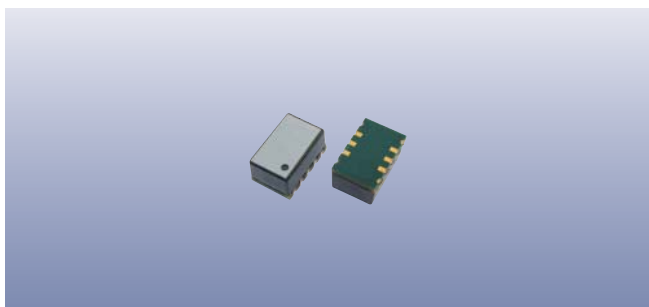




Product Description

Description:	24.0MHz GOXO-149/PIT
Product family:	GOXO-149
Category:	SM OCXO
Order code:	MP07004

Features

- Minature SM package - 50% smaller than DIL-14
- Ideally suited for base stations, VSAT etc.
- CMOS output

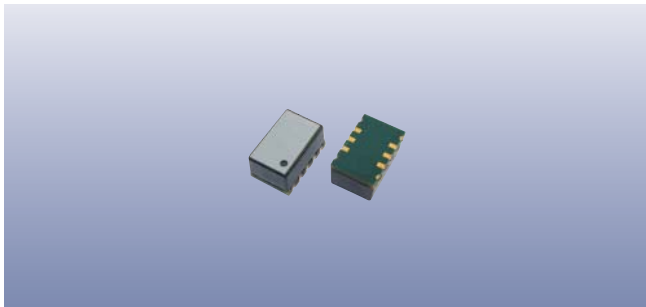
Additional Information

For further information regarding packaging, construction, material composition, soldering profile and environment, please refer to **GOXO-149 Product Information sheet**

For dimensions, refer to package drawing: **D0165-B**

Electrical Specifications

Parameter	Value	Notes
Nominal frequency:	24.0MHz	
Temperature stability:	$<\pm 2 \times 10^{-8}$	
Calibration tolerance:	$<\pm 1 \times 10^{-6}$	@25°C
Frequency stability:	$<\pm 2 \times 10^{-8}$ $<\pm 2 \times 10^{-8}$	Per 5% change in load Per 5% change in V_{DD}
Overall stability:	$\pm 4.6 \times 10^{-6}$ max	
Operating temperature range:	-40 to +85°C	
Storage temperature range:	-55 to +125°C	
Output waveform:	15pF LVCMOS	
Duty cycle:	45:55%	@50% V_{DD}
Rise/fall times:	6.5ns	
Start up time:	10ms	
Supply voltage (V_{DD}):	+3.3V	$\pm 5\%$
Power consumption (0+70°C):	2.5W max 1.1W typ	@switch on When stabilised @25°C
Ageing (after 30 days):	$<\pm 1 \times 10^{-8}$ $<\pm 5 \times 10^{-7}$	Per day First year
Allan variance:	$<\pm 1 \times 10^{-9}$	1s
Warm up (to within spec):	60s 90s	@+25°C @-40°C
SSB phase noise:	-100dBc/Hz @10Hz -128dBc/Hz @100Hz -145dBc/Hz @1kHz -151dBc/Hz @10kHz -154dBc/Hz @100kHz	@10.0MHz
Phase jitter RMS:	0.25ps typ, 0.35ps max	12kHz~ $f_o/2$



Packaging & Handling

Production quantities supplied on T&R, 500 pcs max per reel.
Small quantities may be supplied on tape (no reel), or in bulk.



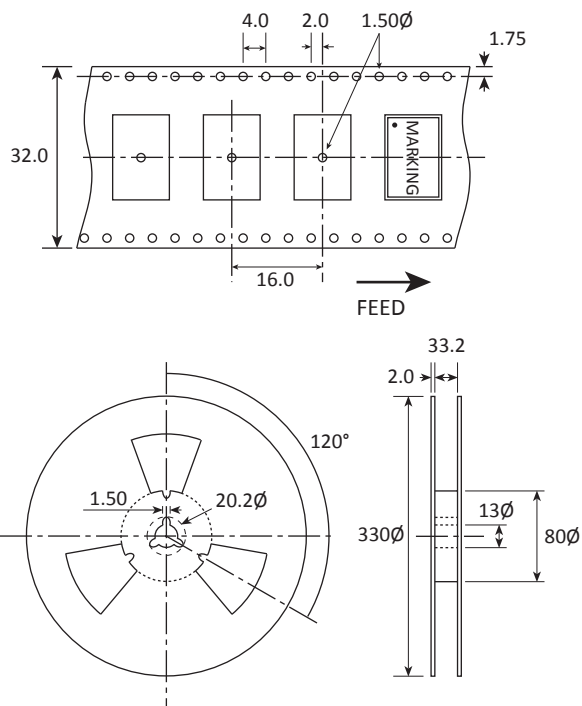
♦ Static sensitive product. Observe proper handling precautions

Marking

GOLLEDGE
FREQUENCY
• DC

• Pin 1
Marking type: Ink
DC = Date code

Tape & Reel Specification



Not to scale. Dimensions in mm. Tolerances $\pm 0.1\text{mm}$ unless otherwise stated.

Construction

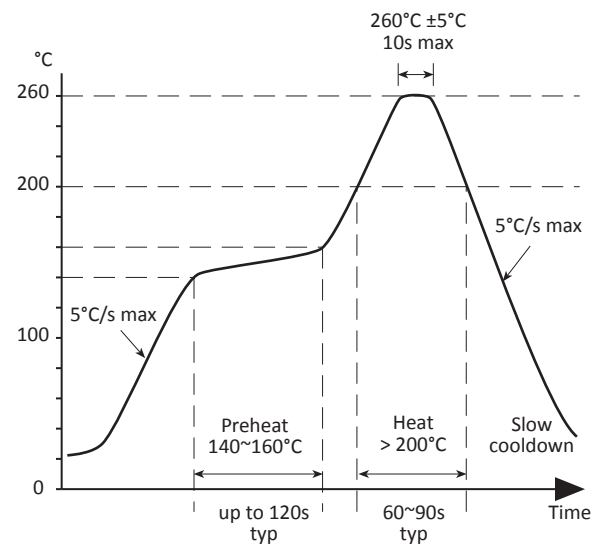
- FR4 substrate, Ryton R4 cover
- Water resistant, non hermetic seal

Composition



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

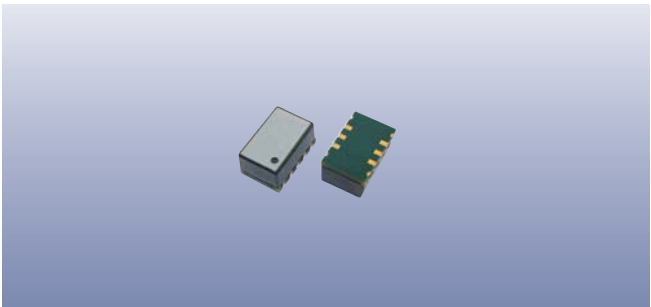
Soldering Profile



Meets IPC/JEDEC J-STD-020C

Recommended Cleaning

Wash only in an inline high pressure wash station that has an air knife and drying capabilities.
(Drying temperature range from 85° to 100°C)



Product Family

GOXO-149

Construction

 FR4 substrate, Ryton R4 cover

 Water resistant, non hermetic seal

Dimensions (mm)

