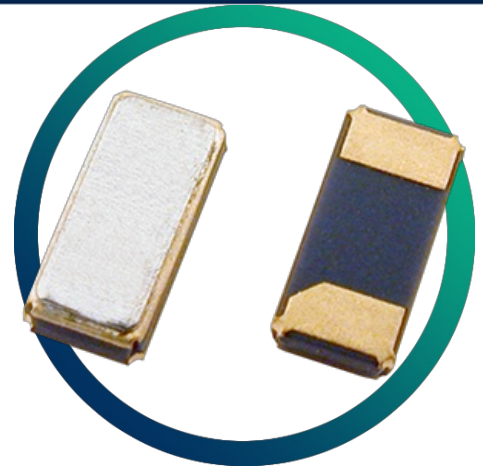


GRX-315

Automotive Watch Crystal (AEC-Q200)

- AEC-Q200 automotive qualified
- Miniature ceramic package with metal lid
- Vacuum seal for excellent long-term stability
- Low cost for volume applications
- Low power consumption



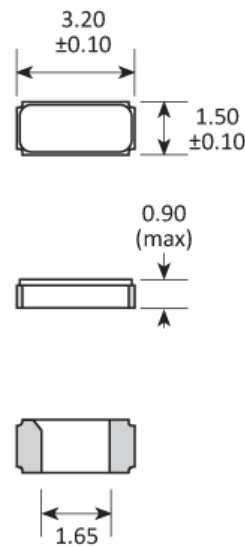
CONFIGURABLE OPTIONS

Parameter	Option Code
Calibration tolerance	
±20ppm	

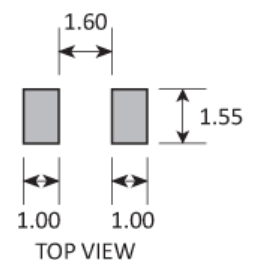
SPECIFICATIONS

Frequency	32.768kHz
Dimensions	3.2 x 1.5 x 0.9mm
Operating temperature range	-40 to +85°C
Storage temperature range	-55 to +125°C
Circuit condition	12.5pF 9pF
Static capacitance (C ₀)	2.0pF max
Motional capacitance (C ₁)	3.0fF min
Equivalent series resistance	50kΩ typ, 70kΩ max @ 25°C
Ageing	±3ppm max first year
Drive level	0.1μW typ, 0.5μW max
Turnover temperature (T ₀)	+25°C ±5°C
Frequency / temp coefficient	-0.04ppm/°C ² max
Soldering condition	Reflow, 260°C, 20 sec max
Qualification	AEC-Q200 (Automotive)

PACKAGE DRAWING



SOLDER PAD LAYOUT



TOP VIEW
Dimensions in mm

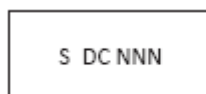
ORDERING INFORMATION

To request a quotation for the GRX-315 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.

MARKING



Marking type: Laser
DC = Date code
NNN = Lot number

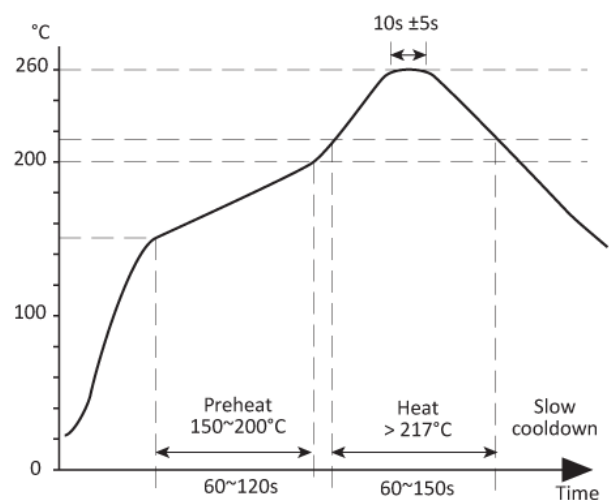
DC = Date Code in YM, eg. "GF" = Jun 2017

	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

APPLICATIONS

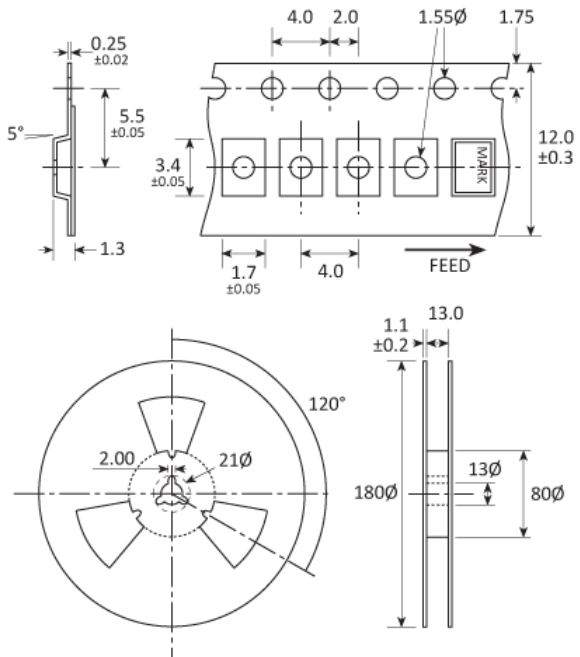
Vehicle telematics
Connected car
Remote keyless entry (RKE)
Audio (DAB/Bluetooth)
Camera

SOLDERING PROFILE



Lead free solderability limits: 260°C ± 5°C x 10s ± 5s x 2.

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)

COMPLIANCE



Lead-free (< 0.1% by weight)



RoHS 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](#)