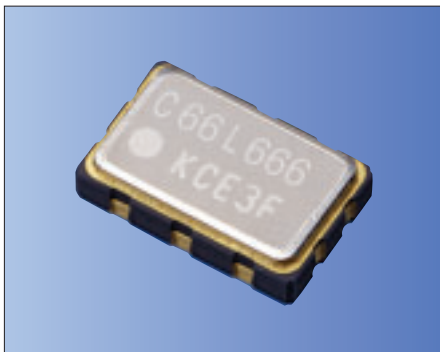


CMOS/ 3.3V/ 5.0×3.2mm



RoHS Compliant

Features

- Built-in Spread Spectrum function
- Miniature ceramic package
- Highly reliable with seam welding
- CMOS output
- Supply voltage Vcc = 3.3V
- External control pad for Modulation Selectable (For initial testing purpose only)

Table 1

Spread Type			
Center Spread		Down Spread	
Code	Spread %	Code	Spread %
C2	±0.5%	D2	-1.0%
C4	±1.0%	D4	-2.0%
C6	±1.5%	D6	-3.0%
C0*	External Control*	D0*	External Control*

* For initial testing purpose only

How to Order

KC5032E 25.0000 C 3 F E
 ① ② ③ ④ ⑤ ⑥ ⑦

- ① Series
- ② Output Frequency
- ③ Output Type (CMOS)
- ④ Supply Voltage (3.3V)
- ⑤ Frequency Tolerance (±100ppm)
- ⑥ Symmetry/ INH Function (45/ 55%, Stand-by)
- ⑦ Spread Type and Spread Percent or Individual Specification (See Table 1)

Packaging (Tape & Reel 1000 pcs./ reel)

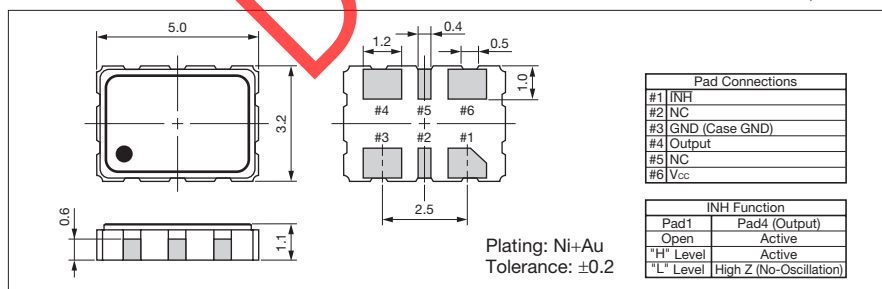
Specifications

Item	Symbol	Conditions	Min.	Max.	Units	
Output Frequency Range	fo		14.31818	166	MHz	
Frequency Tolerance	f_tol	Initial tolerance, Operating temperature range, Rated power supply voltage change, Load change, Aging (1 year @25°C), Shock and vibration Op. Temp.: -40 to +85°C	-100	+100	×10 ⁻⁶	
Storage Temperature Range	T_stg		-55	+125	°C	
Operating Temperature Range	T_use		-40	+85	°C	
Max. Supply Voltage	—		-0.5	+4.6	V	
Supply Voltage	Vcc		+2.97	+3.63	V	
Current Consumption (Maximum Loaded)	Icc	fo≤40MHz	—	20	mA	
		40<fo≤100MHz	—	25		
		100<fo≤166MHz	—	35		
Stand-by Current	I_std		—	30	µA	
Symmetry	SYM	@50% Vcc	45	55	%	
Rise/ Fall Time (10% Vcc to 90% Vcc Maximum Loaded)	tr/ tf	14.31818≤fo≤40MHz	—	10	ns	
		40<fo≤100MHz	—	5		
		100<fo≤166MHz	—	3		
Low Level Output Voltage	VoL	IoL = 13mA (fo<40MHz), IoL = 19mA (40≤fo<100MHz) IoL = 44mA (100≤fo≤166MHz)	—	10% Vcc	V	
High Level Output Voltage	VoH	IoH = 13mA (fo<40MHz), IoH = 19mA (40≤fo<100MHz) IoH = 44mA (100≤fo≤166MHz)	90% Vcc	—	V	
CMOS Load	L_CMOS	CMOS Output	—	15	pF	
Input Voltage Range	VIN		0	Vcc	V	
Low Level Input Voltage	VIL		—	30% Vcc	V	
High Level Input Voltage	VIH		70% Vcc	—	V	
Disable Time	t_dis		—	200	ns	
Enable Time	t_ena		—	10	ms	
Start-up Time	t_str	@Minimum operating voltage to be 0 sec.	—	20	ms	
Peak to Peak Jitter (Cycle to Cycle Jitter)	JPK-PK	Measured with @50%Vcc 10,000 cyc. min. Lecroy Wavepro 950	14.31818≤fo<40MHz	—	±250	ps
			40≤fo<80MHz	—	±175	
			80≤fo≤166MHz	—	±150	

Note: All electrical characteristics are defined at the maximum load and operating temperature range.
Please contact us for inquiry about operating temperature range, available frequencies and other conditions.

Dimensions

(Unit: mm)



Recommended Land Pattern

(Unit: mm)

