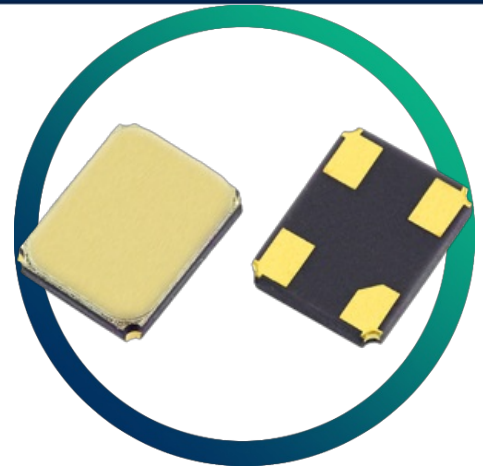


GSX-331

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

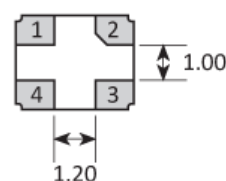
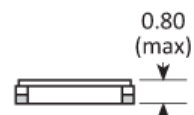
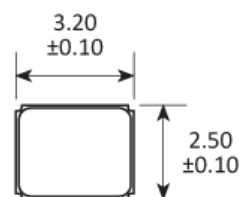
Parameter	Option Code
Frequency	
Calibration tolerance	
Any	
±7.5ppm	M
±10ppm	1
±20ppm	2
±30ppm	3
Temperature stability	
Any	
±7.5ppm	M
±10ppm	1
±15ppm	P
±20ppm	2
±30ppm	3
Operating temperature range*	
Any	
-10 to +60°C	1
-20 to +70°C	2
-30 to +80°C	3
-40 to +85°C	4
Circuit condition	
Any	
8pF	M
9pF	N
10pF	A
12pF	B
Oscillation mode	
Fundamental	F
3rd overtone	3
Ageing	
Any	
±3ppm max first year	
±1ppm max first year	

***Some combinations of stability and wide temperature ranges may not be available. Our team will advise accordingly if this affects your enquiry.**

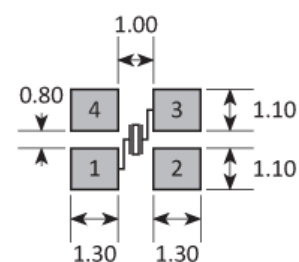
SPECIFICATIONS

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 ₀)	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
Net mass	18.5mg

PACKAGE DRAWING



SOLDER PAD LAYOUT



TOP VIEW

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.

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.

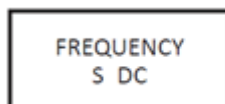
APPLICATIONS

Our crystals and oscillators are regularly supplied for use with industry-leading ICs, from world-leading manufacturers including:

Analogue Devices
Atmel (Microchip Technology Inc.)
Broadcom
Dialog Semiconductor PLC
Intel
Nordic Semiconductor
NXP Semiconductors
Qualcomm (and CSR)
Silicon Labs
STMicroelectronics
Texas Instruments (TI)
Xilinx
and more...

If you'd like more information about chipset compatibility please [get in touch with our team here](#).

MARKING

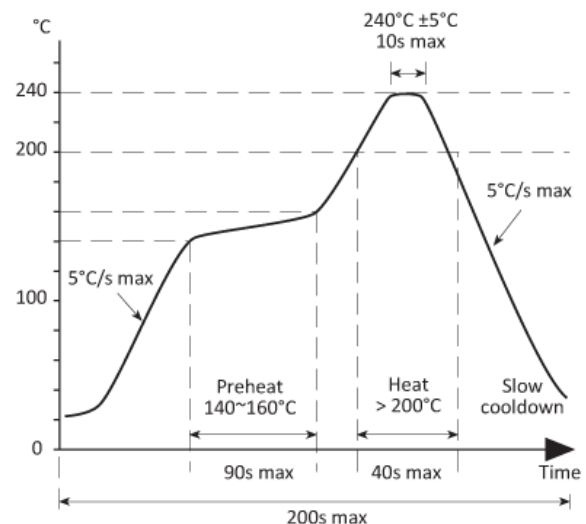


Marking type: Laser

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

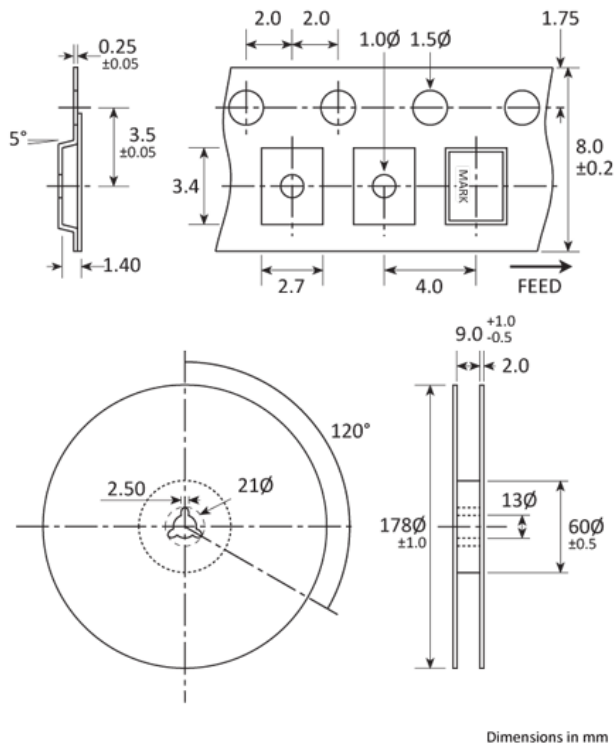
	A	B	C	D	E	F	G	H	J	K	L	M
Y	1	2	3	4	5	6	7	8	9	0		
M	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

SOLDERING PROFILE



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

TAPE & REEL SPECIFICATION



CONSTRUCTION

Ceramic body with gold-plated pads

Metal lid, seam sealed

HANDLING & STORAGE



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



Moisture Sensitivity Level (MSL): 1 (or not applicable)

COMPLIANCE

Please refer to our **DOCUMENTS** section for more information.



Lead-free (< 0.1% by weight)



RoHS compliant with no exemptions.



REACH compliant.



Free of conflict minerals.



Free from halogens.



Free from ozone-depleting substances.