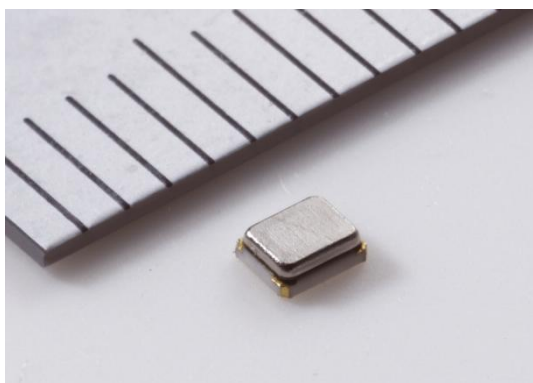


Crystal Unit

- For consumer & Industrial market -



Application

For consumer and industrial market.

- **Consumer** : Wireless Application(BLE, NFC),
Wired Application (Ethernet, USB2.0/3.0),
Processor (CPU, MPU, DSP), HDD, SSD,
PC, Medical/Healthcare, etc...
- **industrial** : PLC, LCD, Processor,
Wireless Application(Zigbee), etc...



Feature and Structure

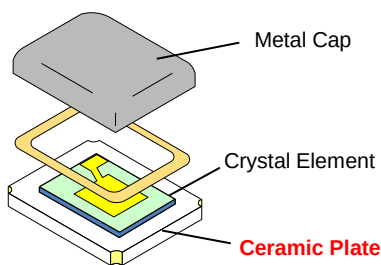
✓ **Small size**

2.5mm x 2.0mm for 16 to 20MHz
2.0mm x 1.6mm for 24 to 48MHz

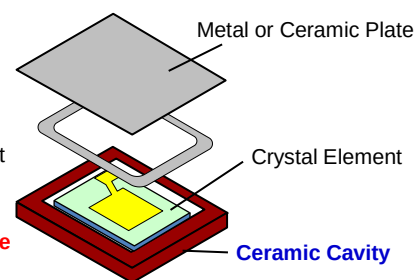
✓ **Economical & Robust Design**

Simple structure using Murata's
proven package technology
Particle screening process for
enhanced reliability

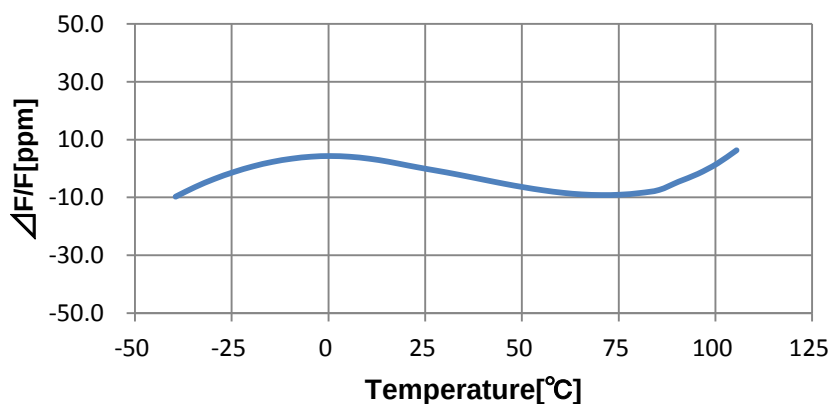
Murata Crystal Unit



Conventional Crystal Unit



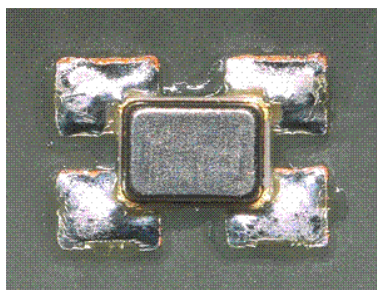
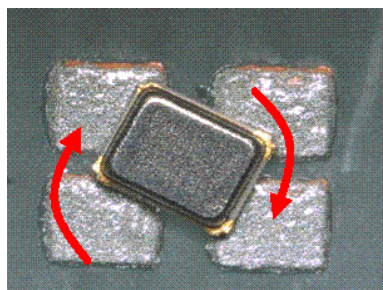
Frequency shift by temperature



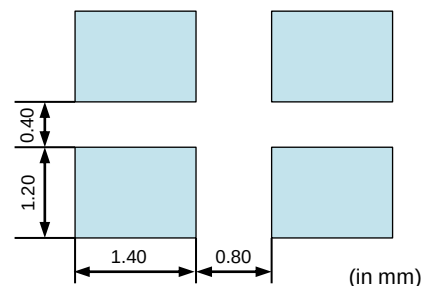
※This graph shows the frequency shift by temperature of XRCGB25M000F3M00R0.

