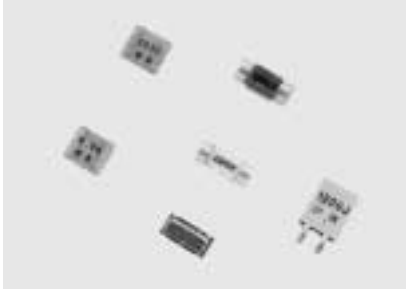


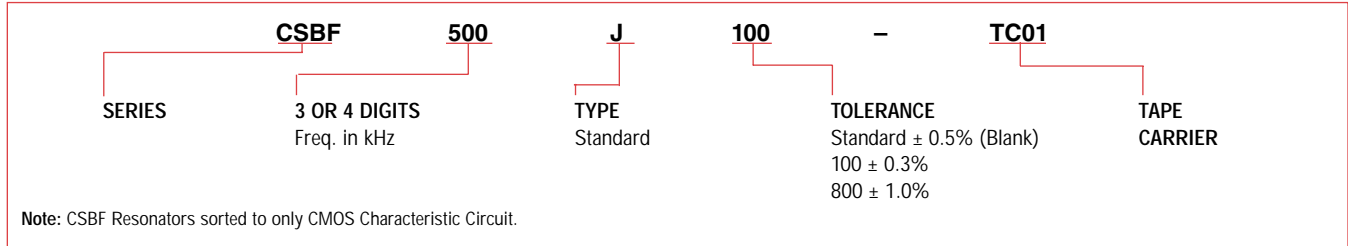
CSBF/CSAC, CSACV/CSACW Series



Increasing demand for size reduction and the economies realized through Surface Mount Technology, have led Murata Electronics to develop the CSBF and CSAC ceramic resonators. The CSBF is a miniaturized leaded unit offering size compatibility with most commonly available surface mount devices, while the CSKCC and the CSAC are true surface mountable component.

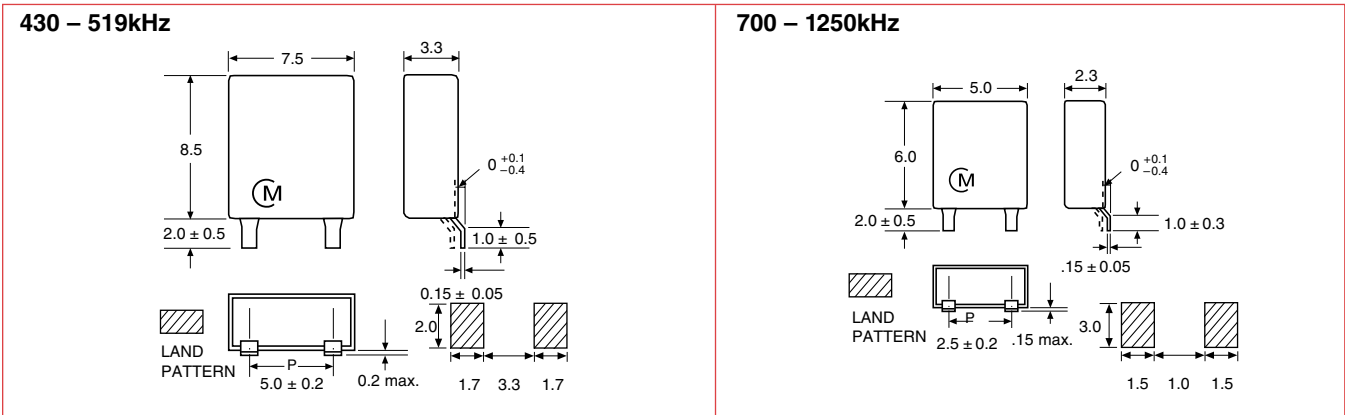
Both devices are available in tape and reel packaging compatible with most auto-placement equipment.

PART NUMBERING SYSTEM



DIMENSIONS: mm

CSBF SERIES – 430 to 1250kHz

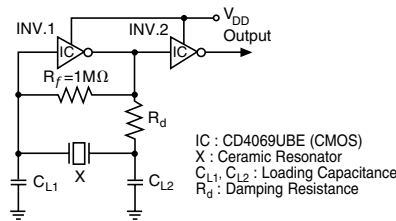


SPECIFICATIONS

Frequency Range	430 – 519kHz	700 – 1250kHz
Standard Initial Frequency Tolerance (25°C)	±0.5%	±0.5%
Temperature Stability (-20°C to +80°C)*	±0.3%	±0.3%

*Unavailable for certain frequency ranges.

