



Ph Free

RoHS Compliant

Features

- Miniature ceramic package
- Highly reliable with seam welding
- LV-PECL output
- Supply voltage $V_{CC}=2.5V$
- $\pm 25 \times 10^{-6}$ available

Table 1

Freq. Tol. Code	Tolerance $\times 10^{-6}$	Operating Temperature Range (°C)	Note
0	± 50	0 to +70	Standard specifications
S	± 30		
U	± 25		
F	± 100	-40 to +85	With only certain frequencies
G	± 50		

How to Order

KC7050P 125.000 P 2 0 E 00
① ② ③ ④ ⑤ ⑥ ⑦

- ① Type (7.0×5.0mm SMD)
- ② Output Frequency
- ③ Output Type (LV-PECL)
- ④ Supply Voltage (2.5V)
- ⑤ Frequency Tolerance (See Table 1)
- ⑥ Symmetry/ Enable Function (45/ 55%, Stand-by)
- ⑦ Customer Special Model Suffix (STD Specification is "00")

Packaging (Tape & Reel 1000 pcs./ reel)

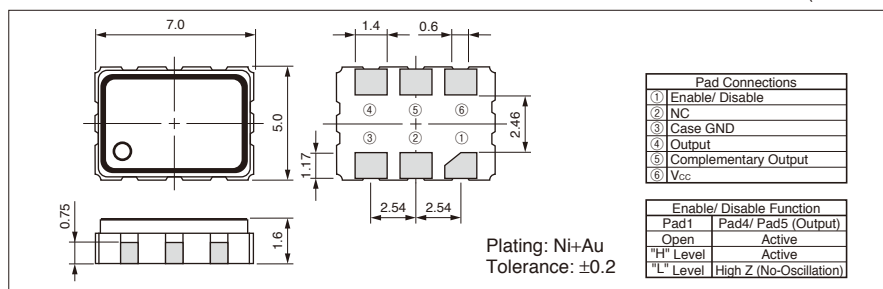
Specifications

Item	Symbol	Conditions	Min.	Max.	Units	
Output Frequency Range	f_o		50	190	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	$\times 10^{-6}$
			Op. Temp.: 0 to +70°C/ -40 to +85°C	-50	+50	
			Op. Temp.: 0 to +70°C	-30	+30	
			Op. Temp.: 0 to +70°C	-25	+25	
Storage Temperature Range	T_{stg}		-55	+125	°C	
Operating Temperature Range	T_{use}	Standard Specifications	0	+70	°C	
		Extend (Option)	-40	+85		
Max. Supply Voltage	—		-0.5	+5	V	
Supply Voltage	V_{CC}		2.375	2.625	V	
Current Consumption	I_{CC}		—	90	mA	
Stand-by Current	I_{std}		—	30	μA	
Symmetry	SYM	50ohm @50% Output Swing	45	55	%	
Rise/ Fall Time (20% to 80% Output Level)	t_r/ t_f	50ohm	—	0.6	nS	
Low Level Output Voltage	V_{OL}	Op. Temp.: 0 to +85°C/ Typ. 0.800V	$V_{CC}-1.810$	$V_{CC}-1.405$	V	
		Op. Temp.: -40 to 0°C/ Typ. 0.805V	$V_{CC}-1.830$	$V_{CC}-1.305$		
High Level Output Voltage	V_{OH}	Op. Temp.: 0 to +85°C/ Typ. 1.550V	$V_{CC}-1.025$	$V_{CC}-0.740$	V	
		Op. Temp.: -40 to 0°C/ Typ. 1.495V	$V_{CC}-1.085$	$V_{CC}-0.800$		
Output Load	RL	LV-PECL Output	50		ohm	
Input Voltage Range	V_{IN}		0	V_{CC}	V	
Low Level Input Voltage	V_{IL}		—	30% V_{CC}	V	
High Level Input Voltage	V_{IH}		70% V_{CC}	—	V	
Disable Time	t_{dis}		—	150	nS	
Enable Time	t_{ena}		—	10	mS	
Start-up Time	t_{str}	@ Minimum operating voltage to be 0 sec.	—	10	mS	
Deterministic Jitter (DJ)	DJ	Measured with Wavcrest DTS-2079 VIS/ 6.3.1	—	2	pS	
1 Sigma jitter	JSigma		—	4	pS	
Peak to Peak Jitter	JPK-PK		—	30	pS	

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)

