

GSX-223

Ultra-miniature SM Crystal

- Ultra-miniature for maximum space saving
- Ideal for wireless & mobile applications
- Metal lid can be grounded to minimise EMI
- Seam sealed for excellent long-term stability

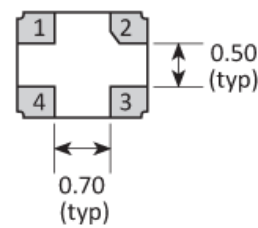
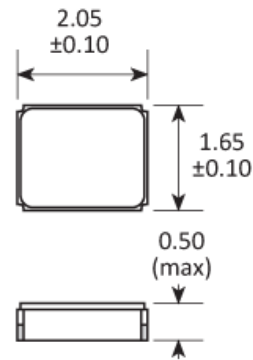
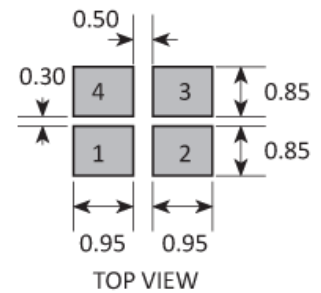


CONFIGURABLE OPTIONS

Parameter	Option Code
Frequency	
Calibration tolerance	
Any	
±10ppm	1
±15ppm	P
±30ppm	3
Temperature stability	
Any	
±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	
6pF	T
8pF	M
9pF	N
10pF	A
12pF	B
16pF	D
Series resonant	S
Oscillation mode	
Fundamental	F

SPECIFICATIONS

Frequency range	16.0 ~ 96.0MHz
Dimensions	2.05 x 1.65 x 0.50mm
Storage temperature range	-40 to +85 °C
Equivalent series resistance	150Ω max (16.0 ~ 23.99MHz)
	100Ω max (24.0 ~ 35.99MHz)
	60Ω max (36.0 ~ 54.0MHz)
	50Ω max (60.0MHz)
	30Ω max (76.8MHz)
20Ω max (96.0MHz)	
Ageing	±1ppm max first year
Test drive level	10μW typ, 100μW max
Soldering condition	260 °C, 10 sec x2 max
Net mass	5.63mg

PACKAGE DRAWING

SOLDER PAD LAYOUT


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

Dimensions in mm

ORDERING INFORMATION

To request a quotation for the GSX-223 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...

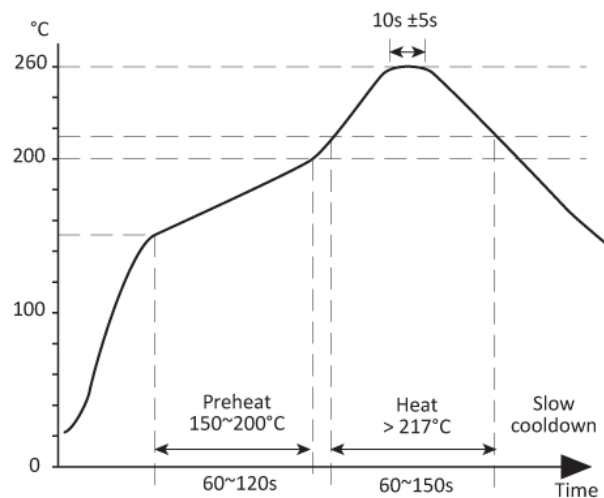
If you'd like more information about chipset compatibility please [get in touch with our team here](#).

MARKING

FREQUENCY T DC

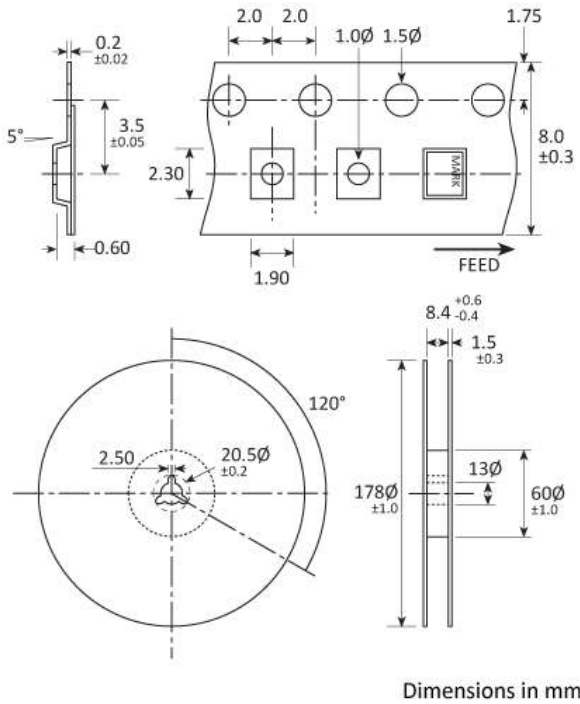
Marking type: Laser
 DC = Date code

SOLDERING PROFILE



Lead free solderability limits: 260°C ±5°C x 10s ±5s 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.