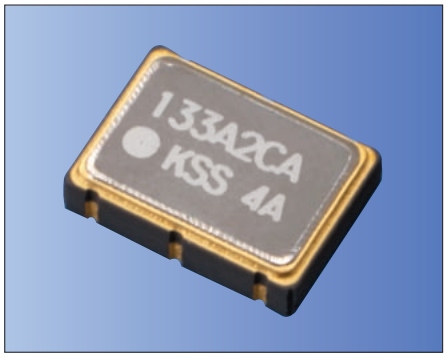
SAW Clock Oscillators Surface Mount Type
KC7050S-C1 Series (FSO-2B Series)

KYOCERA

CMOS/ 1.8V/ 7.0×5.0mm



Pb Free RoHS Compliant

Features

- Low voltage 1.8V
- Low jitter
- LV-CMOS output
- Operation at fundamental high frequency

Table 1

Freq. Tol. Code	Freq. Tol. × 10^{-6}	Operating Temperature Range (°C)	Note
1	± 100	0 to +70	Standard specifications

How to Order

KC7050S 155.520 C 1 1 B 00
① ② ③ ④ ⑤ ⑥ ⑦

① Type (7.0×5.0mm SMD)
② Output Frequency
③ Output Type (CMOS)
④ Supply Voltage (1.8V)
⑤ Frequency Tolerance (See Table 1)
⑥ Symmetry/ Enable Function (40/ 60%, Stand-by)
⑦ Customer Special Model Suffix (STD Specification is "00")

Packaging (Tape & Reel 1000 pcs./ reel)

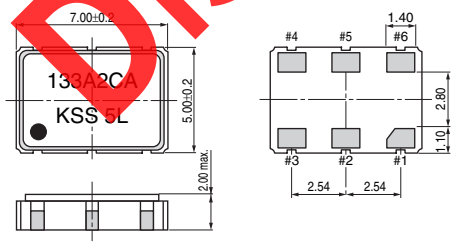
Specifications

Item	Symbol	Conditions	Min.	Max.	Units
Output Frequency Range	fo		100	170	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.: 0 to +70°C	−100	+100	×10⁻⁶
Storage Temperature Range	T_stg		−55	+125	°C
Operating Temperature Range	T_use	Standard Specifications	0	+70	°C
Max. Supply Voltage	—		−0.5	+5	V
Supply Voltage	Vcc	1.8V	1.62	1.98	V
Current Consumption (Standard Loaded)	Icc		—	50	mA
Symmetry	SYM		40	60	%
Rise/ Fall Time (10% Vcc to 90% Vcc Standard Loaded)	tr/ tf		—	2	nS
Low Level Output Voltage	VOL		—	10% Vcc	V
High Level Output Voltage	VOH		90% Vcc	—	V
Output Load (CMOS)	CL		—	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		—	2	mS
Start-up Time	t_str	@Minimum operation voltage to be 0 sec.	—	10	mS
Deterministic Jitter (DJ)	DJ		0.2 typ.		pS
1 Sigma Jitter	JSigma	Measured with Wavecrest DTS-2079 *VISI 6.3.1*	3 typ.		pS
Peak to Peak Jitter	JPK-PK		20 typ.		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)



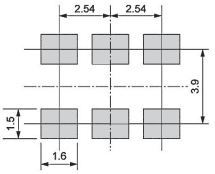
Pad Connections
① Enable/ Disable
② NC
③ Case GND
④ Output
⑤ NC
⑥ Vcc

Plating: Ni+Au

Enable/ Disable Function	
Pad1	Pad4 (Output)
OPEN	Active
"H" Level	Active
"L" Level	High Z (No-Oscillation)

Recommended Land Pattern

(Unit: mm)



Note: A capacitor of value 0.01µF between Vcc and GND is recommended.