

3.2x2.5mm



Pb Free

RoHS Conforming

**Features**

- Ultra-miniature SMD Type (3.2x2.5x1.0mm)
- Reflow compatible
- AFC function available
- 2.3 to 3.5V drive available
- Frequency Stability : ±2.0ppm at -30°C to +85°C

**Applications**

- PDC, GSM, CDMA

**How to Order**

KT21 - D C V 30 □ - 19.680M - T  
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Series

<b>K</b>	±5ppm
<b>E</b>	±2.5ppm
<b>D</b>	±2.0ppm

③ Lower operating temp

<b>C</b>	-30°C
<b>E</b>	-20°C
<b>G</b>	-10°C

④ Upper operating temp

<b>W</b>	85°C
<b>V</b>	80°C
<b>U</b>	75°C

⑤ Supply Voltage

<b>28</b>	2.8V	<b>30</b>	3.0V
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⑥ Option Code

⑦ Frequency(MHz)

12.600	19.200	26.000
13.000	19.440	38.400
14.400	19.680	
16.800	19.800	

⑧ Packaging

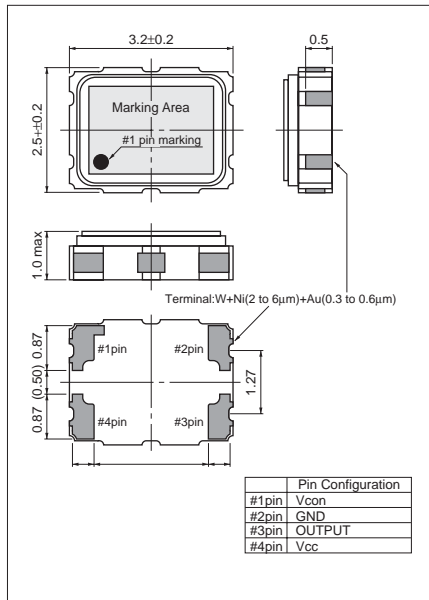
<b>T</b>	Tape & Reel
	2,000pcs/Reel

**Specifications**

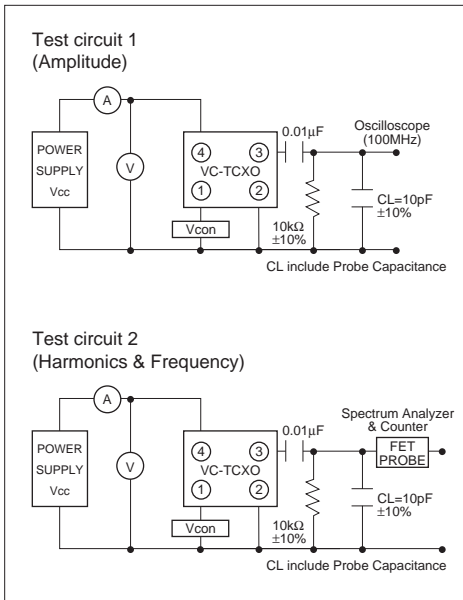
Item	Symbol	Conditions	Min.	Max.	Units
Output Frequency Range	F <sub>OUT</sub>		12.6	38.4	MHz
Frequency Stability	Δf/fo	vs Temperature	-2.0	+2.0	ppm
		vs Load	-0.2	+0.2	
		vs Voltage	-0.3	+0.3	
Storage Temp. Range	T <sub>STG</sub>		-40	+85	°C
Operating Temp. Range	T <sub>OPR</sub>		-30	+85	°C
Aging	Δfaging	Per Year	-1	1	ppm
Voltage control range	Δf/V	Positive	+/-8	+/-15	ppm
Supply Voltage	V <sub>DD</sub>		2.3	3.5	Volt
Output Voltage	V <sub>out</sub>	10k ohm // 10pF	0.8	—	Vp-p
Current Consumption	I <sub>DD</sub>		—	2.0	mA
Duty Ratio	SYM	@50% V <sub>DD</sub>	40	60	%
Harmonics	—		—	-5	dBc

**Dimensions**

(Unit : mm)



**Test Circuit**



**Recommended Land Pattern**

(Unit : mm)