STANDARD TEST CIRCUIT



Note: Also available in automotive temp. grade.

CERAMIC RESONATORS

CSAC, CSACV/CSACW Series

CSA series is being de-emphasized in favor of the GST series.

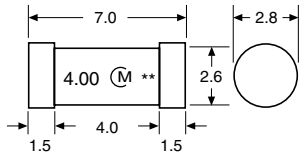
CSAC/CSACV/CSACW SERIES – 1.80 to 60.00MHz

SPECIFICATIONS	CSAC□MGC/MGCM-TC	CSACV□MTJ-TC20	CSACV□MXJ040-TC20	CSACW□MX-T
Frequency Range	1.80 to 6.00MHz	6.01 to 13.0MHz	13.50 to 20.00MHz	20.01 to 70.00
Standard Initial Frequency Tolerance	±0.5%	±0.5%	±0.5%	±0.5%
Storage Temperature Range	-40°C to +85°C			-55°C to +85°C
Temperature Tol. (-20°C to +80°C)	±0.3%	±0.5%	±0.3%	±0.2%
Withstand Voltage	50 VDC max.			100 VDC max.

DIMENSIONS: mm

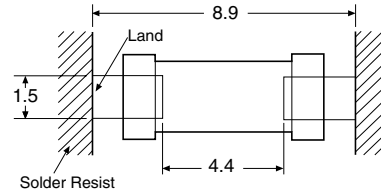
LAND PATTERN: mm

CSAC□MGC-TC

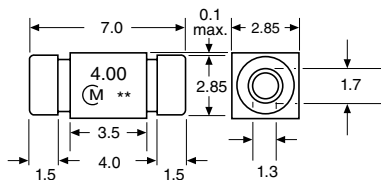


** : EIA-J Date Code

CSAC□MGC-TC

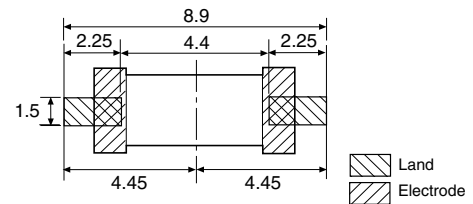


CSAC□MGCM-TC

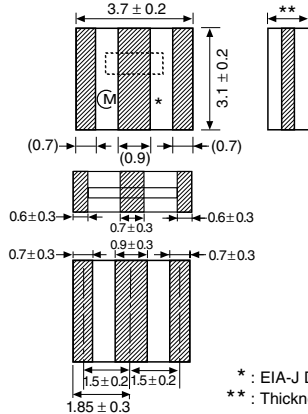


** : EIA-J Date Code

CSAC□MGCM-TC

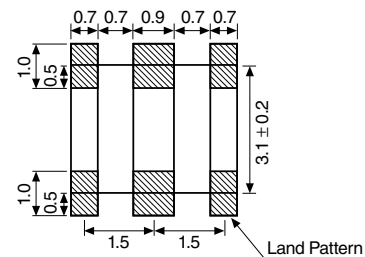


CSACV□MTJ/MXJ-TC20

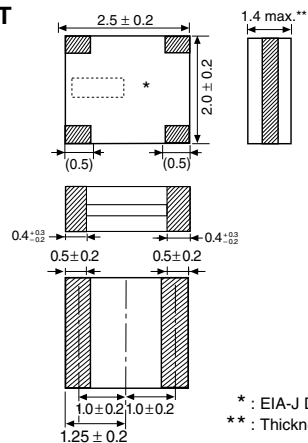


* : EIA-J Date Code
** : Thickness varies by frequency

CSACV□MTJ/MXJ-TC20

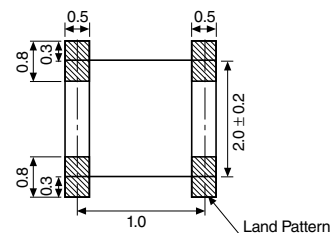


CSACW□MX-T



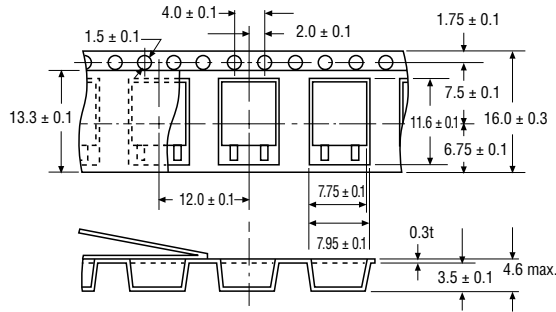
* : EIA-J Date Code
** : Thickness varies by frequency

