

PAD	CONNECTION
1	Crystal
2	Ground & lid
3	Crystal
4	Ground & lid

## Features

- ▶ Ultra-miniature for maximum space saving
- ▶ Ideal for Bluetooth / Wireless applications
- ▶ Metal lid can be grounded to minimise EMI
- ▶ Seam sealed for excellent long-term stability

## Bluetooth Applications

Frequency	Specification	IC	Part No
16.0MHz	9pF, 9ppm/pF typ pullability	CSR	MA07246*
26.0MHz	9pF, 14ppm/pF typ pullability	CSR	MA07232*

\*Designed for use with CSR chipset solutions. Golledge is a global supply partner for CSR

## Specifications

Parameters	Product	Option Codes
	GSX-323	
Frequency range:	12.0 ~ 54.0MHz	<input checked="" type="checkbox"/>
Calibration tolerance:	±10ppm ±15ppm ±20ppm Other values (±7.5 ~ ±100ppm)	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> specify
Temperature stability:	±10ppm ±15ppm ±20ppm ±30ppm Other values (±7.5 ~ ±100ppm)	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> specify
Operating temperature range:	-10 to +60°C -20 to +70°C -30 to +80°C Other values	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> specify
Storage temperature range:	-40 to +85°C	<input checked="" type="checkbox"/>
Circuit condition:	8pF 9pF 12pF 16pF Series resonant Other values	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> specify
Oscillation mode:	Fundamental	<input checked="" type="checkbox"/> F
Equivalent series resistance:	150Ω (12.0 ~ 15.9MHz) 100Ω (16.0 ~ 19.9MHz) 60Ω (20.0 ~ 29.9MHz) 50Ω (30.0 ~ 34.9MHz) 40Ω (35.0 ~ 54.0MHz)	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
Ageing:	±1ppm max first year	<input checked="" type="checkbox"/>
Test drive level:	10μW typ	<input checked="" type="checkbox"/>
Soldering condition:	260°C, 10sec x2 max	<input checked="" type="checkbox"/>

■ Standard. □ Optional - Please specify required code(s) when ordering

## Ordering Information

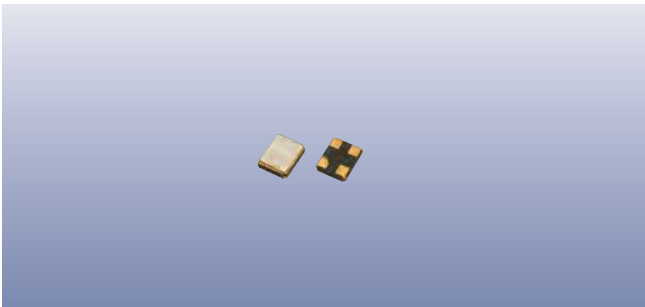
Part No, or product name + option codes + frequency

eg: **GSX-323/111NF 16.0MHz** 10/10/10/9-F

**GSX-323/1P3AF 26.0MHz** 10/15/30/10-F

Option code X (eg GSX-323/X) denotes a custom specification.

- ♦ ±10ppm temperature stability may not be available over -30+80°C. Check with our sales office before ordering.



## Construction

- ▮ Ceramic body with gold-plated pads
- ▮ Metal lid, seam sealed

## Composition



This product is lead-free, and is fully compliant with the RoHS directive 2011/65/EC



## Packaging & Handling

Production quantities supplied on T&R, 3k pcs per reel.  
Small quantities may be supplied on tape (no reel), or in bulk.

## Marking

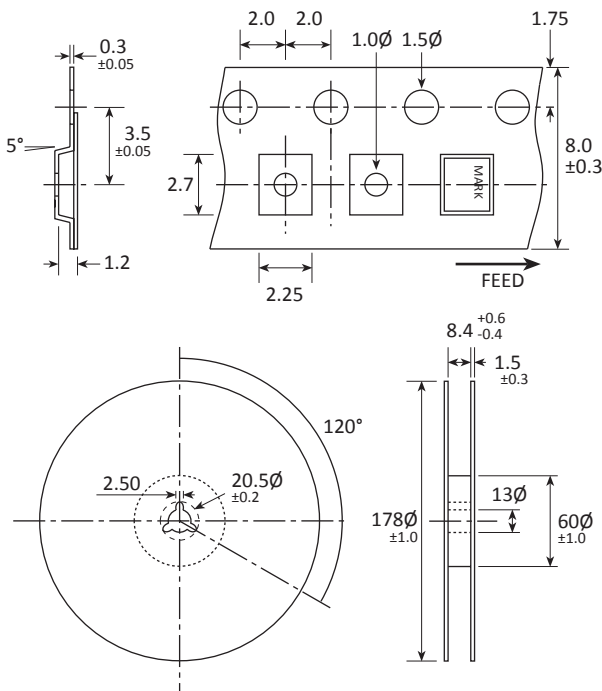
FREQUENCY  
T DC

Marking type: Laser  
DC = Date code in WY, as shown below  
Example: "dJ" = 2013 week 30

Year	2013	2014	2015	2016
	2017	2018	2019	2020
Code	J	J	J	J

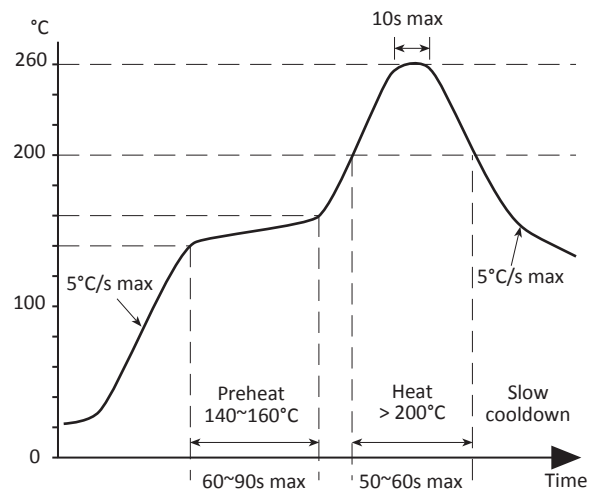
Week codes:  
A ~ Z: weeks 1 to 26  
a ~ z: weeks 27 to 52

## Tape & Reel Specification



Not to scale. Dimensional tolerances ±0.1mm unless otherwise stated.

## Soldering Profile



Maximum solder resistance: 260°C x 10 secs x 2.