

RoHS Compliant

Features

- High stability and high reliability
- 2.7 to 5.5V drive available
- Clipped sine wave or CMOS level output
- Low phase noise
- Disable Function

Applications

- Femtocell, Stratum3
- SONENT/ SDH/ Ethernet

How to Order

For Femtocell (Standard Spec.)

Frequency Tolerance (vs Temp.) : $\pm 0.1 \times 10^{-6} / -10^{\circ}\text{C}$ to 70°C

KT5032F 20000 A G T 33 T xx
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧

For Stratum3 (Standard Spec.)

Frequency Tolerance (vs Temp.) : $\pm 0.28 \times 10^{-6} / -40^{\circ}\text{C}$ to 85°C

KT5032F 20000 K A W 33 T xx
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Series		⑤ Upper Operating Temp.	
② Output Frequency		T	+70°C
③ Frequency Tolerance		W	+85°C
A	$+0.1 \times 10^{-6}$	⑥ Supply Voltage	
K	$\pm 0.28 \times 10^{-6}$	33	3.3V
④ Lower Operating Temp.		⑦ Voltage Control Function	
A	-40°C	T	TCXO
G	-10°C	Other*	VCTCXO
J	0°C		

* Customer Spec.

⑧ Option Code

Packaging (Tape & Reel 1000 pcs./ reel)

Specifications

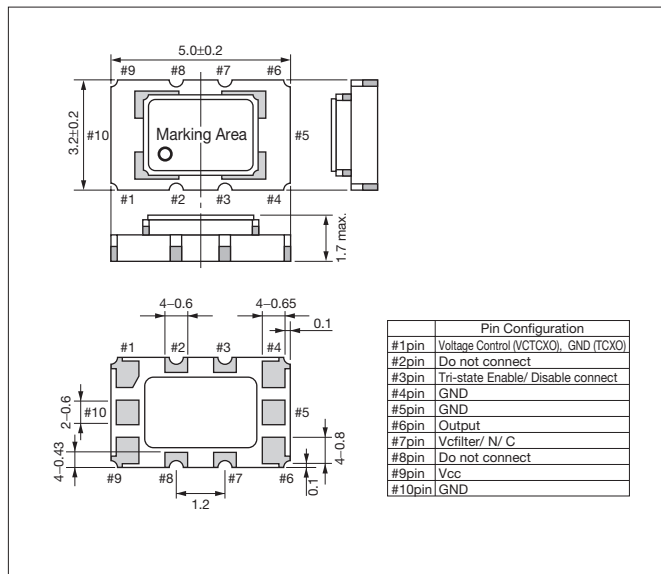
Item	Symbol	Conditions	Min.	Max.	Units	
Output Frequency Range	fo	Standard Frequency: 10, 19.2, 20, 24.576, 26, 30.72, 38.88, 40	10	40	MHz	
Frequency Tolerance	f _{tol}	vs Temperature (-10 to +70°C)	$\pm (f_{\text{max}} - f_{\text{min}}) / 2f_0$	-0.1	+0.1	$\times 10^{-6}$
		vs Temperature (-40 to +85°C)	$\pm (f_{\text{max}} - f_{\text{min}}) / 2f_0$	-0.28	+0.28	
		vs Voltage		-0.1	+0.1	
Supply Voltage	V _{CC}		+2.7	+5.5	V	
Current Consumption	I _{CC}	CMOS output	—	6	mA	
Frequency Aging	f _{age}	20years aging @40°C Including temp characteristics, initial tolerance, rated power supply voltage change and load change.	-4.6	+4.6	$\times 10^{-6}$	
Voltage Control Range	f _{cont}	Positive *100k ohm min	± 5	± 20	$\times 10^{-6}$	
Output Level	V _{pp}	Clipped Sine*, Load: 10k ohm // 10pF	0.8	—	Vp-p	
Low Level Output Voltage	V _{OL}	CMOS, Load: 15pF I _{OL} =4mA	—	10% V _{CC}	V	
High Level Output Voltage	V _{OH}	CMOS, Load: 15pF I _{OH} =-4mA	90% V _{CC}	—	V	
Rise / Fall Time (10%V _{CC} to 90%V _{CC})	tr/ tf	CMOS, Load: 15pF	—	8	ns	
Symmetry	SYM	50% V _{CC}	45	55	%	
Phase Noise @20MHz	—	- 90 (@10Hz offset) - 120 (@100Hz offset) - 140 (@1kHz offset) - 150 (@10kHz offset) - 150 (@100kHz offset)			dBc/ Hz	

* : A DC-cut capacitor is not embedded in this crystal oscillator. In case of clipped sine output, connect a DC-cut capacitor ($\geq 1\text{nF}$) to the line-out terminal of the oscillator.

* Please contact us for other specifications.

Dimensions

(Unit: mm)



Recommended Land Pattern

(Unit: mm)

