

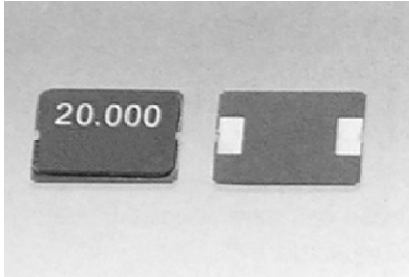


HCX-5SA SERIES 5.2X 3.2X 1.2 MM

FEATURES

- Ultra-miniature size
- Fundamental till 54MHz
- Wide Frequency Range
- Ceramic package
- Emboss taping
- Reflow soldering

The 5FA crystal is a ultra miniature ceramic package SMD type. The height is less than 1.4mm and fundamental till 54MHz that allows is ease of circuit design. Excellent electric performance optimum for OA and AV application.



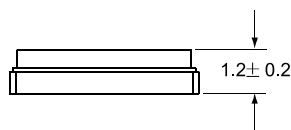
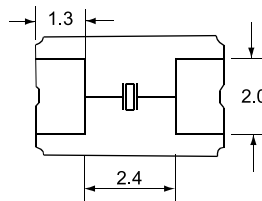
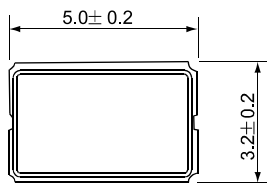
Electrical Specifications

| Parameter | Symb | Condition | Min | Typ | Max | Units |
|-----------------------------|--------------------|--------------------|------|-----|--------|-------|
| Frequency Range | F ₀ | | 12 | | 54 | MHz |
| Frequency Tolerance at 25°C | ΔF/ F ₀ | 25°C | ±30 | ±50 | ±100 | ppm |
| Temperature Stability | T _c | REF TO 25°C | ±30 | ±50 | ±100 | ppm |
| Operating Temperature Range | T _{OPR} | | -10 | | +70 | °C |
| Storage Temperature Range | T _{STG} | | -40 | | +85 | °C |
| Shunt Capacitance | C ₀ | | | | 7 | pF |
| Load Capacitance | C _L | Customer Specified | 8 | | Series | pF |
| Insulator Resistance | I _R | 100V _{DC} | 500 | | | M Ω |
| Drive Level | D _L | | 10 | 100 | 300 | μW |
| Aging(at 25°C) | F _a | AT 25°C ,per year | -5.0 | | +5.0 | ppm |

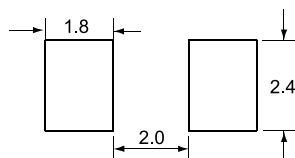
Equivalent Series Resistance(ESR) and Mode of Vibration(Mode)

| Frequency Range | Max ESR(Ω) | Mode |
|------------------------|--------------|-------------|
| 12.000MHz to 19.999MHz | 120 | Fundamental |
| 20.000MHz to 29.999MHz | 70 | Fundamental |
| 30.000MHz to 54.000MHz | 50 | Fundamental |

Mechanical Dimensions(mm)



Recommended Solder Pattern





HCX-5SA

Surface Mount Crystal

Ordering Information

