

CRYSTAL OSCILLATOR, SERIES TC5

5.0X3.2mm SMD Crystal Oscillator

FEATURE

Typical 5.0×3.2×1.2mm ceramic SMD package
Tight symmetry (45 to 55%) available
Realize the standby function with Tri-state

TYPICAL APPLICATION

GPS, Mobile Phone
WLAN, Wireless, Fiber/10G-Bit Ethernet
Notebook, PDA,DSD

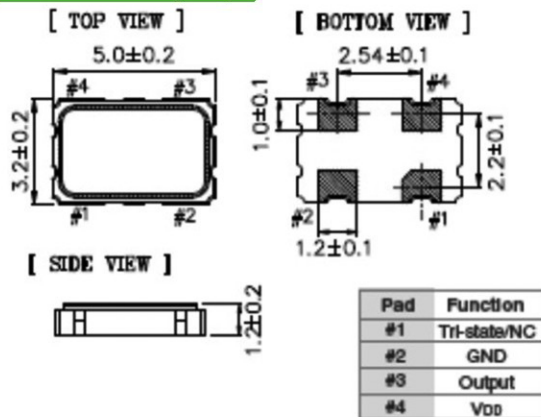
ELECTRICAL SPECIFICATION



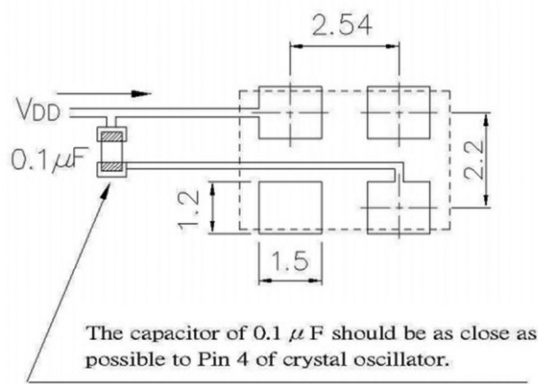
Parameter	3.3V		2.5V		1.8V		Unit
	Min.	Max.	Min.	Max.	Min.	Max.	
Supply Voltage Variation (VDD) 10%	2.97	3.63	2.25	2.75	1.62	1.98	V
Frequency Range	0.0137	125	0.0137	133	0.0137	125	MHz
Supply Frequency	2,048,25,26,27,50,66, 667,100,125						MHz
Supply Current	13.7KHz $\leq F_0 \leq 93$ KHz		-		-		mA
	0.3125MHz $\leq F_0 \leq 50$ MHz(A1)		-		-		
	40MHz $\leq F_0 < 75$ MHz		-		-		
	75MHz $\leq F_0 < 133$ MHz		-		-		
	133MHz $\leq F_0$		-		-		
OutputLevel(CMOS)	Output High(Logic"1")		90%VDD		90%VDD		V
	OutputLow(Logic"0")		10%VDD		10%VDD		
Transition Time:Rise/Fall Time	13.7KHz $\leq F_0 \leq 70$ KHz		-		-		nSec
	0.3125MHz $\leq F_0 < 100$ MHz		-		-		
	100MHz $\leq F_0$		-		-		
Start Time	-		5		5		mSec
Output Drive Capability(CL)	-		15		15		pF
Tri-State(Input to Pin1) Enable(High voltage or floatig)	0.7VDD		-		0.7VDD		V
Disable(Low voltage or GND)	0.3VDD		-		0.3VDD		
Absolute Clock Period Jitter	-		40		40		pSec
RMS Phase Jitter(Integated12KHz~20MHz)	-		1		1		pSec
Standby Current	-		10		10		μ A
Aging (@25°C 1 st year)	-		± 3		± 3		ppm
Storage Temp. Range	-		-55		-55		°C

Standard frequencies are frequencies which the crystal has been designed and does not imply a stock position.
+Transition times are measured between 10% and 90% of VDD,with an output load of 15pF . Output waveform CMOS only
Packing:Tape&Reel,1000/2000/3000pcs per Reel.

DIMENSION (mm)



SOLDER PAD LAYOUT(mm)



FREQ.STABILITY vs.TEMP.RANGE

Temp.(°C)	ppm		
	± 20	± 25	± 50
- 10~+60	O	O	O
- 20~+70	Δ	O	O
- 40~+85	Δ	O	O

O:Available Δ:Conditional X:Not available
Inclusive of calibration @25 °C.operating temperature range,input voltage variation,load variation,aging(1st year), Shock, and vibration