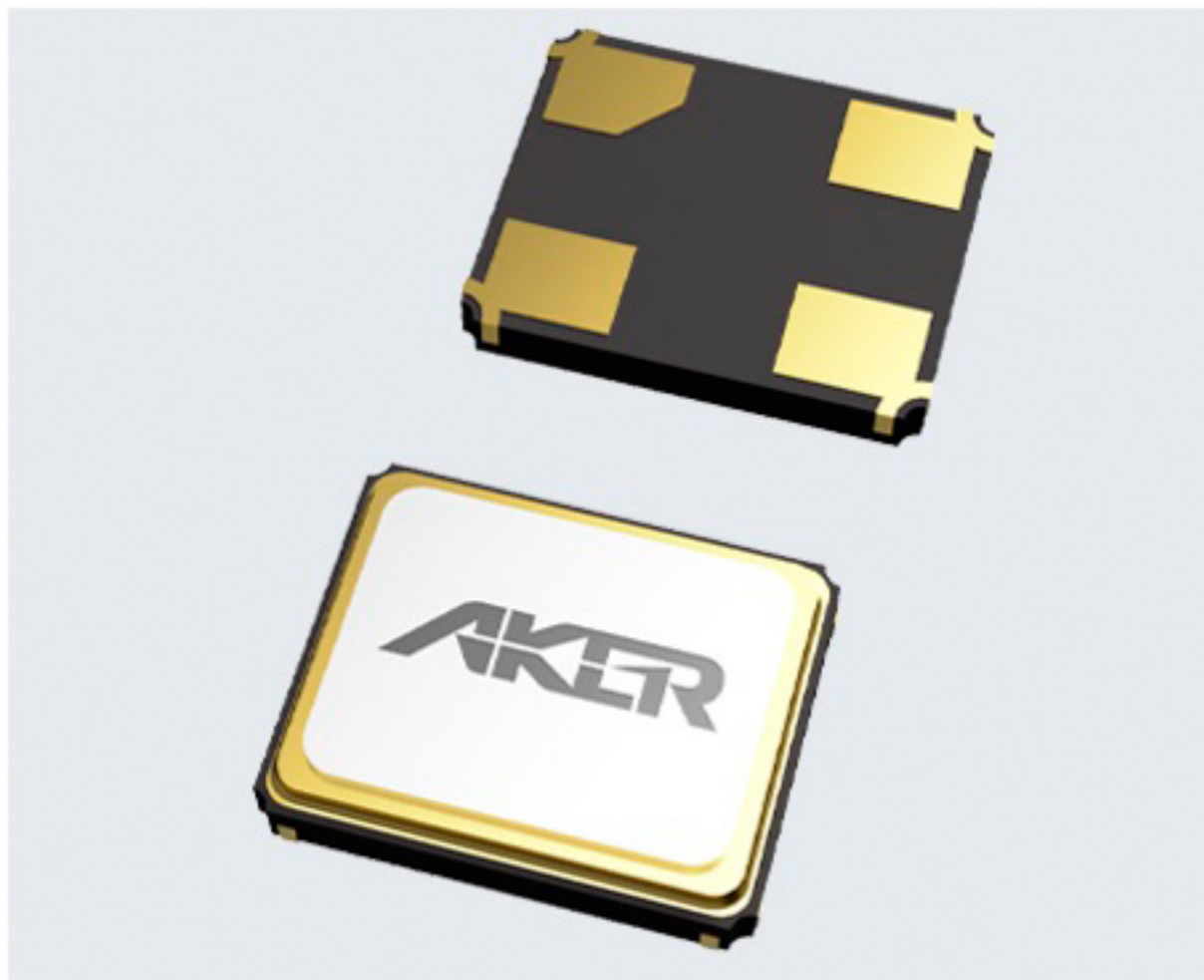


# CRYSTAL UNITS

Automotive Grade

 ACTUAL SIZE: 

## CXAF-025000-2X12X20 CERAMIC PACKAGE



### APPLICATIONS

- ▶ Camera
- ▶ TPMS
- ▶ AVM

### FEATURES

- ▶ Seam Seal
- ▶ Excellent Solderability
- ▶ Excellent Vibration Resistance & Shock Resistance
- ▶ High Frequency Stability
- ▶ Excellent Thermal Hysteresis
- ▶ RoHS Compliant
- ▶ IATF-16949 Certified
- ▶ AEC-Q200 Qualified

## Specification

### MODEL

|                                     |        |   |              |
|-------------------------------------|--------|---|--------------|
| DIMENSION                           | ( mm ) | 2.50 X 2.00                                 |              |
| <b>FREQUENCY</b>                    |        |   |              |
| FREQUENCY RANGE ( Fundamental )     | MHz    | 12.000 ~ 66.999                             |              |
| FREQUENCY RANGE ( 3rd Overtone )    | MHz    | 67.000 ~ 133.000                            |              |
| FREQUENCY TOLERANCE ( 25°C )        | ppm    | ± 10 ~ ± 100                                |              |
| FREQUENCY STABILITY ( Ref to 25°C ) | ppm    | ± 20 ~ ± 100                                | ± 50 ~ ± 100 |
| <b>ENVIRONMENTAL CONDITION</b>      |        |   |              |
| OPERATING TEMPERATURE RANGE         | °C     | - 40 ~ + 85 Or - 40 ~ + 125                 | - 55 ~ + 125 |
| STORAGE TEMPERATURE RANGE           | °C     | - 55 ~ + 150                                |              |
| AGING / YEAR                        | ppm    | ± 3   |              |
| <b>ELECTRICAL SPECIFICATIONS</b>    |        |   |              |
| TEST CIRCUIT                        |        | S&A 250B With π Fixture                     |              |
| LOAD CAPACITANCE                    | pF     | SERIES, 6pF to 47pF, or Specify             |              |
| DRIVE LEVEL                         | uW     | 15, 30, 50, 100, 200 or special requirement |              |
| EQUIVALENT SERIES RESISTANCE        | Ω      | See Table                                   |              |
| SHUNT CAPACITANCE                   | pF     | 2.0 Max.                                    |              |

\*Specification subject to change without notice.

## Equivalent Series Resistance ( Ω )

| Frequency Range  | Mode of Operation | ESR       |
|------------------|-------------------|-----------|
| 12.000 ~ 15.999  | Fundamental       | 150Ω Max. |
| 16.000 ~ 19.999  | Fundamental       | 80Ω Max.  |
| 20.000 ~ 24.999  | Fundamental       | 60Ω Max.  |
| 25.000 ~ 29.999  | Fundamental       | 50Ω Max.  |
| 30.000 ~ 34.999  | Fundamental       | 45Ω Max.  |
| 35.000 ~ 66.999  | Fundamental       | 40Ω Max.  |
| 67.000 ~ 133.000 | 3rd Overtone      | 100Ω Max. |

## Dimension(mm)

