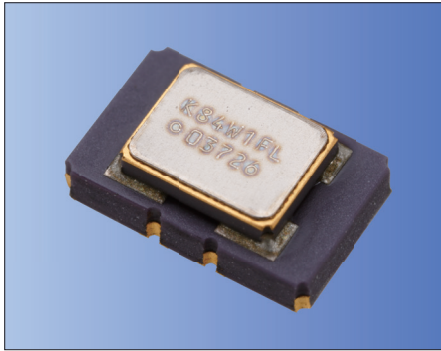




5.0×3.2mm



RoHS Compliant

Features

- High stability and high reliability
- 2.3 to 3.63V drive available
- Clipped sine wave or CMOS level output
- Low phase noise

Applications

- 5G, Smallcell, Stratum3
- SONET/ SDH/ Ethernet

How to Order

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

- ① Series
- ② Output Frequency
- ③ Frequency Tolerance
- ④ Lower Operating Temp.
- ⑤ Upper Operating Temp.

	③	④	⑤
KAW	$\pm 0.28 \times 10^{-6}$	-40°C	+85°C

⑥ Supply Voltage	⑦ Voltage Control Function
33 3.3V	T TCXO
	Spec. Code* VCTCXO

*Please contact us for Spec. Code.

⑧ Individual Specification

Packaging (Tape & Reel 1000 pcs./ reel)

Specifications

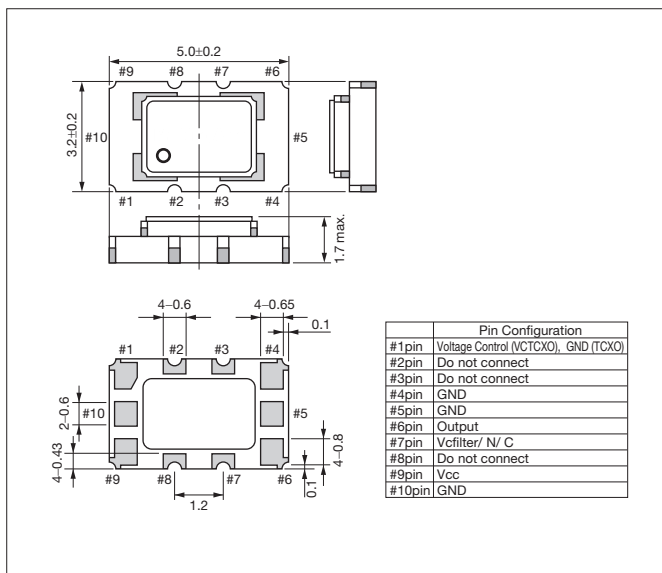
Item	Symbol	Conditions	Min.	Max.	Unit	
Output Frequency Range	fo	Standard Frequency: 10, 19.2, 20, 24.576, 26, 30.72, 38.88, 40	10	40	MHz	
Frequency Tolerance	f _{tol}	vs Temperature (-40 to +85°C) $[\pm(f_{max}-f_{min})/ 2f_0]$	-0.28	+0.28	$\times 10^{-6}$	
		vs Voltage	-0.1	+0.1		
Supply Voltage	V _{CC}		+2.3	+3.63	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	—	V _{p-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	@10Hz offset	—	-90	dBc/ Hz
			@100Hz offset	—	-120	
			@1kHz offset	—	-140	
			@10kHz offset	—	-150	
			@100kHz offset	—	-150	

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

* Please contact us for other specifications.

Dimensions

(Unit: mm)



Recommended Land Pattern

(Unit: mm)

