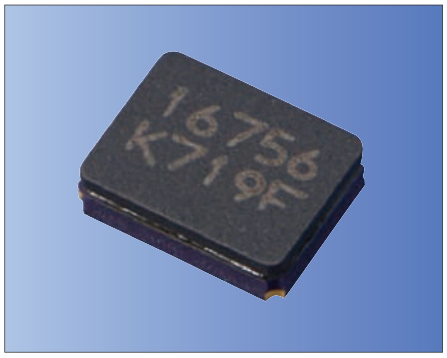
# Crystal Units
# Surface Mount Type CX3225GB

KYOCERA

3.2×2.5mm for Consumer Products




RoHS Compliant

## Features

- Crystal unit for Consumer Products
- Small and low profile 0.9mm max. (3.2×2.5×0.8mm)
- Ceramic package
- Product with lead free terminations
- Reflow compatible

## Applications

- Digital Electronics
- Consumer Products

## How to Order

CX3225GB 27000 □□ □ □ □ □□

① ② ③ ④ ⑤ ⑥ ⑦

① Series

② Frequency

③ Load Capacitance

| | | |
|---|---|---|
| B0 | 6 pF | — |
| D0 | 8 pF | Std. |
| F0 | 10 pF | — |

④ Frequency Stability

| | | |
|---|---|---|
| H | ±20×10⁻⁶ | Std. |

⑤Operating Temp. Range ⑥Frequency Temp. Stability

| | | | |
|---|---|---|---|
| EQ | −10 to +70°C | ±30×10⁻⁶ | Std. |

⑦ Individual Specification

## Specifications

| Item | Symbol | Specification | Units | Remarks |
|---|---|---|---|---|
| Frequency Range | f_nom | 9800 to 54000 | kHz | |
| Overtone Order | OT | Fundamental | — | |
| Load Capacitance | CL | 8 | pF | |
| Frequency Stability | f_tol | ±20 | ×10⁻⁶ | 25°C±3°C |
| Motional Series Resistance | R1 | Table 1 | ohm | |
| Drive Level | DL | Table 2 | μW | |
| Operating Temp. Range | T_use | −10 to +70 | °C | |
| Storage Temp. Range | T_stg | −40 to +85 | °C | |
| Frequency Temp. Characteristics | f_tem | ±30 | ×10⁻⁶ | Freq. deviation from the value at 25°C |

* Please contact us for other specifications.

## Table1 Motional Series Resistance

| Frequency Range | Motional Series Resistance |
|---|---|
| 9800 to 11999kHz | 300Ω max. |
| 12000 to 13999kHz | 250Ω max. |
| 14000 to 15999kHz | 100Ω max. |
| 16000 to 19999kHz | 80Ω max. |
| 20000 to 26999kHz | 60Ω max. |
| 27000 to 54000kHz | 50Ω max. |

## Table2 Level of Drive

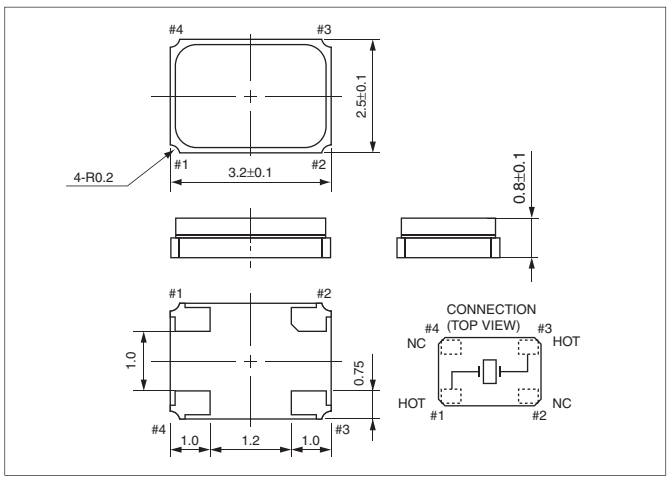
| Frequency Range | Level of Drive |
|---|---|
| 10000 to 54000kHz | 10μW (100μW max.) |

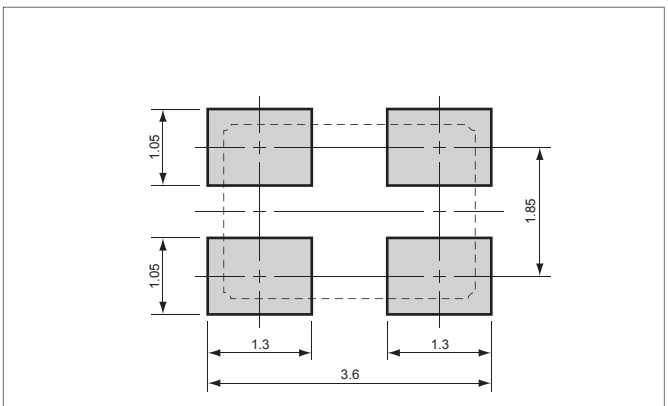
Typical Frequencies and Part Numbers

| Frequency (kHz) | Part Number |
|---|---|
| 10000.000 | CX3225GB10000D0HEQZ1 |
| 12000.000 | CX3225GB12000D0HEQZ1 |
| 13560.000 | CX3225GB13560D0HEQZ1 |
| 14318.180 | CX3225GB14318D0HEQZ1 |
| 14745.600 | CX3225GB14745D0HEQZ1 |
| 16000.000 | CX3225GB16000D0HEQZ1 |
| 18432.000 | CX3225GB18432D0HEQZ1 |
| 19200.000 | CX3225GB19200D0HEQZ1 |
| 20000.000 | CX3225GB20000D0HEQZ1 |
| 22579.200 | CX3225GB22579D0HEQZ1 |
| 24000.000 | CX3225GB24000D0HEQZ1 |
| 24576.000 | CX3225GB24576D0HEQZ1 |
| 25000.000 | CX3225GB25000D0HEQZ1 |
| 27000.000 | CX3225GB27000D0HEQZ1 |
| 27120.000 | CX3225GB27120D0HEQZ1 |
| 30000.000 | CX3225GB30000D0HEQZ1 |
| 32000.000 | CX3225GB32000D0HEQZ1 |
| 33333.000 | CX3225GB33333D0HEQZ1 |
| 38400.000 | CX3225GB38400D0HEQZ1 |
| 40000.000 | CX3225GB40000D0HEQZ1 |
| 48000.000 | CX3225GB48000D0HEQZ1 |
| 54000.000 | CX3225GB54000D0HEQZ1 |

## Dimensions

(Unit: mm)




## Recommended Land Pattern

(Unit: mm)