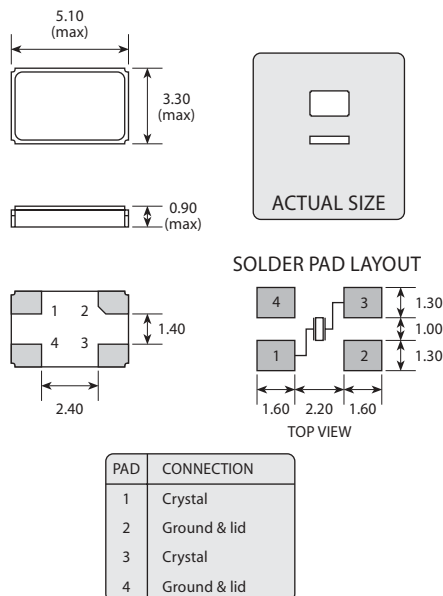
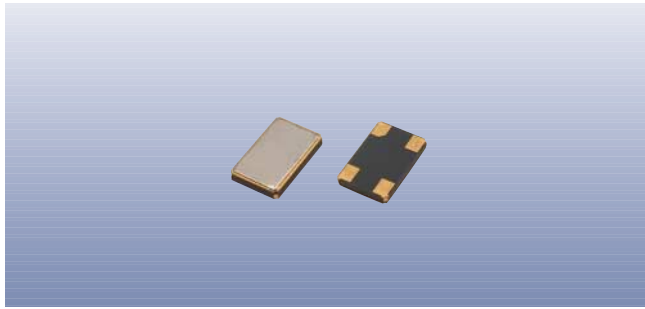




Scale 3:1

Features

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

Bluetooth Applications

Frequency	Specification	IC	Part No
12.0MHz	9pF, $C_1 = 4fF \pm 20\%$	Philips	MA06096
12.0MHz	18pF, $C_1 = 4fF \pm 20\%$	Philips	MA06097
15.360MHz	18pF, 6.5ppm/pF typ pullability		MA06098
16.0MHz	9pF, 20ppm/pF min pullability	CSR	MA05625*
32.0MHz	12pF, 20ppm/pF typ pullability	S.Wave	MA06099

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

Specifications

Parameters	Product GSX-533	Option Codes
Frequency range: 12.0 ~ 44.0MHz	■	
Calibration tolerance: $\pm 10ppm$ $\pm 15ppm$ $\pm 20ppm$ Other values ($\pm 7.5 \sim \pm 100ppm$)	■ □ □ □	1 P 2 specify
Temperature stability: $\pm 10ppm$ $\pm 15ppm$ $\pm 20ppm$ $\pm 30ppm$ Other values ($\pm 7.5 \sim \pm 100ppm$)	■ □ □ □ □	1 P 2 3 specify
Operating temperature range: -10 to +60°C -20 to +70°C -30 to +80°C Other values	■ □ □ □	1 2 3 specify
Storage temperature range: -40 to +85°C	■	
Circuit condition: 9pF 12pF 16pF 18pF 20pF Other values	□ □ ■ ■ ■ □	N B D E F specify
Oscillation mode: Fundamental	■	F
Equivalent series resistance: 40Ω max	■	
Frequency perturbation: $\pm 1ppm$ max	■	
Ageing: $\pm 1ppm$ max first year	■	
Test drive level: 10μW	■	
Soldering condition: 260°C, 10 sec x2 max	■	

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

Ordering Information

Product name + option codes + frequency

eg: **GSX-533/111NF 16.0MHz** 10/10/10/9-F

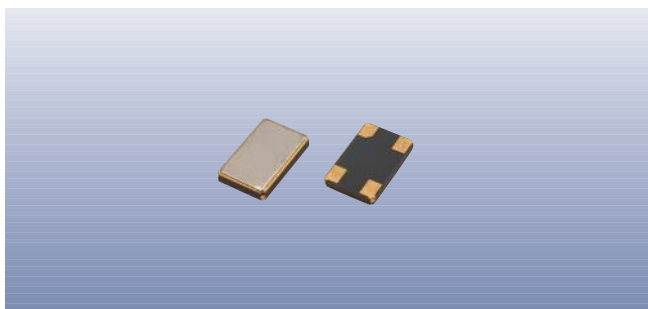
GSX-533/1P3AF 26.0MHz 10/15/30/10-F

Option code X (eg GSX-533/X) denotes a custom specification.

