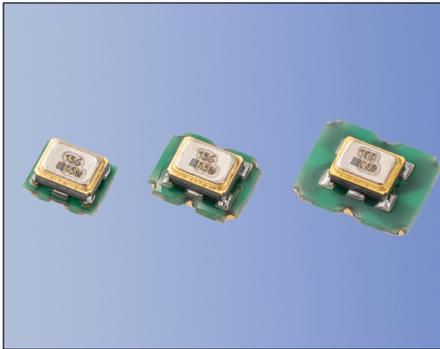




### HCSL, 2.0×1.6 / 2.5×2.0 / 3.2×2.5mm



**RoHS Compliant**  
**PSL: R4Y MSL1**

#### Features

- Output Frequency: 100/125/156.25MHz
- HCSL output
- Supply voltage  $V_{CC}=3.3V, 2.5V$
- Low Jitter
- Heat resistant up to  $+125^{\circ}C$

#### Applications

- Consumer / Networking / Industrial / Audio Codec / Amuse

#### Table 1

Freq. Code	Tol. $\times 10^{-6}$	Operating Temperature Range ( $^{\circ}C$ )	Note
0	$\pm 50$	-10 to +70	For additional stability, please contact us.
F	$\pm 100$	-40 to +85	
G	$\pm 50$	-40 to +85	
6	$\pm 50$	-40 to +105	
7	$\pm 100$	-40 to +105	
X	$\pm 100$	-40 to +125	

#### How to Order

KC□□□□F ① 100,000 ② H □ □ K 00 ③ ④ ⑤ ⑥ ⑦

##### ① Series

KC2016F	2016 Size	KC2520F	2520 Size
KC3225F	3225 Size		

##### ② Output Frequency (100,000 : 100MHz)

##### ③ Output Type (H : HCSL)

##### ④ Supply Voltage

2	2.5V	3	3.3V
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##### ⑤ Frequency Tolerance (See Table 1)

##### ⑥ Symmetry/ INH Function

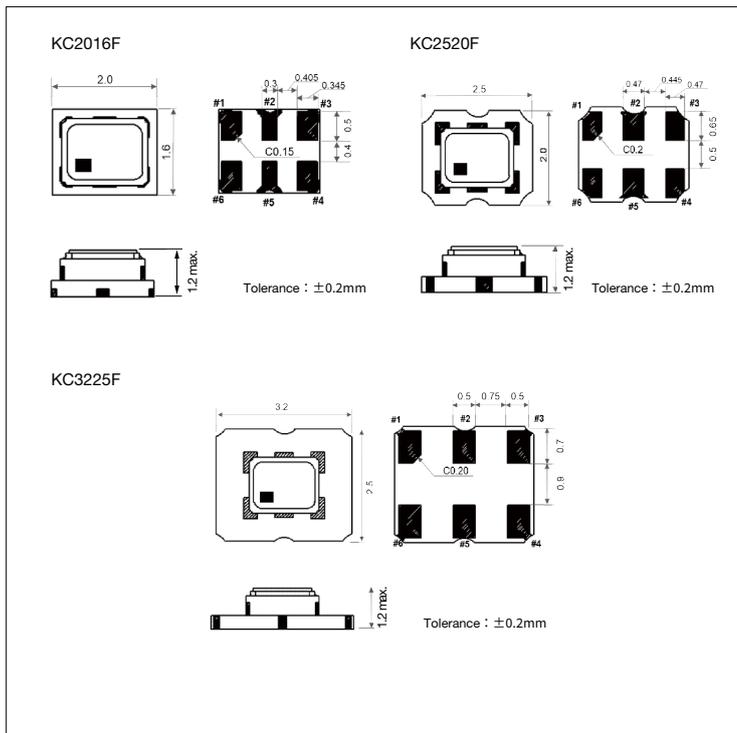
##### ⑦ Individual Specification (STD Specification is "00" .)

