

# T53 TCXO/VCTCXO

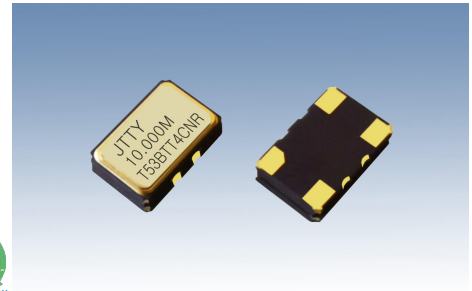
## Product Data Sheet

### 产品特点 FEATURES

- 典型的5.0X3.2X1.5mm 陶瓷底座贴片封装  
Typical 5.0X3.2X1.5mm ceramic SMD package
- 高频率稳定性和温度:±0.20~0.5ppm  
High frequency stability vs.temperature:±0.20~0.5ppm
- 低相位噪声,高可靠性  
Low phase noise,high reliability

### 应用范围 APPLICATION

- 基站  
Femtocell
- 仪器仪表  
Instrumentation
- 无线收音机  
Mobile radio
- 卫星导航  
Sat.navigation



### 规格 Specification

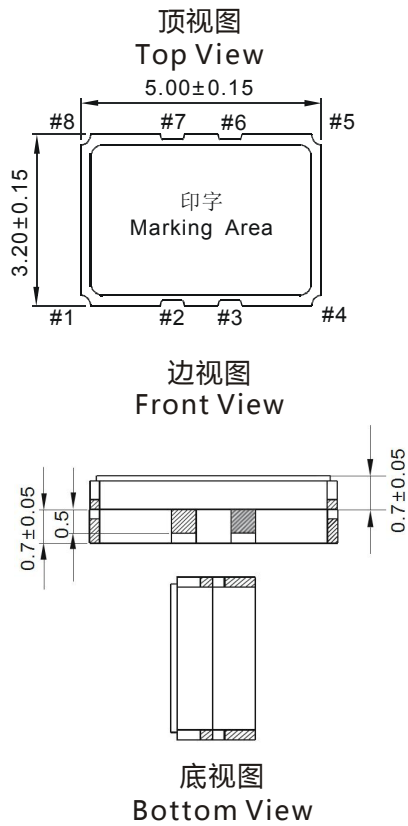
参数	Parameter	符号 Sym	条件 Condition	最小值 Min.	典型 Typ.	最大值 Max.	单位 Unit	备注 Note
频率温度稳定度 ( Fmax+Fmin ) 2	Frequency Stability vs.temperature reference to ( Fmax+Fmin ) 2		-40~+85°C	±0.5			ppm	标准 standard
			-40~+85°C	±0.20~0.28				根据要求 on request
			-55~+95°C	±1.0				根据要求 on request

### 电气 Electrical

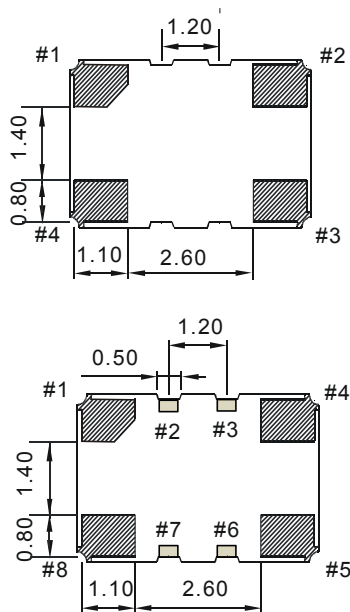
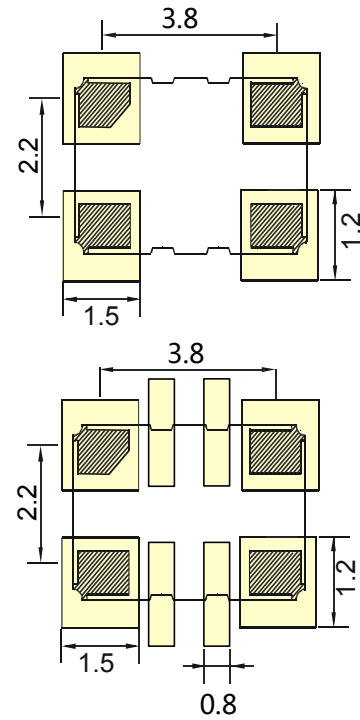
频率范围	Frequency Range	F		5		100	MHz	自定义 Custom
存储温度	Storage Temp.	Ts		-55		+125	°C	
频率精度	Frequency Calibr.	ΔF/F	At 25°C	0 ~ ±1.0			ppm	
频率稳定度	Frequency Stability	ΔF/F	VS Supply Voltage(vcc±5%)			±0.05	ppm	
			VS Load(±10%)			±0.05		
老化率	Aging Per Year		1st year			±1.0	ppm	根据要求 on request
			1st year			±0.5		
工作温度范围	Operating Temp.	To		-20		+70	°C	标准 Standard
				-40		+85		工业控制 Extended
				-55		+95		汽车及军工 Car&Military
电源电压	Supply Voltage	Vcc		1.8	3.3	5	V	自定义 Custom 1.8, 2.5, 2.8, 3.0, 3.3, 5
输出波形	Output Waveform		削峰正弦波 Clipped Sinewave			方波 CMOS		
输出幅度	Output Level		>0.8Vp-p			VOH>0.9xVcc VOL<0.1xVcc		
输出负载	Output Load		10KΩ//10pF			15pF Max.		
电源电流	Supply Current		1.5~4mA			3~8mA		
占空比	Duty Cycle		45~55%			45~55%		
相位噪声	SSB Phase Noise	@ 10MHz	100Hz			-125	dBc/Hz	
			1KHz			-145		
			10KHz			-155		
			100KHz			-155		
启动时间	Start-up Time					2	ms	At 25°C
频率调整	Frequency Adjustment	压控 VC-	EFC Voltage	0.5	2.5	4.5	V	@5V
				0.5	1.5	2.5		@3.3V
		TCXO Vcon	EFC Range	±5			ppm	自定义 Custom
			输入阻抗 Input impedance	100			KΩ	
3态功能	Tri-state function	当引脚6给电压(>0.7V)或打开时, 晶振输出标称频率; 当引脚6给电压(<0.3V)或接地时, 晶振停止输出; 当引脚6悬空时, 默认高电平, 晶振正常工作 pin#6>0.7xVcc or open pin#5→oscillation pin#6<0.3xVcc or GND pin#5→high impedance						根据要求 on request
焊接条件	Soldering Conditions	≤260°C, 最长时间为10s				≤260°C, for 10s max		
封装尺寸	Package	5.0x3.2x1.5				mm		

所有规格如有更改, 恕不另行通知。

All specifications are subject to change without notice



推荐的焊盘布局  
Recommended Solder  
Pad Layout



4 Pad Functions:

Pad #1	Vcon: VC-TCXO GND/NC: TCXO
Pad #2	GND
Pad #3	OUTPUT
Pad #4	Vcc

8 Pad Functions:

Pad #1	GND
Pad #2	do not connect
Pad #3	do not connect
Pad #4	GND
Pad #5	OUTPUT
Pad #6	Tri-state or do not connect
Pad #7	do not connect optional 33 nF to the GND
Pad #8	Vcc