

## CRYSTAL UNITS

Automotive Grade

ACTUAL SIZE: ☐

CXAF-013

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 )	3.20 X 2.50	
FREQUENCY			
FREQUENCY RANGE ( Fundamental )	MHz	8.000 ~ 64.000	
FREQUENCY RANGE ( 3rd Overtone )	MHz	60.000 ~ 156.250	
FREQUENCY TOLERANCE ( 25°C )	ppm	± 10 ~ ± 100	
FREQUENCY STABILITY ( Ref to 25°C )	ppm	± 20 ~ ± 100	± 50 ~ ± 100
ENVIRONMENTAL CONDITION			
OPERATING TEMPERATURE RANGE	°C	- 40 ~ + 85 Or - 40 ~ + 125	- 55 ~ + 125
STORAGE TEMPERATURE RANGE	°C	- 55 ~ + 150	
AGING / YEAR	ppm	± 3	
ELECTRICAL SPECIFICATIONS			
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	3.0 Max.	

\*Specification subject to change without notice.

Equivalent Series Resistance (  $\Omega$  )

Frequency Range	Mode of Operation	ESR
8.000 ~ 9.999	Fundamental	300 $\Omega$ Max.
10.000 ~ 11.999	Fundamental	150 $\Omega$ Max.
12.000 ~ 15.999	Fundamental	80 $\Omega$ Max.
16.000 ~ 19.999	Fundamental	60 $\Omega$ Max.
20.000 ~ 24.999	Fundamental	50 $\Omega$ Max.
25.000 ~ 39.999	Fundamental	40 $\Omega$ Max.
40.000 ~ 64.000	Fundamental	30 $\Omega$ Max.
60.000 ~ 124.999	3rd Overtone	100 $\Omega$ Max.
125.000 ~ 156.250	3rd Overtone	80 $\Omega$ Max.

## Dimension(mm)

## CXAF

