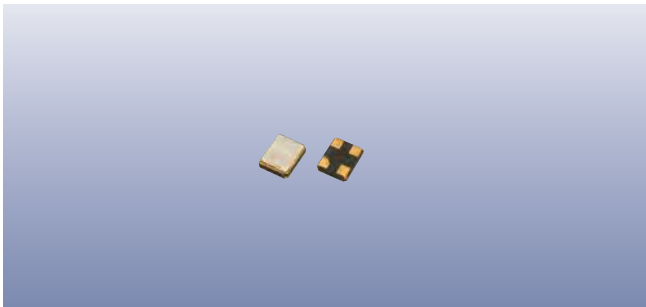




Product Description

Description:	16.0MHz GRX-220/254MF SM Crystal
Product family:	GRX-220
Category:	SM Quartz Crystal
Order code:	MP11194

Features

- 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

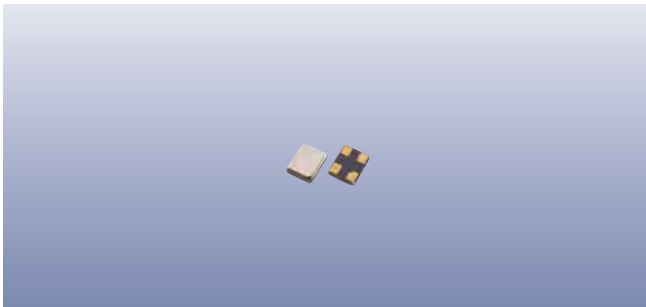
Additional Information

For further information regarding packaging, construction, material composition, soldering profile and environment, please refer to **GRX-220 Product Information sheet**

For dimensions, refer to package drawing: **D0305-B**

Electrical Specifications

Parameter	Value	Notes
Nominal frequency:	16.0MHz	
Calibration tolerance:	±20ppm	@25°C ±3°C
Temperature stability:	±50ppm	Referred to the value @25°C
Operating temperature range:	-40 to +85°C	
Storage temperature range:	-40 to +90°C	
Circuit condition:	8pF	
Oscillation mode:	Fundamental	
Equivalent series resistance:	200Ω max	
Drive level:	10μW typ, 100μW max	
Static capacitance (C ₀):	3pF max	
Ageing:	±3ppm max	Per year
Qualifications:	AEC-Q200	



Packaging & Handling

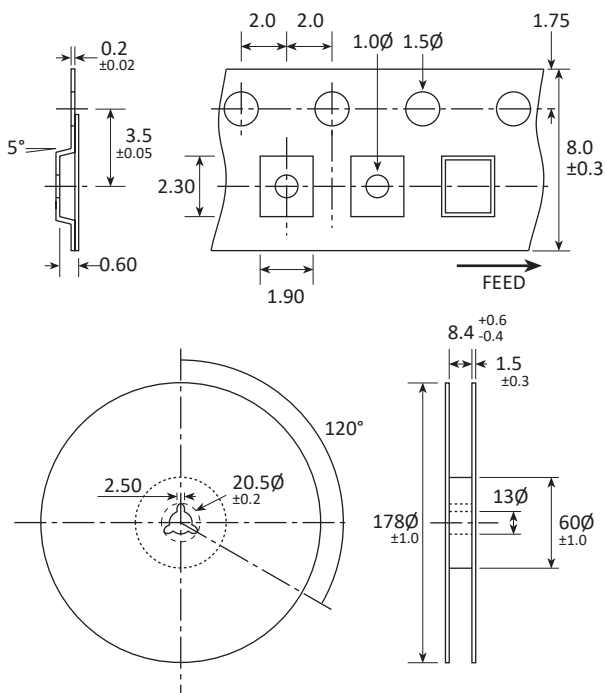
Production quantities supplied on T&R, 3k pcs per reel.
Small quantities may be supplied on tape (no reel), or in bulk.

Marking

FREQUENCY
DC

Marking type: Laser
DC = Date code

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

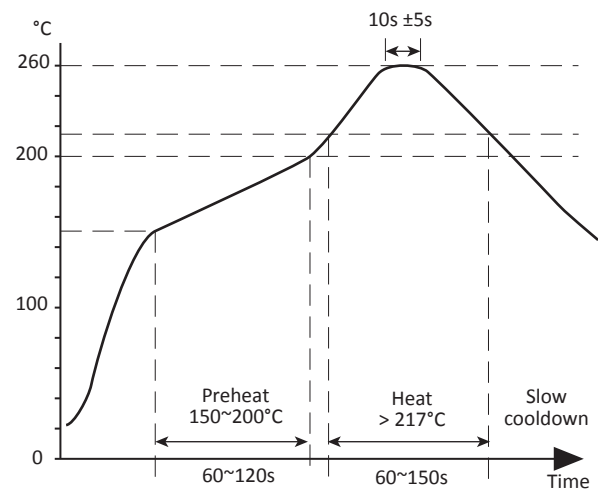
Composition



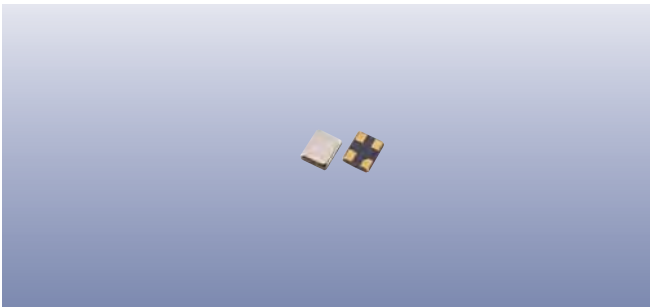
This product is lead-free, and is fully compliant with the RoHS directive 2011/65/EU



Soldering Profile

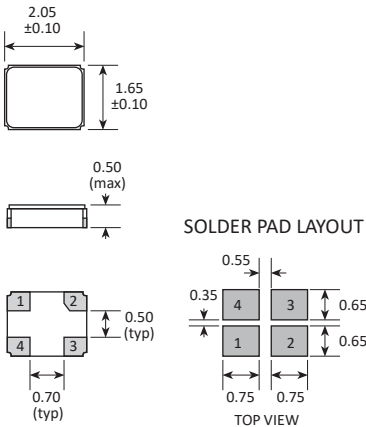


Maximum solder resistance: $260^{\circ}\text{C} \times 10 \text{ secs} \times 2$.



Product Family
GRX-220, GSX-223
Construction
 Ceramic body with gold-plated pads
 Metal lid, seam sealed

Dimensions (mm)



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