

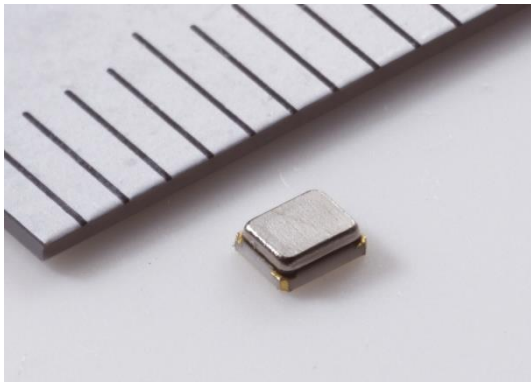
Crystal Unit

- For consumer market -

RoHS

Lead free

muRata
INNOVATOR IN ELECTRONICS



Application

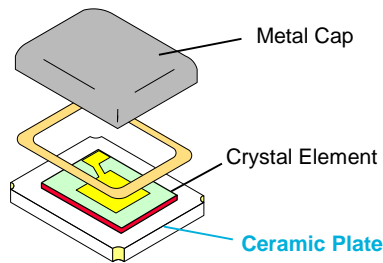
- **Wireless Application**
(Wi-Fi, BT, BLE, UWB, NFC, Zigbee)
- **Wired Application**
(Ethernet, USB2.0/3.0)
- **Processor**
(CPU, MPU, DSP)

HDD, SSD, PC, Medical/Healthcare, Wireless module, Headset, Over The Top (OTT), Game devices, Lighting fixtures, HEMS/BEMS, etc...

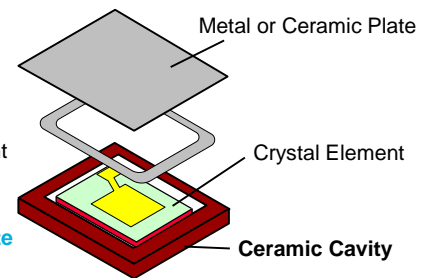
Feature and Structure

- **Small size**
2.0mm x 1.6mm for 16 to 50MHz
- **Economical & Robust Design**
Simple structure using Murata's proven package technology
Particle screening process for enhanced reliability

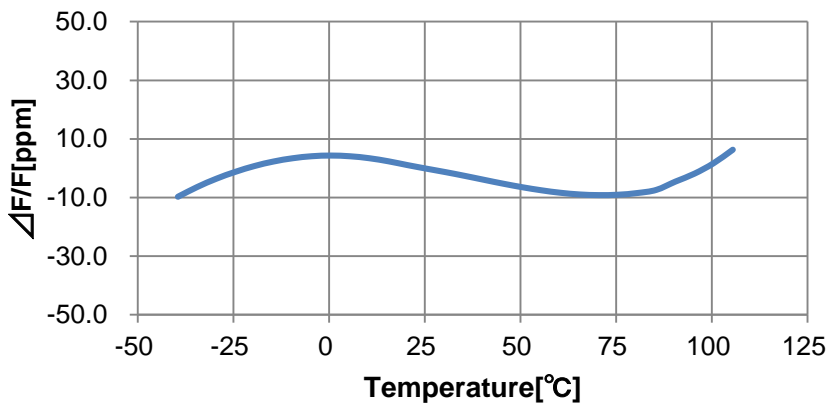
Murata Crystal Unit



Conventional Crystal Unit



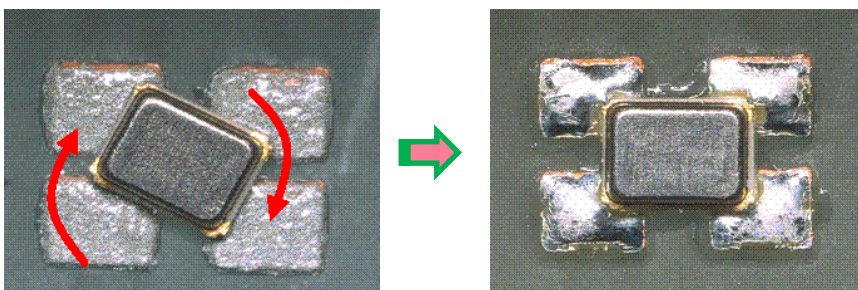
Frequency shift by temperature



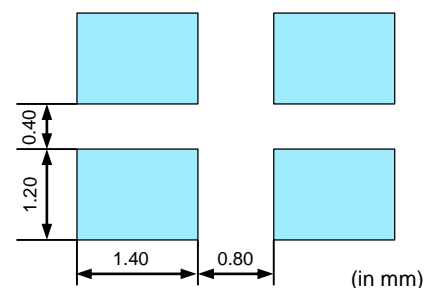
※This graph shows the frequency shift by temperature of XRCGB25M000F3M00R0.

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)



Lineup

Series	P/N	Freq. (MHz)	Freq. Tolerance (ppm max.)	Frequency Shift By Temp. (ppm max.)	ESR (ohm max.)	Frequency Aging (ppm/Y)	Load Capacitance (pF)
XRCGB_F_S	XRCGB24M000FFS1AR0	24.0000	±8	±12 (-30 ~ +85 °C)	70	±2	6.0
	XRCGB26M000F1S1AR0	26.0000	±10	±10 (-30 ~ +85 °C)	60		
	XRCGB32M000F1S1AR0	32.0000			50		
	XRCGB37M400F1S1AR0	37.4000			60		
	XRCGB38M400F1S1AR0	38.4000			50		
	XRCGB40M000F1S1AR0	40.0000			70		
	XRCGB24M000F1SBAR0	24.0000			60		
	XRCGB26M000F1SBAR0	26.0000			50		
	XRCGB32M000F1SBAR0	32.0000			60		
	XRCGB37M400F1S2FR0	37.4000			50		
	XRCGB38M400F1S2FR0	38.4000			60		
	XRCGB40M000F1S2FR0	40.0000			50		
XRCGB_F_N	XRCGB16M000FXN00R0	16.0000			±40(Total) (-30 ~ +85 °C)		200
XRCGB_F_P	XRCGB24M000F2P00R0	24.0000	±20	±20 (-30 ~ +85 °C)	150	±5	
	XRCGB25M000F2P00R0	25.0000	±20	±20 (-30 ~ +85 °C)			
	XRCGB26M000F2P00R0	26.0000					
	XRCGB27M000F2P00R0	27.0000					
	XRCGB27M120F2P00R0	27.1200					
	XRCGB30M000F2P00R0	30.0000			100		
	XRCGB31M250F2P00R0	31.2500					
	XRCGB32M000F2P00R0	32.0000					
XRCGB24M576F3M00R0	24.5760	±30				±40 (-30 ~ +85 °C)	150
XRCGB_F_M	XRCGB33M868F4M00R0	33.8688	±45	±40 (-30 ~ +85 °C)	100		
	XRCGB40M000F4M00R0	40.0000					

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

Dimensions and Land pattern

(in mm)

