Surface Mounted (SMD) VCXO

High Purity - Low Harmonic Distortion

True Sinewave Output SMD VCXO - 7x5mm & 5x3mm

RoHS compliant 2002/95/EC

Static sensitive device

Current part - Recommended for new designs

Frequency Stability Options

Operating Temperature Range		Frequency Stability (PPM)		
		±25	±50	±100
Standard	-0°C to +70°C	**AS**	**BS**	**CS**
Industrial	-40°C to +85°C	**AI**	**BI**	**CI**

Operating Conditions

Storage Temp	-55°C to +125°C

Option Codes

Supply Voltage	Option Code
+5.0V DC	0
+3.3 V DC	3

Marking & Specification Code Format

Type	Voltage Code	OTR/Stability	Frequency	WWYY
VSW***	3 or 5	See Above	ie 175.0000	1611

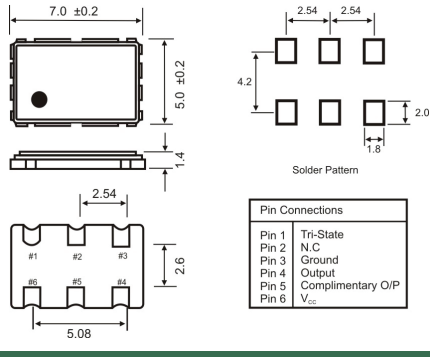
High-Q Fundamental Crystal with Multiplier Circuit

Electrical Characteristics Ta = +25°C, [Note] Inclusive of V_{DD} ±10%, Load Change ±10%, Ageing, Shock & Vibration

Parameter	Condition	Value	
Input Voltage		**3.3VDC ±5%**	**5.0VDC ±5%**
Frequency Range		10.00 - 30.00MHz	
Initial Frequency Accuracy	at 25°C	$V_{CONTROL}$= 1.65V ±0.2V	$V_{CONTROL}$ = 2.5V ±0.2V
Output Level		1.0V p-p Typ.	
Load		10kΩ//10pF Load	
Input Current		1.1mA Max.	1.2mA Max.
VCXO Characteristics	Control Voltage	1.65V DC ±1.25V	2.5V DC ±2.0V
	Pulling Range	±50PPM Typ.	
Harmonics		< -25dBc (Freq. Dependant)	
Input Impedance		>0.5MΩ	
Modulation Bandwidth	at -3dB	25kHz Min.	
Sub-Harmonics		None	
Linearity		10% Max.	
Slope Polarity		Positive	
Start-Up Time	12kHz to 20MHz	2ms Typ.	
Ageing		±5PPM per Year Max.	
SSB Phase Noise	**Offset**	**Frequency = 13.00MHz**	
	10Hz	-95dBc/Hz	
	100Hz	-123dBc/Hz	
	1kHz	-135dBc/Hz	
	10kHz	-140dBc/Hz	
	100kHz	-145dBc/Hz	

Dimensions (mm)

VSW-431



VSW-600