

- ▶ -55 to +125°C Temp Range
- ▶ 5 x 3.2 mm Footprint
- ▶ Pb Free/RoHS Compliant

# ECX-53B-DU

## SMD CRYSTAL



### OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

| PARAMETERS            | CONDITIONS     | ECX-53B-DU |     |         | UNITS |
|-----------------------|----------------|------------|-----|---------|-------|
|                       |                | MIN        | TYP | MAX     |       |
| Frequency Range       |                | 10.000     |     | 150.000 | MHz   |
| Frequency Tolerance   | at +25°C       |            |     | ± 30    | ppm   |
| Frequency Stability   | -55 to +125°C  |            |     | ± 100   | ppm   |
| Shunt Capacitance     |                |            |     | 5       | pF    |
| Load Capacitance      | Specify in P/N | 8          | 20  | Series  | pF    |
| Drive Level           |                |            |     | 300     | μW    |
| Operating Temperature |                | -55        |     | +125    | °C    |
| Storage Temperature   |                | -55        |     | +125    | °C    |
| Aging (Per Year)      | @ +25°C ±3°C   |            |     | ±5      | ppm   |

### EQUIVALENT SERIES RESISTANCE/MODE OF OSCILLATION

| FREQUENCY RANGE (MHz) | MODE OF OSC | MAX ESR Ω | FREQUENCY RANGE (MHz) | MODE OF OSC  | MAX ESR Ω |
|-----------------------|-------------|-----------|-----------------------|--------------|-----------|
| 10.000 ~ 15.999       | Fundamental | 80        | 24.000 ~ 50.000       | Fundamental  | 30        |
| 16.000 ~ 19.999       | Fundamental | 60        | 50.100 ~ 59.999       | 3rd Overtone | 100       |
| 20.000 ~ 23.999       | Fundamental | 40        | 60.000 ~ 150.000      | 3rd Overtone | 80        |

### DIMENSIONS (mm)

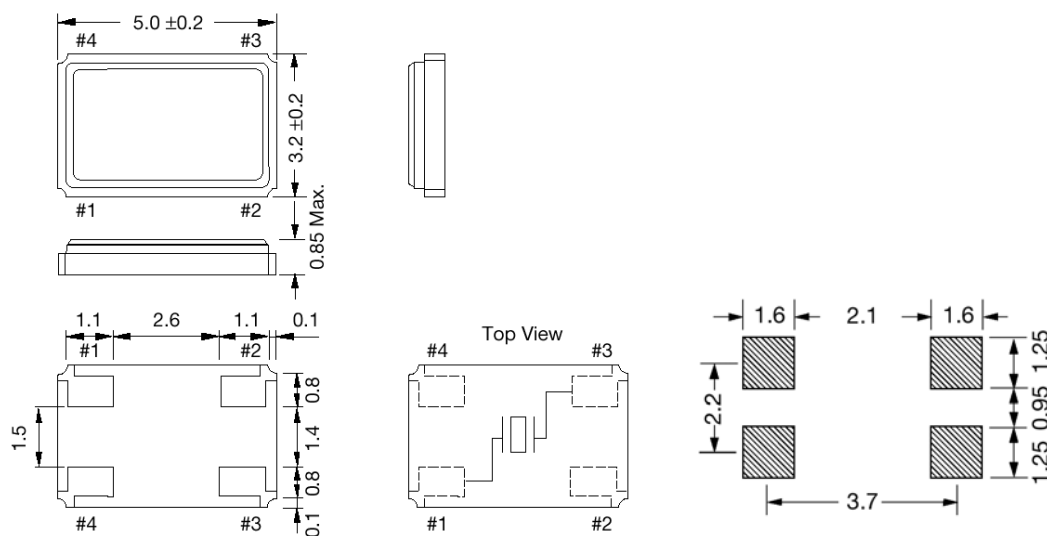


Figure 1) Top, Side, Bottom and End views

Figure 2) Suggested Land Pattern

PART NUMBERING GUIDE: Example ECS-200-20-30B-DU