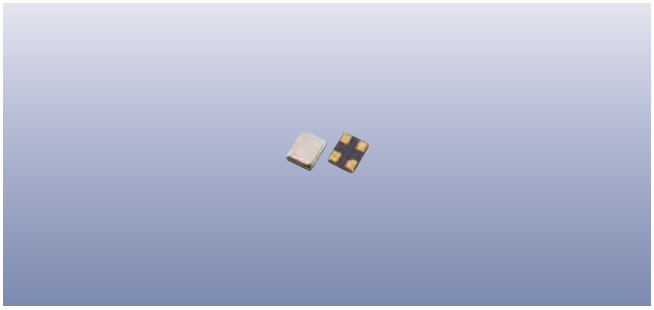
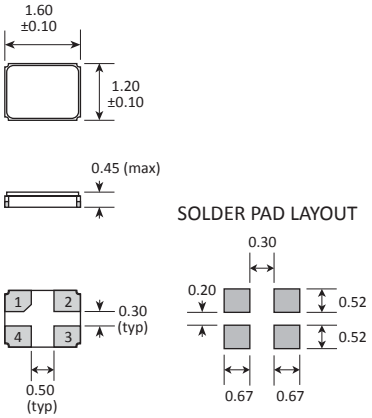
Automotive SM Crystal (AEC-Q200)

GRX-210

RoHS 2011/65/EU

Pb LeadFree





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

Features

- AEC-Q200 qualified for automotive apps
- Seam sealed for excellent long-term stability
- High reliability at low cost
- Metal lid can be grounded to minimise EMI
- Miniature for maximum space/weight saving

Example Applications

- Vehicle telematics
- Connected car
- Remote Keyless Entry (RKE)
- Audio - DAB / Bluetooth
- Camera

Specifications

Parameters		Product GRX-210	Option Codes
Frequency range:	26.0 ~ 40.0MHz	■	
Calibration tolerance:	±10ppm	□	1
	±15ppm	■	P
	±20ppm	□	2
	Other values	□	specify
Temperature stability:	±15ppm	□	P
	±20ppm	□	2
	±50ppm	■	5
	Other values	□	specify
Operating temperature range:			
	-40 to +85°C	■	4
	-40 to +125°C	□	A
	Other values	□	specify
Storage temperature range:			
	-40 to +125°C	■	
Circuit condition:	8pF	■	M
	10pF	□	A
	12pF	□	B
	16pF	□	D
	Other values	□	specify
Oscillation mode:	Fundamental	■	F
Static capacitance (C_0):	5pF max	■	
Equivalent series resistance (max):			
	100Ω (26.0 ~ 29.99MHz)	■	
	80Ω (30.0 ~ 40.0MHz)	■	
Ageing:	±3ppm max first year	■	
Test drive level:			
	10µW typ, 100µW max	■	
Soldering condition:			
	260°C, 10 sec x2 max	■	

■ Standard. □ Optional - Please specify required code(s) when ordering

Ordering Information

Product name + option codes + frequency

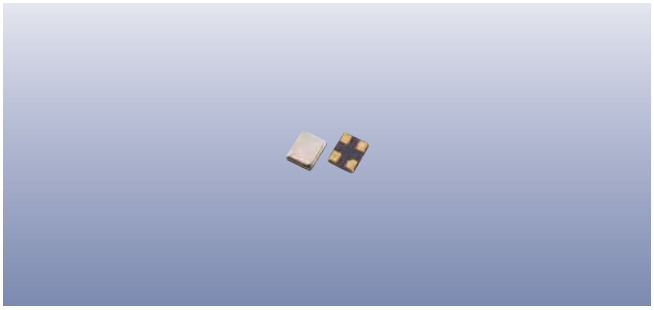
eg: **GRX-210/P24MF 32.0MHz** 15/20/-40+85/8-F

GRX-210/25ABF 27.0MHz 20/50/-40+125/12-F

Option code X (eg GRX-210/X) denotes a custom specification.

Product Information

GRX-210



Packaging & Handling

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

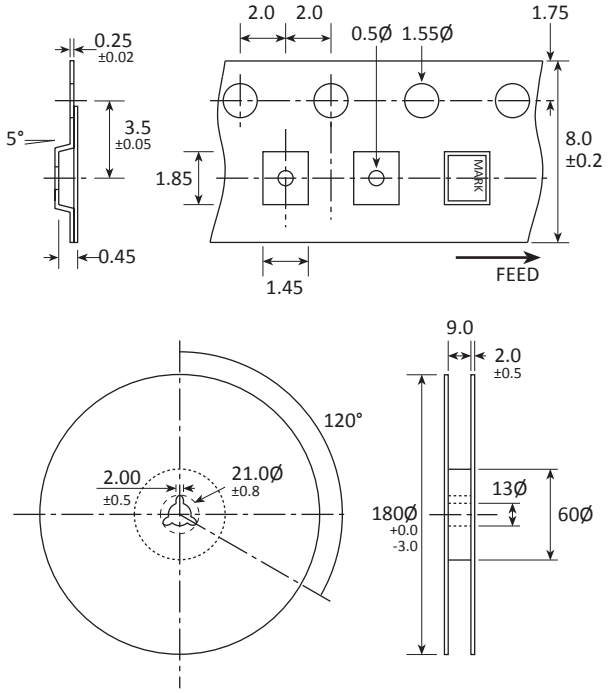
Marking

FREQUENCY
S DC

Marking type: Laser
DC = Date code in YM, eg “EJ” = Sep 2015

	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

Tape & Reel Specification



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

Construction

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

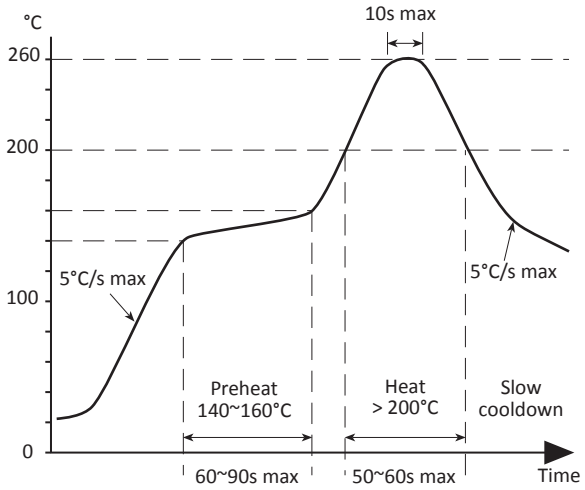
Composition

RoHS 2011/65/EU

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

Pb LeadFree

Soldering Profile



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