

- **Crystal Oscillator (晶体振荡器) – TCXO series (温补晶振系列)**
- **Temperature Compensated Crystal Oscillator SMD TCX-7050, 5032 (表贴型温补晶振)**
SMD VTX-7050, 5032 (表贴型压控/温补晶振)



● **Applications 用途:**
 Cellular phone, PHS, GPS equipment & communication equipment, etc. 移动通讯手机, 小灵通, 卫星定位系统及通讯设备, 等等。

● **Features 特征:**

- Series is a surface mounting type with features of compactness. 复合式组装表面贴装型外形。
- High accuracy and outstanding durability against heat are assured throughout the working temperature range. 在工作温度范围内具有高频率精度及显著耐久性。

● **Typical specifications 规格参数**

Model	型号	TCX-7050	VTX-7050	TCX-5032	VTX-5032
Nominal frequency (MHz)	频率	12.8, 13.0, 14.4, 15.36, 16.384, 19.2, 19.680		13.0, 14.4, 19.2, 19.680	
Frequency Stability 频率稳定性	Temperature 温度变化	$\pm 2.5 \times 10^{-6}/-30 \sim +75^\circ\text{C}$		$\pm 2.5 \times 10^{-6}/-30 \sim +75^\circ\text{C}$	
	Aging 老化	$\pm 1.0 \times 10^{-6}/\text{year} (25^\circ\text{C})$		$\pm 1.0 \times 10^{-6}/\text{year} (25^\circ\text{C})$	
	Supply voltage change 电压改变	$\pm 0.3 \times 10^{-6}/(+3.0\text{V} \pm 5\%)$		$\pm 0.2 \times 10^{-6}/(\text{Vcc} \pm 5\%)$	
Storage temperature range	储存温度	-40 ~ +85°C		-40 ~ +85°C	
Power supply voltage	供给电压	+2.8V ~ +5.0V DC		+2.7 ~ +5.0V DC	
Current consumption	消耗电流	2mA max.(Load)		2mA max.(Load)	
Output 输出	Load 负载	10KΩ/10PF		10KΩ/10PF	
	Voltage 电压	0.8Vp-p min.		0.8Vp-p min.	
	Waveform 波形	Clipped Sine wave		Clipped Sine wave	
External control function 外部控制	Frequency tuning range 频率调变	-	$\pm 4.0 \times 10^{-6}/\text{min. (Positive)}$	-	$\pm 8 \times 10^{-6}/\text{min. (Positive)}$
	External control voltage 外控电压	-	+1.5V \pm 1.0V DC	-	+1.5V \pm 1.0V DC
Phase noise**	相位噪声	-125 dBc/Hz Typ.(at 1.0KHz)		-135 dBc/Hz Typ.(at 1.0KHz)	

- Please consult for other specifications. (若有其它规格需求请告知)
 - Do not clean this TCXO by ultrasonic-wave or liquid. (请不要将 TCXO 放在超声波溶剂清洗)
- ** Performance varies based on different specification. (性能的变化, 根据不同规格而定)

● **Outline Dimensions [Unit: mm] 外形尺寸**

● **TCX-7050**

Terminal	Connection	
	TCXO	VC-TCXO
#1	GND	Vcont
#2	GND	
#3	OUTPUT	
#4	Vdd	

Example of Terminal Land Pattern

● **TCX-5032**

Terminal	Connection	
	TCXO	VC-TCXO
#1	GND	Vcont
#2	GND	
#3	OUTPUT	
#4	Vcc	

LAND PATTERN (REFERENCE)