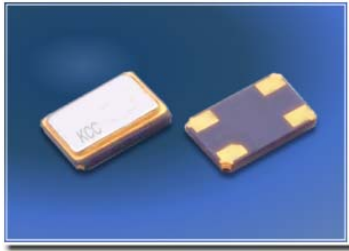


K.C.C Crystal (M53 Series)



Features & Applications

- 5.0x3.2x1.0mm Size
- Ceramic Package
- High Frequency Stability
- Excellent Vibration Resistance & Shock Resistance
- RoHS & REACH Compliant, Pb Free

General Specifications

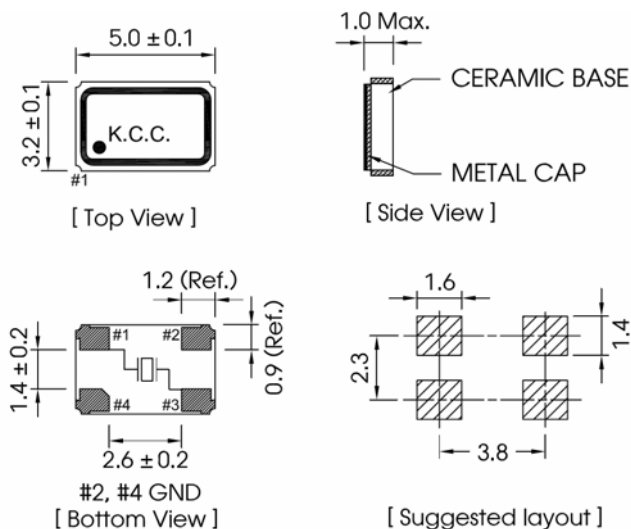
Parameter	M53 (A / B Type)
Frequency Range (Fundamental)	8.0 ~ 52.0 MHz
Frequency Range (3rd overtone)	40.0 ~ 133.0 MHz
Frequency Tolerance	±10~100 ppm @25°C
Frequency stability	±15~100 ppm @25°C
Operating Temperature Range	-10 to +70°C or specify (-40 ~ +150°C is available)
Storage Temperature Range	-55 to +125°C
Load Capacitance	Series or Parallel (4 to 39 pF) resonance
Shunt Capacitance	7.0 pF (Max.)
Drive Level	15 / 30 / 50 / 100 / 200 / 500 or special requirement
Aging	± 5 ppm per year (Max.)

Equivalent Series Resistance (ESR)

Frequency Range	Vibration Mode	ESR (Ω Max.)	Frequency Range	Vibration Mode	ESR (Ω Max.)
8.000~10.000MHz	F	150	30.001~40.000MHz	F	30
10.001~12.000MHz	F	90	40.001~52.000MHz	F	20
12.001~15.000MHz	F	70	40.000~52.000MHz	3rd	100
15.001~20.000MHz	F	50	52.001~80.000MHz	3rd	100
20.001~30.000MHz	F	40	80.001~133.000MHz	3rd	80

※F: Fundamental/AT

Outline and Dimensions (A Type)[Unit: mm]



Order Part No.:

Product name: **X 25.000 M53 - 20 - 4P - G T Z**

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- ① KCC Crystal
- ② Frequency (Standard ± 30ppm)
- ③ Size Type : M53=5x3.2x1.0mm
- ④ Load capacitance(pF)
- ⑤ Pad : 2 or 4 pad
- ⑥ G= RoHS Compliant
- ⑦ Operating temperature : T= -40°C to +85°C
- ⑧ Frequency stability code (±ppm)