIFICATE OF CONFORMANCE
- Wide Frequency Range: 9.6 MHz ~ 40.0 MHz
- -40 to +85°C Temperature Range Available
- Clipped Sinewave Output
- REQUEST A QUOTE ON THIS DEVICE

BVT1657CS VCTCXO SERIES SPECIFICATIONS

Supply Voltage(V _{DD})		+2.8VDC	+3.0VDC	+5.0VDC			
Frequency Range		9.6 MHz ~ 40.0 MHz			9.6MHz to 26.0MHz		
Output Wave from		Clipped Sinewave					
Initial Calibration Tolerance ⁽¹⁾		± 1 ppm at +25°C					
Frequency Stability		± 1.0 ppm	± 1.5 ppm	± 2.0 ppm	± 3.0 ppm	± 4.0 ppm	± 5.0 ppm
TEMPERATURE RANGE	0°C to +60°C	AVAILABLE	AVAILABLE	AVAILABLE	AVAILABLE	AVAILABLE	AVAILABLE
	0°C to +70°C	AVAILABLE	AVAILABLE	AVAILABLE	AVAILABLE	AVAILABLE	AVAILABLE
	-10°C to +60°C	AVAILABLE	AVAILABLE	AVAILABLE	AVAILABLE	AVAILABLE	AVAILABLE
	-20°C to +70°C	AVAILABLE	AVAILABLE	AVAILABLE	AVAILABLE	AVAILABLE	AVAILABLE
	-30°C to +60°C	AVAILABLE	AVAILABLE	AVAILABLE	AVAILABLE	AVAILABLE	AVAILABLE
	-30°C to +75°C	AVAILABLE	AVAILABLE	AVAILABLE	AVAILABLE	AVAILABLE	AVAILABLE
	-30°C to +85°C	AVAILABLE	AVAILABLE	AVAILABLE	AVAILABLE	AVAILABLE	AVAILABLE
FREQUENCY STABILITY	VS. AGING	± 1.0 ppm max. first year at +25°C					
	Vs. VOLTAGE CHANGE	± 0.3 ppm max. for a ±5% input voltage change					
	Vs. LOAD CHANGE	± 0.3 ppm max. for a ± 10% loading condition change					
	Vs. REFLOW	± 1 ppm max. 1 reflow and measured 24 hours afterwards					
Output Voltage Level(peak to peak)		0.8 V p-p (min.)					
Current Consumption (max)		1.5 mA (9.6 ~ 15 MHz) / 2.0 mA (15.01~26.0 MHz) / 2.5 mA (26.01~40.0 MHz)					
Mechanical Frequency Tuning		No mechanical trimmer built -in (for aqueous washing cycles).					
Pin 1 Options	Control Voltage(Vcon)	+1.5V ±1.0 V			+1.5V ±1.0 V / +2.5V ±2.0 V		
	Frequency Deviation Range	± 6.0 ppm (min.), Vcon = +1.5 V±1.0 V					
	Slope Polarity	Positive slope. Positive voltage for positive frequency shift.					
	Input Impedance	1.0 MΩ min.					
	Modulation Bandwidth	3 kHz min. Measured at -3 dB , Vcon = +1.5 VDC					
Linearity		10 % max.					
Start-Up Time.		2.0 m sec. (typ.) , 5.0 m sec. (max.) (reach 90% amplitude and at +25°C ± 2°C)					
Output Load		10 KΩ // 10 pF ± 10%					
Input Impedance		1 meg Ω (min.)					
Harmonics Distortion		- 7 dBc (max.)					
Output Format		DC block, AC coupled.					
SSB Phase Noise @25°C	Offset	10 Hz	100 Hz	1 kHz	10 kHz	100 kHz	
	3.0V-13.000MHZ	-80dBc/Hz	-105dBc/Hz	-135dBc/Hz	-148dBc/Hz	-148dB/Hz	

PART NUMBER GUIDE

Model	Supply Voltage(V _{DD})	Stability	Operating Temperature (°C)	Control Voltage(Vcon)	Frequency
BVT1657CS	2 = 2.8V	1 = ± 1 ppm	A = 0°C to 70°C	Blank = +1.5V ± 1.0 V	
	3 = 3.0V	15 = ± 1.5 ppm	B = -10°C to 60°C	B = +2.5V ± 2.0 V	
	5 = 5.0V	2 = ± 2.0 ppm	C = -20°C to 70°C		
		3 = ± 3.0 ppm	D = -30°C to 75°C		
		4 = ± 4.0 ppm	M = -40°C to 85°C		
		5 = ± 5.0 ppm	E = 0°C to +60°C		
			F = -30°C to +60°C		
		G = -30°C to +85°C			

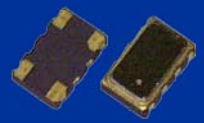
EXAMPLE

BVT1657CS	3	1	A	A	26.0 MHz
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BVT1657CS SERIES VCTCXO

BROOKDALE FREQUENCY CONTROLS, INC.



BVT1657CS MECHANICAL DRAWING AND LAND PATTERN

