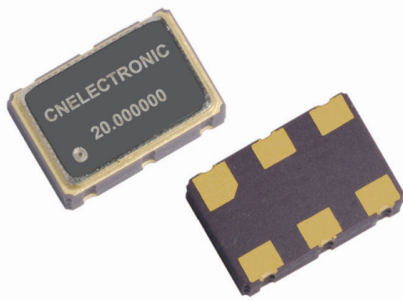


Voltage Controlled Crystal Oscillators (VCXOs)

VC75

**Description:**

- Stability up to $\pm 15 \times 10^{-6}$
- Control Voltage Range $\pm 200 \times 10^{-6}$ Max
- TTL/HCMOS Output
- Miniature Package
- Tape and Reel
- SONET
- SDH
- GB Ethernet

Performance Characteristics

Parameter		Condition	VC75	
Frequency Range	F_0		1.500MHz~52.000MHz	
Frequency Stability		All Condition	See Next Table	
Operating Temperature Range	T_{OPR}		See Next Table	
Linearity			$\pm 10\%$	
Supple Voltage	V_{DD}		B: +5.0VDC $\pm 10\%$	A: +3.3VDC $\pm 10\%$
Load			50 Ω	
Supple Current	I_{DD}	$1.5M \leq F_0 < 20M$	8mA Max	10mA Max
		$20M \leq F_0 < 52M$	5mA Max	6mA Max
Output Load			C: CMOS 15pF D: CMOS 50pF	
Output Duty		$1/2V_{DD}$	45%~55%	
Control Voltage Range			See Ordering Information	
Rise Time	T_r	$10\%V_{DD} \sim 90\%V_{DD}$	10nS Max	
Fall Time	T_f	$90\%V_{DD} \sim 10\%V_{DD}$	10nS Max	
Output Level	"0"Level	V_{OL}	10% V_{DD}	
	"1"Level	V_{OH}	90% V_{DD}	
Start-Up Time	T_s		10mS Max	
Aging (First Year)	F_a	$25^\circ C \pm 3^\circ C$	$\pm 5 \times 10^{-6}$	
Storage Temperature Range	T_{STG}		$-55^\circ C \sim +125^\circ C$	
Package			SMD7.0 \times 5.20 \times 1.80 mm	
Slope			Positive	

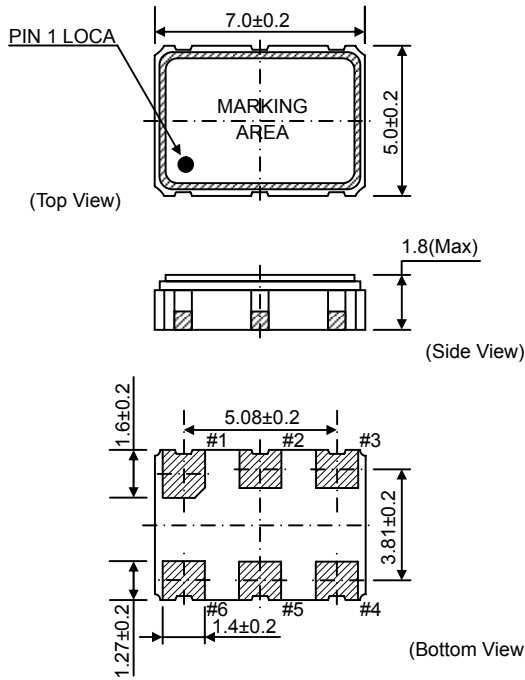
Frequency Stability Over Temperature Range

Temperature Range	Frequency Stability		
	P: $\pm 15 \times 10^{-6}$	R: $\pm 25 \times 10^{-6}$	T: $\pm 50 \times 10^{-6}$
A: $0^\circ C \sim +50^\circ C$	●	●	●
B: $-10^\circ C \sim +60^\circ C$	●	●	●
C: $-20^\circ C \sim +70^\circ C$		●	●
G: $-40^\circ C \sim +85^\circ C$			●