#### Packaging Tape & Reel

KC3225F/ KC2520F/ KC2016F	2000 pcs./ reel
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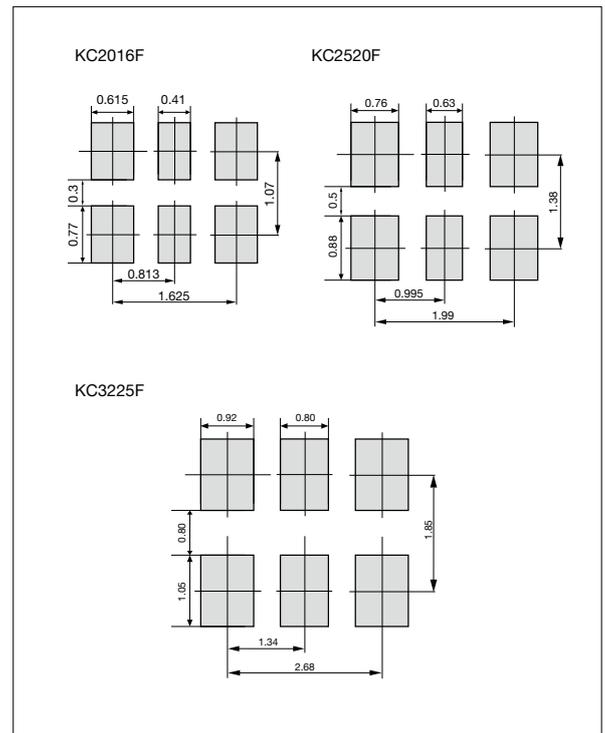
#### Dimensions

(Unit: mm)



#### Recommended Land Pattern

(Unit: mm)



Pad Connections	
#1	Stand-by Function
#2	NC
#3	Case GND
#4	Output
#5	Complementary Output
#6	Vcc

Stand-by Function	
Pad1	Pad4 / Pad5
Open	Active
"H" Level	Active
"L" Level	No-Oscillation



HCSL, 2.0×1.6 / 2.5×2.0 / 3.2×2.5mm

## Specifications

Item	Symbol	Conditions	Specifications	Units	
Output Frequency Range	f <sub>o</sub>		100/125/156.25	MHz	
Frequency Tolerance	f <sub>tol</sub>	Initial tolerance, Operating temperature range, Rated power supply voltage change, Load change, Aging (1 year @25° C), Shock and vibration	See Table 1	× 10 <sup>-6</sup>	
Storage Temperature Range	T <sub>stg</sub>		-55 to +125	° C	
Operating Temperature Range	T <sub>use</sub>		See Table 1	° C	
Max. Supply Voltage	—		-0.3 ~ +4.0	V	
Supply Voltage	V <sub>CC</sub>	@+2.5V @+3.3V	+2.375 to +2.625 +3.135 to +3.465	V	
Current Consumption	I <sub>CC</sub>		46 max.	mA	
Stand-by Current	I <sub>std</sub>		30 max.	μA	
Symmetry	SYM	50ohm @Cross Point output swing	50±5	%	
Rise/ Fall Tim (20% V <sub>CC</sub> to 80% V <sub>CC</sub> )	Tr/ Tf	50ohm/+0.175V to +0.525V	0.6 max.	ns	
Low Level Output Voltage	V <sub>OL</sub>		-0.15 to +0.15	V	
High Level Output Voltage	V <sub>OH</sub>		+0.60 to +0.90	V	
Output Load	—	HCSL Output	50	ohm	
Low Level Input Voltage	V <sub>IL</sub>		30% V <sub>CC</sub> max.	V	
High Level Input Voltage	V <sub>IH</sub>		70% V <sub>CC</sub> min.	V	
Disable Time	t <sub>dis</sub>		200 max.	ns	
Enable Time	t <sub>ena</sub>		10 max.	ms	
Start-up Time	t <sub>str</sub>	@Minimum operating voltage to be 0 sec.	10 max.	ms	
Deterministic Jitter <sup>Note1</sup>	DJ	DJ pk-pk	2 max.	ps	
1Sigma Jitter <sup>Note1</sup>	J <sub>Sigma</sub>		4 max.	ps	
Peak to Peak Jitter <sup>Note1</sup>	J <sub>PK-PK</sub>		30 max.	ps	
Phase Jitter	—	BW: 12kHz to 20MHz @+3.3V, 25degC	@100MHz	0.15 max.	ps
			@125MHz	0.15 max.	ps
			@156.25MHz	0.10 max.	ps

Note : All electrical characteristics are defined at the maximum load and operating temperature range.

Note1: Jitter is measured with the Time Interval Analyzer “Wavecrest SIA-3000”