

Ph Free

RoHS Compliant

Features

- Since it has a frequency dividing function, it is able to obtain a frequency division of $1/2-1/2^8$ ($1/256$)
- The symmetry of frequency divided output is within $50\pm 2\%$
- The oscillation start time has the fast starting characteristic of being 1.5m sec. or less
- The pin arrangement is DIP 8PIN
- Supply voltage $V_{CC}=5.0V$

Applications

- Amusement

How to Order

KCEXO3- 20.0000 C 5 1 B 00
 ① ② ③ ④ ⑤ ⑥ ⑦

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

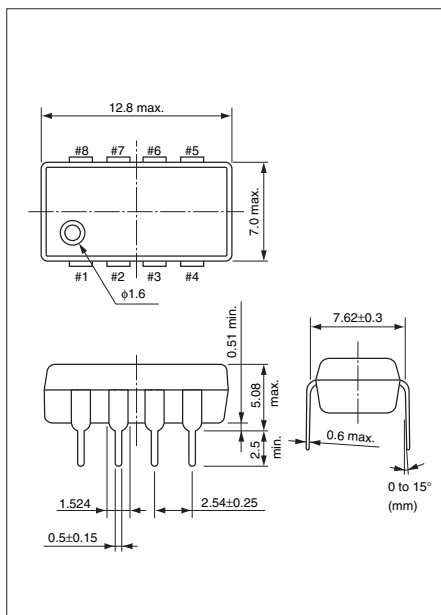
Specifications

Item	Symbol	Conditions	Specifications		Units
			Min.	Max.	
Output Frequency Range	F _o		11.0592	24.576	MHz
Frequency Tolerance (Overall)	F _{tol}		-100	+100	$\times 10^{-6}$
Storage Temperature Range	T _{stg}		-40	+85	°C
Operating Temperature Range	T _{use}		-10	+70	°C
Supply Voltage	V _{CC}		4.5	5.5	V
Current Consumption	I _{CC}		—	20	mA
Symmetry	SYM	@50% V _{CC}	40	60	%
Rise/ Fall Time	tr/ tf		—	15	nS
Low Level Output Voltage	V _{OL}		—	10% V _{CC}	V
High Level Output Voltage	V _{OH}		90% V _{CC}	—	V
Output Load	CL		—	50	pF
Start-up Time	t _{str}		—	1.5	mS

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

Dimensions

(Unit: mm)



Settings of the frequency division output

(Divider Select)

V _{CC}	C	B	A
8	7	6	5

EXO3 5E
16.000M
KSS JAPAN

1	2	3	4
F	D	ST	GND

(OUTPUT)

1. F Outputs the original frequency (fo) of the internal quartz crystal.
2. D Outputs the frequency of programmed dividing ratio (fo/ 2ⁿ). Possible to be oscillated when set to HIGH level and stopped in oscillation when set to LOW level. when this function is not needed, be sure to set the STANDBY pin to the HIGH level.
3. ST Possible to be oscillated when set to HIGH level and stopped in oscillation when set to LOW level. when this function is not needed, be sure to set the STANDBY pin to the HIGH level.
4. GND
5. A } Used to program the dividing ratio for the original frequency.
6. B } Supply voltage
7. C }
8. V_{CC}

Pin connection

Input			Output		
Select	ST		F	D	
C	B	A	Original Frequency	Divided Wave form	
L	L	L	H	fo clock	fo · 1/ 2 clock
L	L	H	H	fo clock	fo · 1/ 2 ² clock
L	H	L	H	fo clock	fo · 1/ 2 ³ clock
L	H	H	H	fo clock	fo · 1/ 2 ⁴ clock
H	L	L	H	fo clock	fo · 1/ 2 ⁵ clock
H	L	H	H	fo clock	fo · 1/ 2 ⁶ clock
H	H	L	H	fo clock	fo · 1/ 2 ⁷ clock
H	H	H	H	fo clock	fo · 1/ 2 ⁸ clock
—	—	—	L	L	L