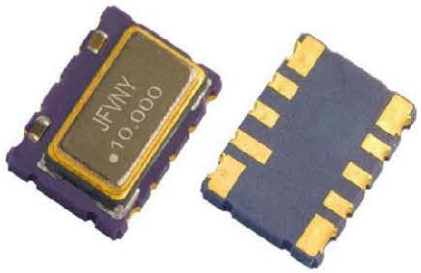
TC75/VT75



Description:

- Low Jitter±10×10^{-6} Max.
- Frequency Stability±0.5×10^{-6}
- Green Product
- Small Volume
- Dribbling Packaging
- Military Radio
- PCS Base Station
- Measuring Equipment

Performance Characteristics

Parameter			Condition	TC75 / VT75	
Frequency Range		F_0		10.000MHz~50.000MHz	
Nominal Frequency (MHz)		F_0		10 12.8 13 19.2 20 26 40 50	
Frequency Tolerance		F_tol	At 25℃	≤±2.0 ppm	
Frequency Stability		F_0_Tc		See Table Below	
Supply Voltage		V_{DD}		A:+3.3 VDC±10%	B:+5.0VDC±10%
Supply Current		I_{DD}	10M≤F_0<15M	1.5mA Max.	5.0mA Max.
			15M≤F_0<26M	2.0mA Max.	6.0mA Max.
			26M≤F_0≤50M	2.5mA Max.	8.0mA Max.
Output Waveform				H: Peak clipping sine	CMOS
Output Load				10KΩ//10pF±10%	15pF
Output Level	"0"	V_{OL}		0.8V (P-P) Min.	10%V_{DD}
	"1"	V_{OH}			90%V_{DD}
Low Jitter		Fcont		See Selection Guide	
Phase noise			10MHz 下	100Hz	1KHz / 10KHz
				-115dBc/Hz	-135dBc/Hz / -148dBc/Hz
Frequency Stability relative to	Working voltage	F_0_V_{DD}	±5%	±0.2×10^{-6} Max.	
	Load	F_0_Load	±10%	±0.2×10^{-6} Max.	
	Frequency Aging	_age		±1×10^{-6}/Year Max.	
VcInput Impedance		Rin		1.0MΩ	
Start-Up Time		Ts		2mS Max.	
Storage Temperature		T_stg		-55°C~+125°C	

Frequency Temperature Stability Table

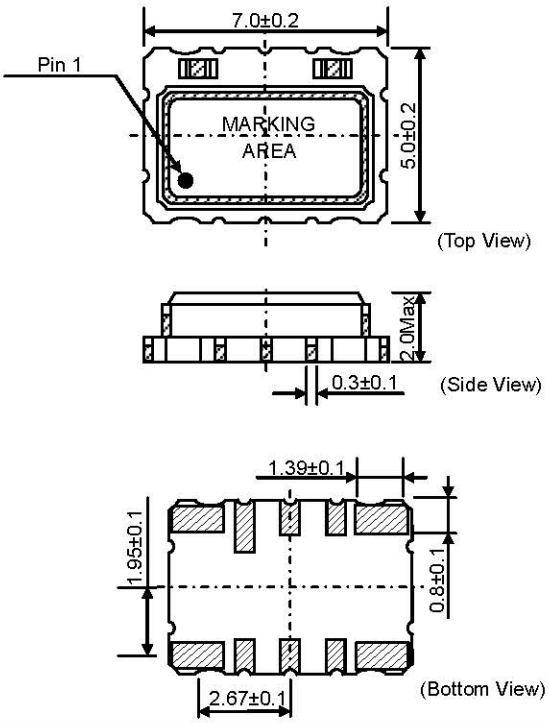
Tempperature Range	Frequency Stability					
	H:±0.5×10^{-6}	I:±1.0×10^{-6}	J:±1.5×10^{-6}	K:±2.0×10^{-6}	L:±2.5×10^{-6}	N:±5.0×10^{-6}
A: 0°C ~ +50°C	●	●	●	●	●	●
B:-10°C ~ +60°C	●	●	●	●	●	●
C:-20°C ~ +70°C	●	●	●	●	●	●
D:-30°C ~ +75°C	◎	●	●	●	●	●
▵G:-40°C ~ +85°C	◎	●	●	●	●	●

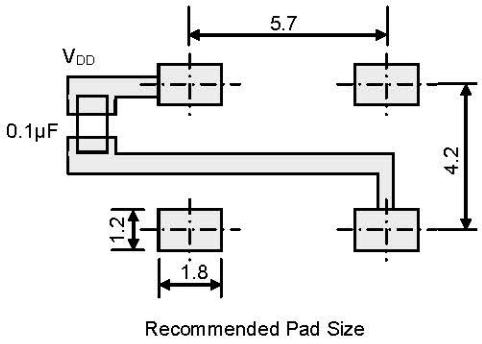
●: Optional ◎: Customized Δ: Industrial ∇: Automotive ☆: Military Products

Note: for those not marked in the selection table of frequency and temperature stability, please communicate with us for confirmation

TC75 / VT75

Outline Size (mm)





Recommended Pad Size

Pin	Functionality
#1	Pressure control end for pressure control and temperature compensation Grounding for temperature compensation
#2	Ground
#3	Output
#4	Power

Selection Guide

TC | 75 | — | N | A | C | I | H | — | 10.000 MHz

Product Category
TC= TCXO

Package Size
75= 7.0×5.0×2.0 mm

Control Voltage Range
N= No Voltage Control Function
A= $\pm5\times10^{-6}$
C=$\pm10\times10^{-6}$
Voltage control range：1.5V+/-1V
Note: TCXO No Voltage Control Function

Power Supply Voltage
A= +3.3VDC
B= +5.0VDC

Tempperature Range
A= 0°C~+50°C
B= -10°C~+60°C
C= -20°C~+70°C
D= -30°C~+75°C
G= -40°C~+85°C

Frequency Stability
H= $\pm0.5\times10^{-6}$
I= $\pm1.0\times10^{-6}$
J= $\pm1.5\times10^{-6}$
K= $\pm2.0\times10^{-6}$
L= $\pm2.5\times10^{-6}$
N= $\pm5.0\times10^{-6}$
See frequency temperature stability table for details
" ● ◎ " As optional

Output Waveform
H= Peak Clipping Sine Wave
C= CMOS 15pF

Frequency
10.00MHz~50.00MHz

Sample Selection

TC75-NBAIH-10MHz
TCXO / No Voltage Control Function / +5.0VDC / 0°C ~ +50°C / $\pm1.0\times10^{-6}$ / Peak clipping sine wave / 10MHz

VT75-ABAIH-10MHz
VCTCXO / ±5PPM 1.5V ± 1V / +5.0VDC / 0°C ~ +50°C / $\pm1.0\times10^{-6}$ / Peak clipping sine wave / 10MHz