

Product Description

Description:	24.0MHz GSX-213/112MF SM Crystal
Product family:	GSX-213
Category:	SM Quartz Crystal
Order code:	MP08532

Features

- ▣ Ultra-miniature for maximum space saving
- ▣ Metal lid grounded to minimise EMI
- ▣ Seam sealed for excellent long-term stability

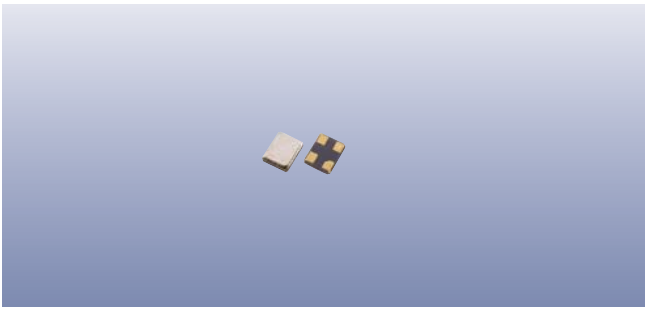
Additional Information

For further information regarding packaging, construction, material composition, soldering profile and environment, please refer to **GSX-213 Product Information sheet**

For dimensions, refer to package drawing: **D0324-A**

Electrical Specifications

Parameter	Value	Notes
Nominal frequency:	24.0MHz	
Calibration tolerance:	±10ppm	@25°C ±3°C
Temperature stability:	±10ppm	Referred to the value @25°C
Operating temperature range:	-20 to +70°C	
Storage temperature range:	-40 to +85°C	
Circuit condition:	8pF	
Oscillation mode:	Fundamental	
Equivalent series resistance:	80Ω max	
Ageing:	±2ppm	Per year
Drive level:	50µW typ, 100µW max	
Static capacitance:	3pF max	
Motional inductance:	50mH max	



Construction

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

Composition



This product is lead-free, and is fully compliant with current RoHS directives



Packaging & Handling

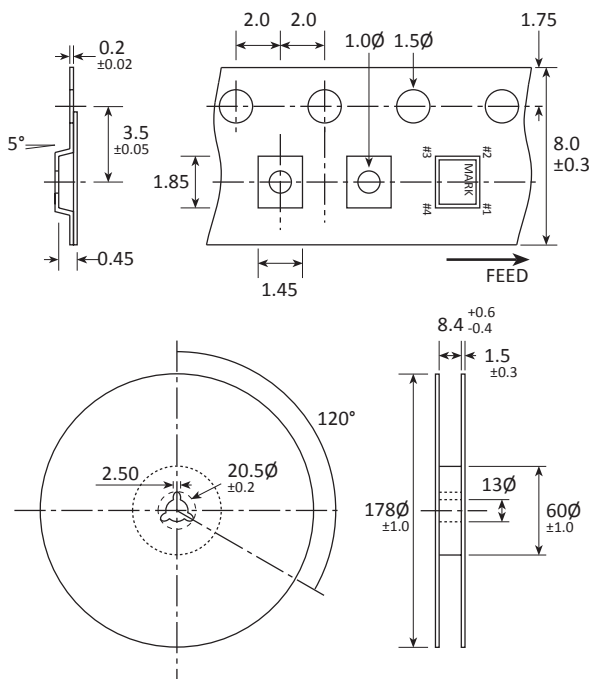
Production quantities supplied on T&R, 3k pcs per reel.
Small quantities may be supplied on tape (no reel), or in bulk.

Marking

FREQUENCY
T DC

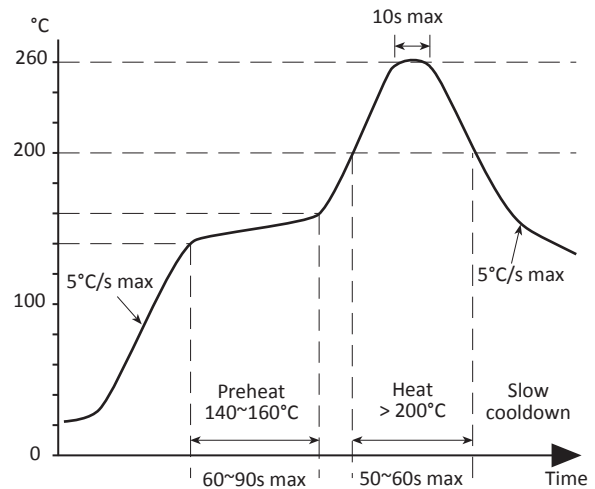
Marking type: Laser
DC = Date code

Tape & Reel Specification

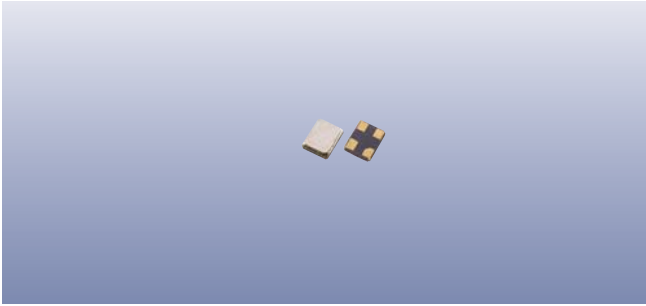


Not to scale. Dimensional tolerances ±0.1mm unless otherwise stated.

Soldering Profile



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



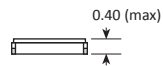
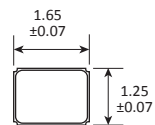
Product Family

GSX-213, GRX-210

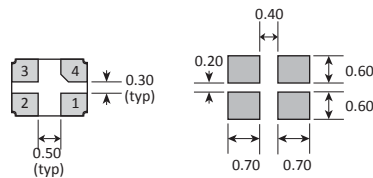
Construction

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

Dimensions (mm)



SOLDER PAD LAYOUT



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