Voltage Controlled Crystal Oscillators (VCXOs)

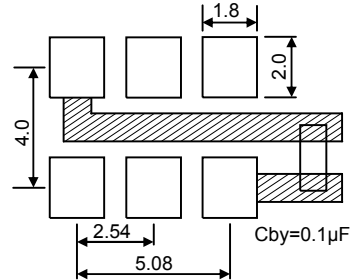
VC75

Outline Drawing (mm)

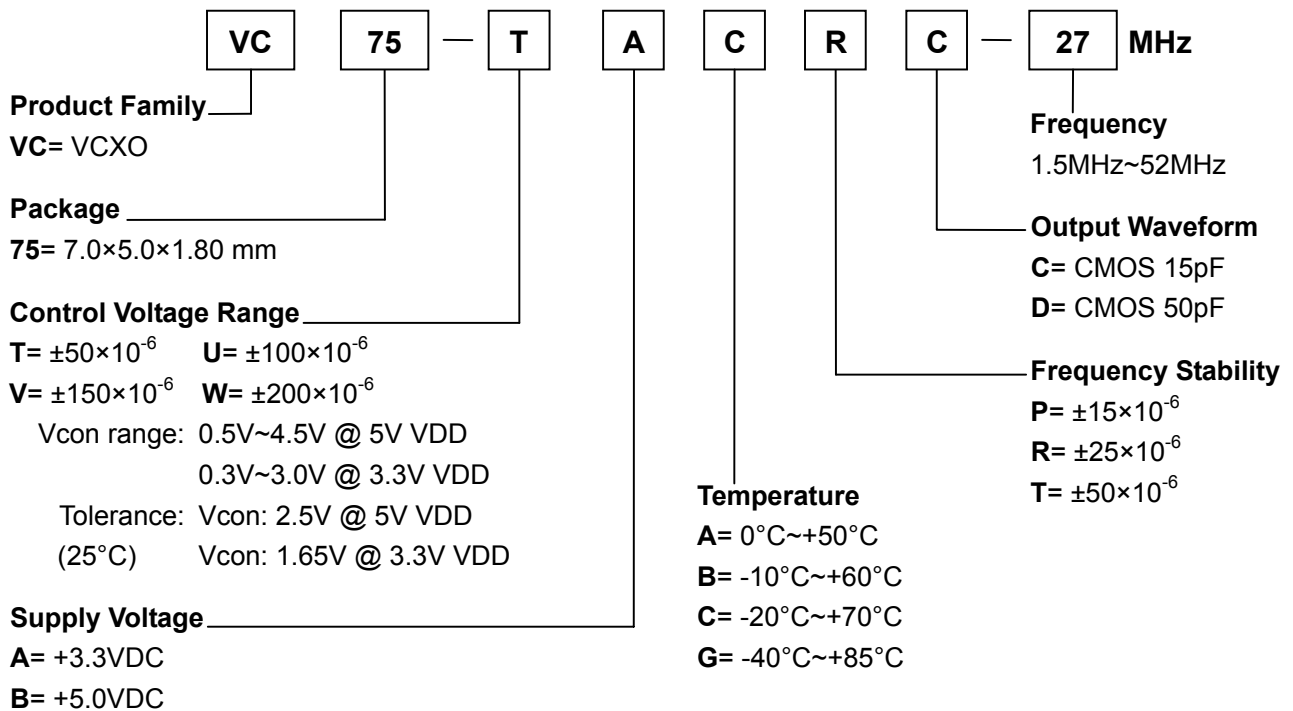


PAD NO.	CONNECTION
#1	VC
#2	NC/TRI-STATE
#3	GND
#4	OUTPUT
#5	NC/TRI-STATE
#6	+DC

Recommended land pattern



Ordering Information



Ordering Example

VC75-TACRC-27MHz

VCXO / Pulling Range: ±50×10⁻⁶ / +3.3VDC / -20°C~+70°C / Frequency Stability: ±25×10⁻⁶ / CMOS 15pF / 27MHz