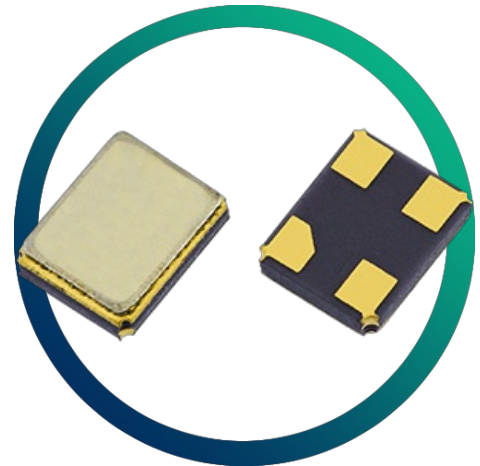


GRX-320

Automotive Crystal (AEC-Q200)

- AEC-Q200 qualified for automotive applications
- Vacuum seal for excellent long-term stability
- High reliability at low cost
- Metal lid can be grounded to minimise EMI

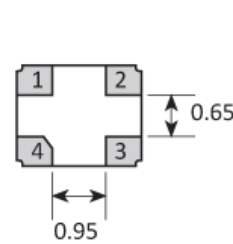
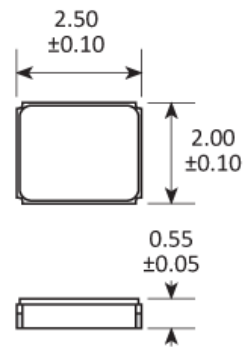
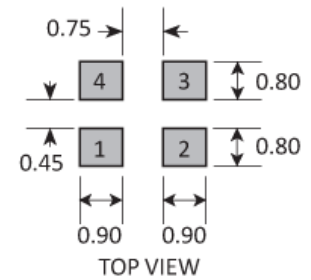


CONFIGURABLE OPTIONS

Parameter	Option Code
Frequency	
Calibration tolerance	
Any	
±10ppm	1
±15ppm	P
±20ppm	2
Temperature stability	
Any	
±15ppm	P
±20ppm	2
±50ppm	5
±100ppm	C
Operating temperature range	
Any	
-40 to +85 °C	4
-40 to +125 °C	A
Circuit condition	
Any	
8pF	M
10pF	A
12pF	B
16pF	D
Oscillation mode	
Fundamental	F

SPECIFICATIONS

Frequency range	12.0 ~ 40.0MHz
Dimensions	2.5 x 2.0 x 0.6mm
Storage temperature range	-40 to +125°C
Static capacitance (C ₀)	5pF max
Equivalent series resistance	150Ω max (12.0 ~ 15.99MHz)
	80Ω max (16.0 ~ 19.99MHz)
	60Ω max (20.0 ~ 29.99MHz)
	50Ω max (30.0 ~ 34.99MHz)
40Ω max (35.0 ~ 40.0MHz)	
Ageing	±3ppm max first year
Test drive level	10μW typ, 100μW max
Soldering condition	260°C, 10 sec x2 max
Qualification	AEC-Q200 (Automotive)

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 GRX-320 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.

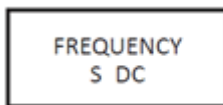
Following product selection you will be issued with a seven character Golledge part number. Your Golledge part number is the internationally accepted Golledge manufacturing part number (MPN) that should be used for all project documentation, including bills of materials (BoMs) and purchase orders.

If you have any queries regarding any of our documentation our dedicated sales team will be happy to help.

APPLICATIONS

Vehicle telematics
 Connected car
 Remote keyless entry (RKE)
 Audio (DAB/Bluetooth)
 Camera

MARKING

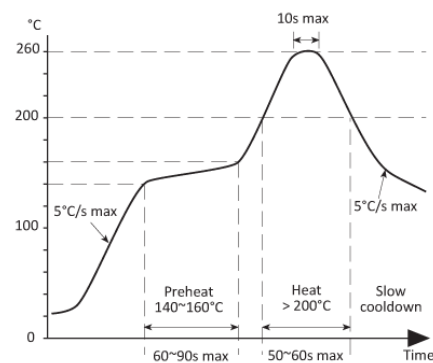


Marking type: Laser

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

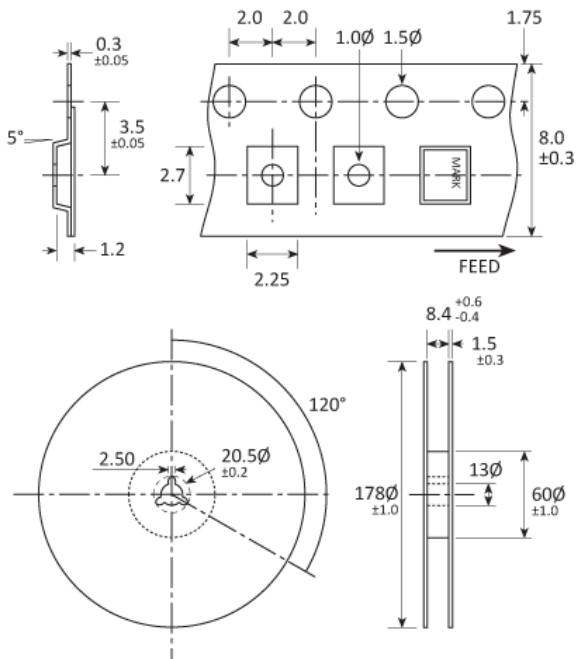
SOLDERING PROFILE



Solderability limits:

260°C max x 10sec max x 2 max

TAPE & REEL SPECIFICATION



Dimensions in mm

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)

MATERIAL COMPOSITION



Lead-free (< 0.1% by weight)



RoHS 2 compliant with no exemptions. [See our declaration](#)



REACH compliant. [See our statement](#)



Free of conflict minerals. [See our declaration](#)



Free of Halogens. [See our declaration](#)



Free of Ozone-depleting substances. [See our declaration](#)

OTHER INFORMATION

About Golledge

We are the UK's leading supplier of frequency control products and are proud to serve the global electronics industry. Our philosophy is a focus firmly on your requirements by striving to meet and exceed your needs. We do this by ensuring the utmost quality and consistency in our products and services. If you have any queries about the Golledge service or any of our products please get in touch, we'd love to hear from you.

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Our customer feedback is testament to our quality; "Never had such good service as this from anyone in 35 years of being in the industry, this is impressive and has really helped us out of a corner to keep the design flowing" Andy (Senior Design Engineer), "As always your support is state of the art" Nicoleta (Material Management), "Legendary work - as usual it has to be said" John (Operations).

To take advantage of our highly praised service get in touch with us today.