Compatibility

Self-alignment test on 3225 land pattern of XRCGB series
Before reflow After reflow



Land pattern for self-alignment test
(Land pattern for 3.2mm x 2.5mm crystal)



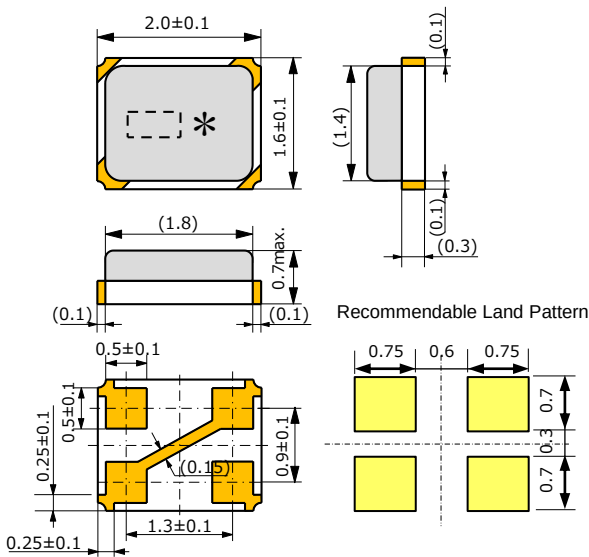
App.	P/N	Freq. (MHz)	Freq. Tolerance at +25 °C (ppm max.)	Frequency Shift By Temp. (ppm max.)	ESR (ohm max.)	Frequency Aging (ppm/Y)	Load Capacitance (pF)	Drive Level (μW max.)	
Consumer	XRCHA16M000F0L01R0	16.0000	+/-100	+/-100 (-30 to +85°C)	100	+/-5	8+/-0.1	300	
	XRCHA20M000F0L01R0	20.0000			80				
	XRCGB24M000F2P00R0	24.0000	+/-20	+/-20 (-30 to +85°C)	150		6+/-0.1		
	XRCGB24M576F3M00R0	24.5760	+/-30	+/-40 (-30 to +85°C)					
	XRCGB25M000F2P00R0	25.0000	+/-20	+/-20 (-30 to +85°C)					
	XRCGB26M000F2P00R0	26.0000							
	XRCGB27M000F2P00R0	27.0000							
	XRCGB27M120F2P00R0	27.1200							
	XRCGB30M000F2P00R0	30.0000							
	XRCGB31M250F2P00R0	31.2500	+/-45	+/-40 (-30 to +85°C)	100				
	XRCGB32M000F2P00R0	32.0000							
	XRCGB33M868F4M00R0	33.8688							
	XRCGB40M000F4M00R0	40.0000							
	XRCGB48M000F4M00R0	48.0000							
Industrial	XRCHA16M000F0Z01R0	16.0000	+/-100 *	+/-100 * (-40 to 105 °C)	100		8+/-0.1	6+/-0.1	
	XRCHA20M000F0Z01R0	20.0000			80				
	XRCGB24M000F0Z00R0	24.0000			150				
	XRCGB24M576F0Z00R0	24.5760							
	XRCGB25M000F0Z00R0	25.0000							
	XRCGB26M000F0Z00R0	26.0000							
	XRCGB27M000F0Z00R0	27.0000							
	XRCGB27M120F0Z00R0	27.1200							100
	XRCGB30M000F0Z00R0	30.0000							
	XRCGB31M250F0Z00R0	31.2500							
	XRCGB32M000F0Z00R0	32.0000							
	XRCGB33M868F0Z00R0	33.8688							
	XRCGB40M000F0Z00R0	40.0000							
	XRCGB48M000F0Z00R0	48.0000							

*: If you need tight tolerance solution, please contact Murata.

Dimensions and Land pattern

(in mm)

XRCGB Series



XRCHA Series

