

# GSX-331

## 3.2 x 2.5mm High Frequency SM Crystal with Tight Specifications

- Metal lid can be grounded to minimise EMI
- Seam sealed for excellent stability
- Tight specifications available
- Ultra-miniature for maximum space saving



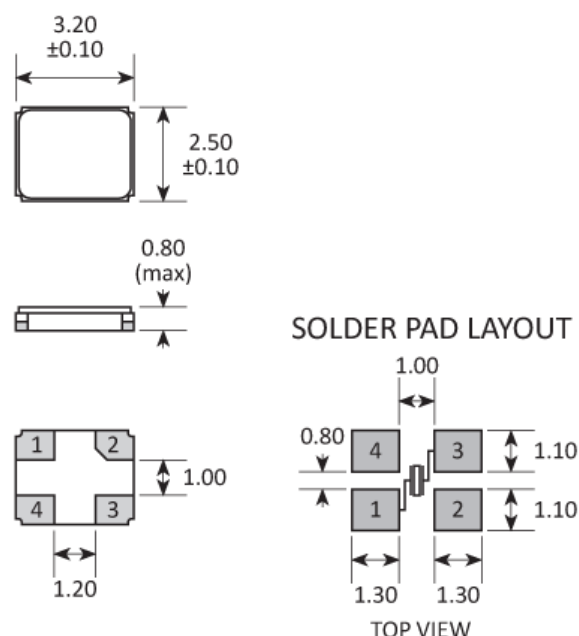
### CONFIGURABLE OPTIONS

Parameter	Option Code
Frequency	
Calibration tolerance	
Any	
±7.5ppm	M
±10ppm	1
Temperature stability	
Any	
±7.5ppm	M
±10ppm	1
Operating temperature range	
Any	
-10 to +60°C	1
Circuit condition	
Any	
8pF	M
Oscillation mode	
Fundamental	F
3rd Overtone	3
Ageing	
±3ppm max first year	
±1ppm max first year	

## SPECIFICATIONS

Frequency range	10.0 ~ 54.0MHz 54.0 ~ 125MHz (3rd overtone)
Dimensions	3.2 x 2.5 x 0.8mm
Storage temperature range	-40 to +90°C
Static capacitance (C <sub>0</sub> )	5pF max
Equivalent series resistance	100Ω max (10.0 ~ 15.99MHz) 80Ω max (16.0 ~ 18.99MHz) 60Ω max (19.0 ~ 29.99MHz) 40Ω max (30.0 ~ 54.0MHz, fund) 100Ω max (54.0 ~ 125MHz, 3rd OT)
Test drive level	10μW
Soldering condition	260°C, 10 sec x2 max

## PACKAGE DRAWING



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

Dimensions in mm

## ORDERING INFORMATION

To request a quotation for the GSX-331 please use the configurable options form to choose the options you require and then submit your configured product to our team. Our expert advisers are always happy to help with your requirements and can be contacted on +44 1460 256 100 or at [sales@golledge.com](mailto:sales@golledge.com).

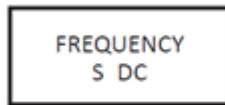
Following product selection you will be issued with a seven character Golledge part number. Your Golledge part number is the internationally accepted Golledge manufacturing part number (MPN) that should be used for all project documentation, including bills of materials (BoMs) and purchase orders.

If you have any queries regarding any of our documentation our dedicated sales team will be happy to help.

## TEMPERATURE CHARACTERISTICS

	±30ppm	±20ppm	±15ppm
-10 to +60°C	±30ppm	±20ppm	±15ppm
-20 to +70°C	±30ppm	±20ppm	±15ppm
-30 to +80°C	±30ppm	±20ppm	±15ppm
-40 to +85°C	±30ppm	±20ppm	

## MARKING

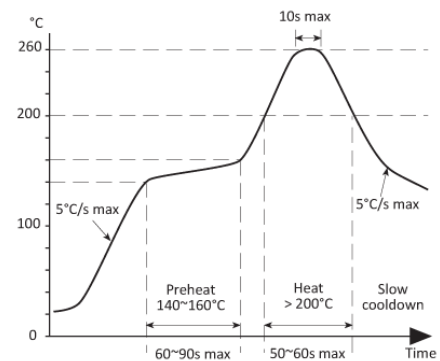


Marking type: Laser

DC = Date Code in YM, eg. "GF" = Jun 2017

	A	B	C	D	E	F	G	H	J	K	L	M
Y	1	2	3	4	5	6	7	8	9	0		
M	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

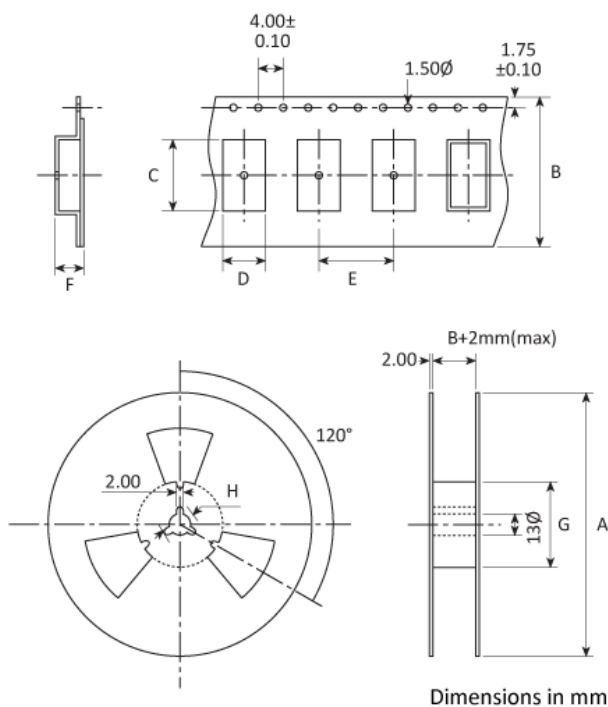
## SOLDERING PROFILE



Solderability limits:

260°C max x 10sec max x 2 max

## TAPE & REEL SPECIFICATION



A:178 B:8 C:3.5 D:2.8 E:4 F:1 G:60 H:21

## HANDLING & STORAGE



Human Body Model (HBM) 1A (250V to < 500V)



Moisture Sensitivity Level (MSL): 1

## CONSTRUCTION

Ceramic base with metal lid

## COMPLIANCE



Lead-free (< 0.1% by weight )



Product is RoHS 2 compliant



Nominal Net Mass: 19mg

## OTHER INFORMATION

### About Golledge

We are the UK's leading supplier of frequency control products and are proud to serve the global electronics industry. Our philosophy is a focus firmly on your requirements by striving to meet and exceed your needs. We do this by ensuring the utmost quality and consistency in our products and services. If you have any queries about the Golledge service or any of our products please get in touch, we'd love to hear from you.

### Come and visit

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Our customer feedback is testament to our quality; "Never had such good service as this from anyone in 35 years of being in the industry, this is impressive and has really helped us out of a corner to keep the design flowing" Andy (Senior Design Engineer), "As always your support is state of the art" Nicoleta (Material Management), "Legendary work - as usual it has to be said" John (Operations).

To take advantage of our highly praised service get in touch with us today.