CSACW□MX-T

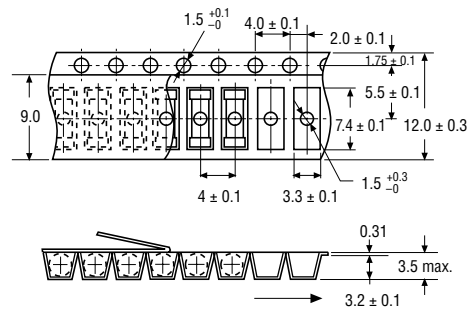


PLASTIC TAPE DIMENSIONS: mm

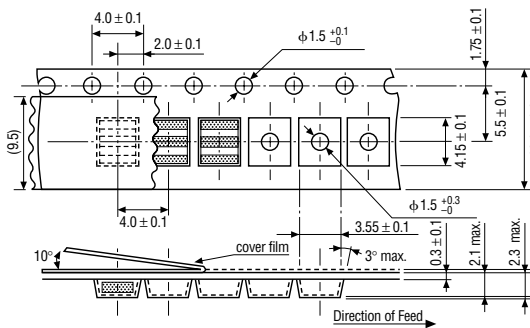
CSBF 430 – 519kHz



CSAC MGC/M



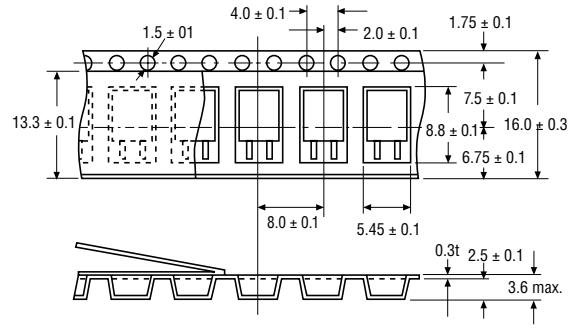
CSACV □ MTJ/MXJ



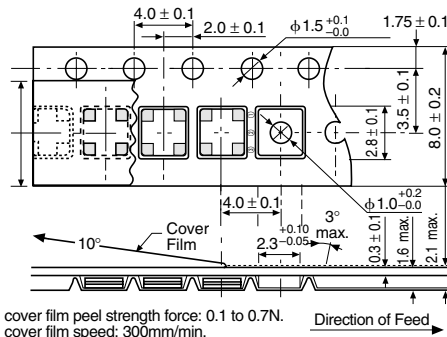
The cover film peel strength force: 20 ~ 70gr.

The cover film peel speed: 300mm/min.

CSBF 700 – 1250kHz



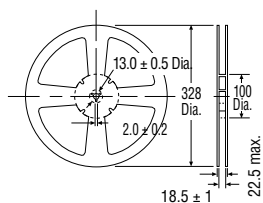
CSACW □ MX-T



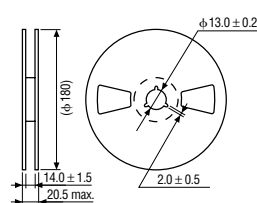
The cover film peel strength force: 0.1 to 0.7N.
The cover film speed: 300mm/min.

PLASTIC REEL DIMENSIONS: mm

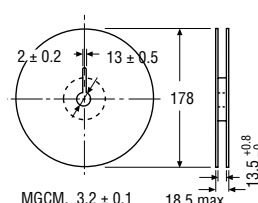
CSBF 328mm Dia.



CSACV □ MTJ/MXJ-TC20

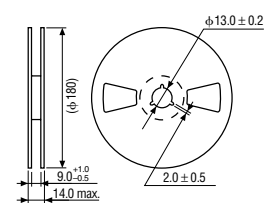


CSAC MGC/M



MGC/M. 3.2 ± 0.1

CSACW □ MX-T



CERAMIC RESONATORS