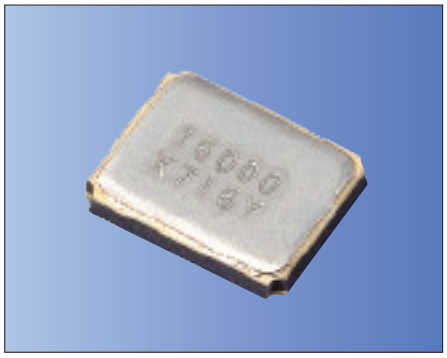
Crystal Units
Surface Mount Type CX3225SB

KYOCERA

3.2×2.5mm for Consumer Products/ Mobile Communications/ Automotive



RoHS Compliant

Features

- Crystal unit for Consumer Products
- Miniature and low profile (3.2×2.5×0.55mm)
- Ceramic package
- Reflow compatible
- AEC-Q200 qualified
  (Please contact us for Automotive use)

Applications

- Digital Electronics
- Consumer Products
- Car Electronics
- Mobile Communications, Bluetooth®, Wireless LAN

* Bluetooth® Trademarks are owned by Bluetooth SIG Inc.

How to Order

CX3225SB 12000 □□ □ □ □ □□
① ② ③ ④ ⑤ ⑥ ⑦

① Series ② Frequency
③ Load Capacitance ④ Frequency Tolerance

D0	8 pF	G	$\pm15\times10^{-6}$

⑤ Operating Temp. Range ⑥ Frequency Temp. Stability

EJ	−10 to +70°C	$\pm15\times10^{-6}$
LJ	−30 to +85°C	$\pm15\times10^{-6}$
SS	−40 to +125°C	$\pm50\times10^{-6}$

⑦ Individual Specification

Packaging (Tape & Reel 1000/ 3000 pcs./ reel)

Specifications

Item	Symbol	Specification			Units	Remarks
Frequency Range	f_{nom}	12000 to 54000			kHz	
Overtone Order	OT	Fundamental			—	
Load Capacitance	CL	8			pF	Please contact us for other Load Capacitance.
Frequency Tolerance	f_{tol}	±15			$\times10^{-6}$	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	−30 to +85	−40 to +125	°C	
Storage Temp. Range	T_{stg}	−40 to +85		−40 to +125	°C	
Frequency Temp. Characteristics	f_{tem}	±15		±50	$\times10^{-6}$	Freq. deviation from the value at 25°C

Please contact us for other specifications.

Table1 Motional Series Resistance

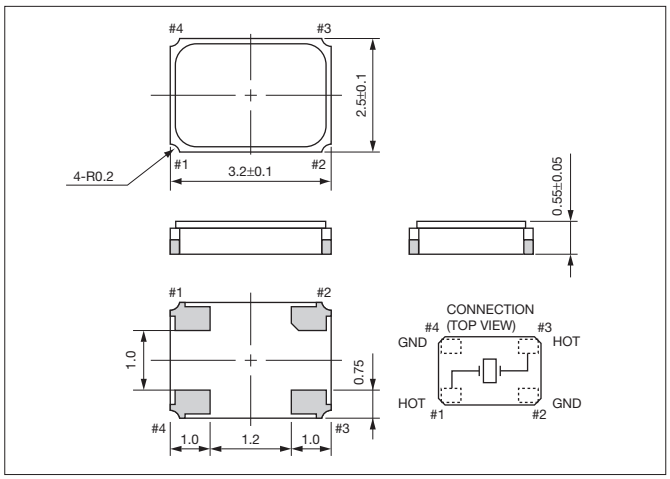
Frequency Range	Motional Series Resistance
$12000 \le f_{nom} < 13000$kHz	150Ω max.
$13000 \le f_{nom} < 20000$kHz	80Ω max.
$20000 \le f_{nom} \le 54000$kHz	50Ω max.

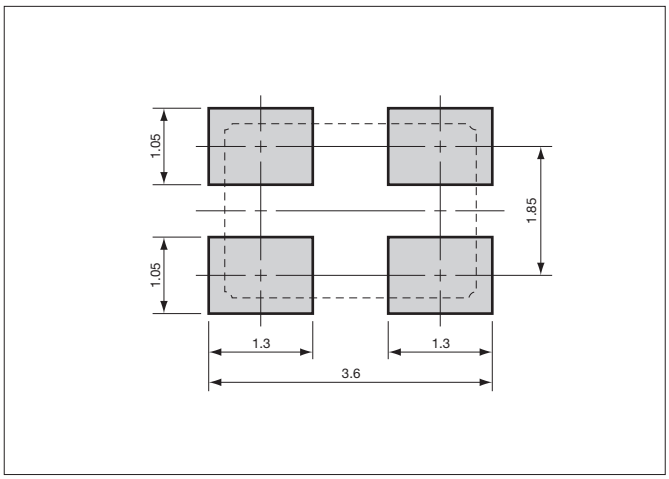
Table2 Level of Drive

Frequency Range	Level of Drive
$12000 \le f_{nom} \le 54000$kHz	10μW (100μW max.)

Dimensions

(Unit: mm)



Recommended Land Pattern

(Unit: mm)