

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	
<b>Frequency range:</b> 12.0 ~ 54.0MHz	<input checked="" type="checkbox"/>	
<b>Calibration tolerance:</b> ±10ppm ±15ppm ±20ppm Other values (±7.5 ~ ±100ppm)	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	1 P 2 specify
<b>Temperature stability:</b> ±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"/>	1 P 2 3 specify
<b>Operating temperature range:</b> -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"/>	1 2 3 specify
<b>Storage temperature range:</b> -40 to +85°C	<input checked="" type="checkbox"/>	
<b>Circuit condition:</b> 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"/>	M N B D S specify
<b>Oscillation mode:</b> Fundamental	<input checked="" type="checkbox"/>	F
<b>Equivalent series resistance:</b> 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"/>	
<b>Ageing:</b> ±1ppm max first year	<input checked="" type="checkbox"/>	
<b>Test drive level:</b> 10μW typ	<input checked="" type="checkbox"/>	
<b>Soldering condition:</b> 260°C, 10sec x2 max	<input checked="" type="checkbox"/>	

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

## Ordering Information

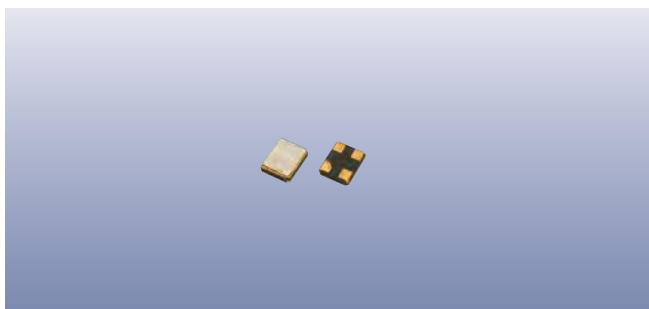
Part No, or product name + option codes + frequency

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



LeadFree

## 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

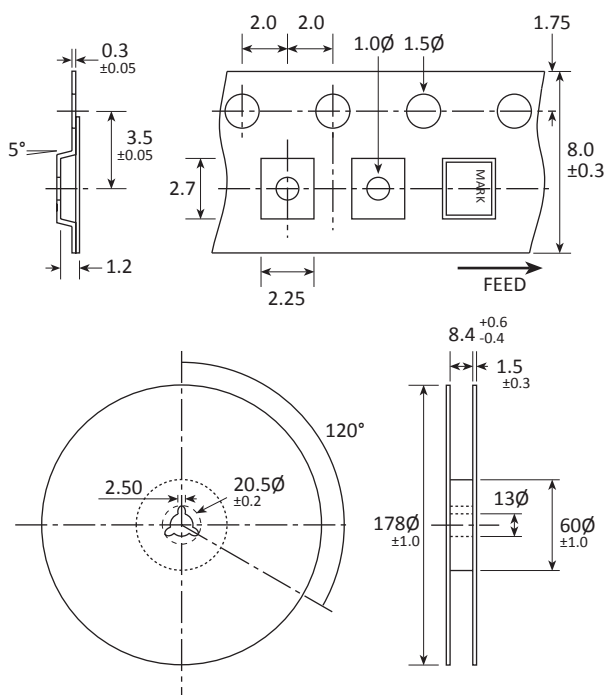
FREQUENCY
T DC

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

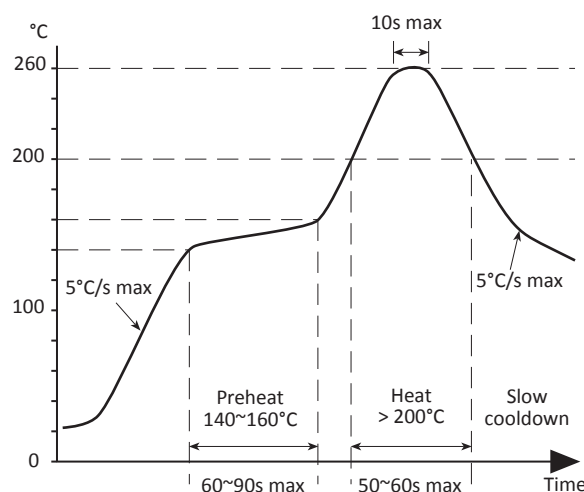
Week codes:  
A ~ Z: weeks 1 to 26  
a ~ z: weeks 27 to 52

## 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.