

CMOS/ 3.3V Typ./ 3.2×1.5mm



RoHS Compliant

Features

- Output frequency: 32.768kHz
- Miniature and Low profile ceramic package
- Low current consumption: 0.35µ A Typ (3.3V, Disable)
- Wide operating voltage range 1.5V to 3.6V
- CMOS output
- Output enable

Applications

- W-LAN etc.

How to Order

KC3215A 32768 C 33 A A E 00
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧

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|--------------------------------|-------------------------------------|
| ① Series | ⑥ Freq. Temp. Chrst. |
| ② Output Frequency | A +10/ -120×10 ⁻⁶ |
| ③ Output type | ⑦ Output Waveform Symmetric |
| ④ Supply Voltage | E 45 to 55% |
| 33 3.3V | ⑧ Customer Special Model Suffix |
| ⑤ Frequency Tolerance | 00 STD Specification |
| A 5±23×10 ⁻⁶ | |

Packaging (Tape & Reel 3000 pcs./ reel)

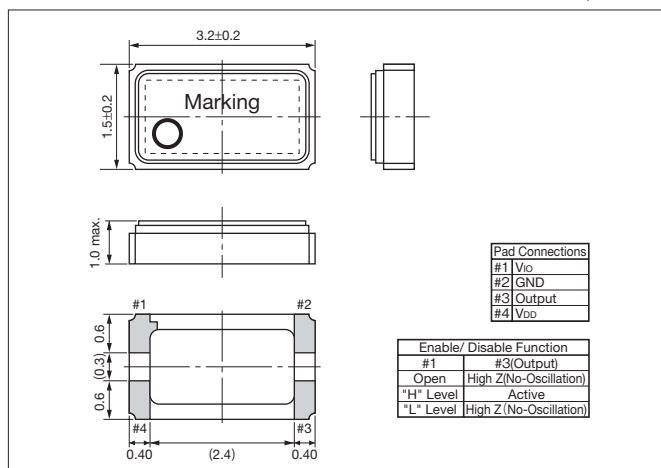
Specifications

Item	Symbol	Conditions	Specifications			Units
			Min.	Typ.	Max.	
Output Frequency Range	f _o	Standard Frequency	—	32.768	—	kHz
Frequency Tolerance	f _o	after 2times Reflow, V _{CC} =3.3V, T _a =25±2°C	-18	+5	+28	×10 ⁻⁶
Frequency Temperature Characteristics	f _o -T _c	T _a =-20 to +70°C (+25°C is reference)	-120	—	+10	×10 ⁻⁶
Frequency Voltage Coefficient	f _o -V	T _a =+25±2°C	-2.0	—	2.0	×10 ⁻⁶ /V
Frequency Aging	F _{age}	Per Year	-3.0	—	3.0	×10 ⁻⁶
Storage Temperature	T _{stg}		-55	—	+125	°C
Operating Temperature	T _{use}		-40	—	+85	°C
Supply Voltage	V _{DD}		1.5	—	3.6	V
Interface Power Supply Voltage	V _{IO}		1.5	—	3.6	V
Current Consumption	I _{CC}	No load, V _{DD} =3.3V, V _{IO} =3.3V	—	—	1.5	µA
		load: 15pF, V _{DD} =3.3V, V _{IO} =3.3V	—	—	4.2	µA
Symmetry	SYM	@50% V _{IO}	45	—	55	%
Rise/ Fall Time	tr/ tf	load: 15pF, 20%V _{IO} to 80%V _{IO}	—	—	50	ns
Low Output Voltage	V _{OL}	I _{OL} =+0.4mA	—	—	0.4	V
High Output Voltage	V _{OH}	I _{OH} =-0.4mA	V _{IO} -0.4	—	—	V
CMOS Load	L _{CMOS}	CMOS Output	—	—	15	pF
Disable Delay Time	t _{dis}		—	—	1.0	µs
Start-up Time	t _{str}	Time at minimum Supply voltage to be 0 s	—	—	0.6	sec

* Unless otherwise stated, characteristics(specifications) shown in the above table are based on the rated operating temperature and voltage condition.
 * Please contact us for other specifications.

Dimensions

(Unit: mm)



Recommended Land Pattern

(Unit: mm)

