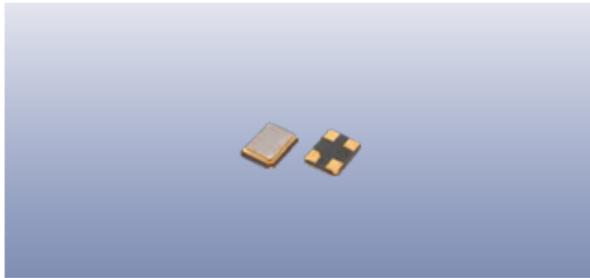




Specification

Part No: MA06152



Product Description

Description:	16.0MHz GSX-333/112NF SM Crystal
Product family:	GSX-333
Category:	SM Quartz Crystal
Order code:	MA06152

Features

- 1 Qualified for use with CSR Bluetooth chipsets
- 1 Metal lid can be grounded to minimise EMI
- 1 Seam sealed for excellent long-term stability
- 1 Ultra-miniature for maximum space saving

Additional Information

For further information regarding packaging, construction, material composition, soldering profile and environment, please refer to *GSX-333 Product Information sheet*

For dimensions, refer to package drawing: *D0262-A*

Electrical Specifications

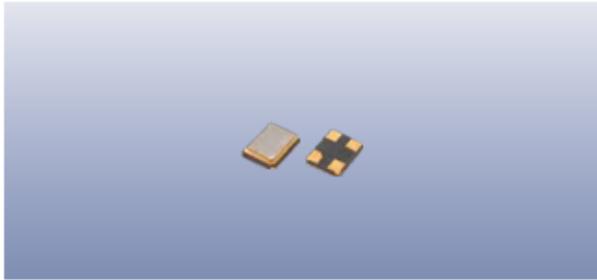
Parameter	Value	Notes
Nominal frequency:	16.0MHz	
Calibration tolerance:	±10ppm max	At 25°C ±3°C
Temperature stability:	±10ppm max over -20 to +75°C ±30ppm max over -40 to +85°C	Referred to frequency at 25°C
Operating temperature range:	-40 to +85°C	
Storage temperature range:	-40 to +85°C	
Circuit condition:	9pF	
Static capacitance (C ₀):	2.0pF max	
Pulling sensitivity:	9ppm / pF min	Load @ 9pF
Oscillation mode:	Fundamental	
Equivalent series resistance:	80 <u>max</u>	
Test drive level:	10µW	





Product Information

GSX-333



Construction

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

Composition



This product is lead-free, and is fully compliant with the RoHS directive 2002/95/EC



Packaging & Handling

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

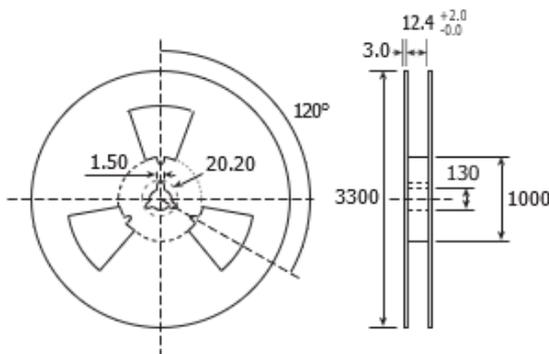
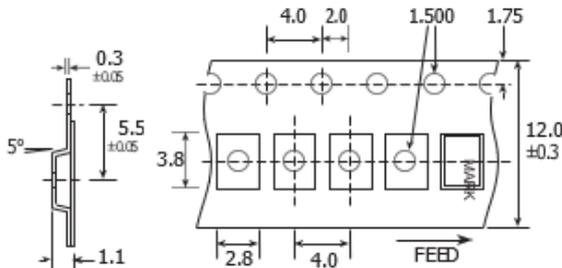
Marking

FREQUENCY
T zDC

Marking type: Laser
DC = Date code in YW, as shown below
Example: "zD" = 2012 week 30

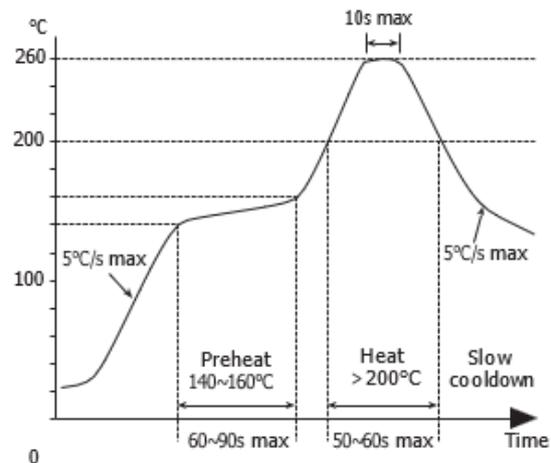
Year	2009	2010	2011	2012	Week codes:
	2013	2014	2015	2016	
Code	Z	z	Z	z	A ~ Z: weeks 1 to 26 a ~ z: weeks 27 to 52

Tape & Reel Specification



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

Soldering Profile



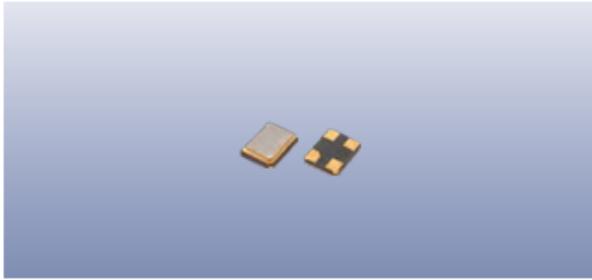
Maximum solder resistance: 260°C x 10 secs x 2.





Package Drawing

D0262-A



Product Family

GSX-333

Construction

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

Dimensions (mm) Scale 3:1