- $\pm 10ppm$ temperature stability may not be available over -30+80°C. Check with our sales office before ordering.
- Available on T&R - 1k pcs per reel.
- Refer to our website for T&R and soldering details.

GPS / Mobile Applications

Frequency	Specification	IC / Appln	Part No
13.0MHz	8pF, 22.5ppm/pF $\pm 15\%$	Silicon Labs	MA06106
13.0MHz	8pF, 29.5ppm/pF $\pm 10\%$	Silicon Labs	MA06118
13.0MHz	8.5pF, 25.5ppm/pF $\pm 10\%$	Silicon Labs	MA06119
13.0MHz	11.5pF, $C_1 = 4.9fF \pm 20\%$	Infineon	MA06107
16.367667MHz	20pF, $C_1 = 6.0fF \pm 15\%$		MA06105
24.5535MHz	32pF, $C_1 = 8.5fF \pm 15\%$	SiRF GPS	MA05925
26.0MHz	10pF, 18~25ppm/pF	Infineon	MA06108
26.0MHz	9.5pF, 20ppm/pF min	Hitachi	MA06122



Packaging & Handling

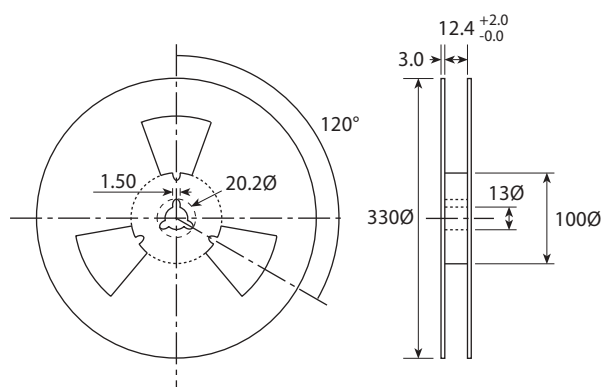
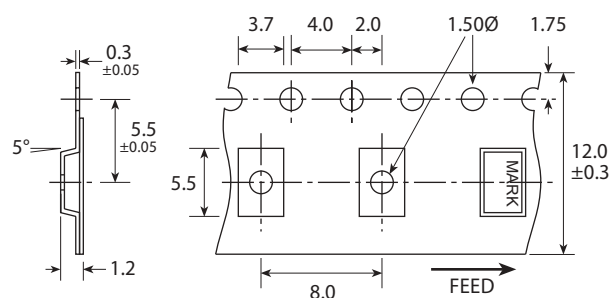
Production quantities supplied on T & R, 1k or 3k pcs per reel.
Small quantities may be supplied on tape (no reel), or in bulk.

Marking

NNN T DC Marking type: Laser NNN = Part ID code DC = Date code in YW, as shown below Example: "zd" = 2004 week 30				
Year	2001 2005	2002 2006	2003 2007	2004 2008
Code	Z	z	Z	z

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

Tape & Reel Specification



Not to scale. Dimensional tolerances $\pm 0.1\text{mm}$ unless otherwise stated

Construction

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

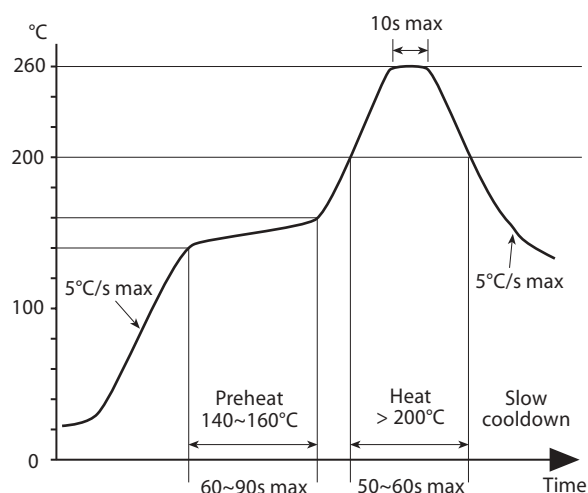
Composition



This product is lead-free, and is fully compliant with the RoHS directive 2002/95/EC



Soldering Profile



Solder resistance: 260°C x 10 secs x 2.