

Automotive Temperature Range Oscillator

Features

- Operating temperature range:
 - Automotive, -40°C to +125°C
- Mechanically robust:
 - Shock, 50 KG
 - Vibration, 70 G
- Wide frequency range
 - 1 MHz to 125 MHz
- Low frequency tolerance
 - ±100 ppm or ±200 ppm or ±500
- Operating voltage
 - 1.8V or 2.5 or 3.3 V
- Small footprint
 - 2.5 x 2.0 x 0.85 mm
 - 3.2 x 2.5 x 0.85 mm
 - 5.0 x 3.2 x 0.85 mm
 - 7.0 x 5.0 x 0.85 mm
- All packages are Pb-free and ROHs compliant (QFN SMD)
- Ultra-reliable start up and greater immunity from interference
- High drive option: 30pF load (contact factory)

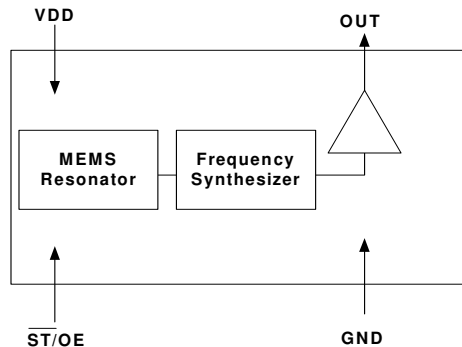
Benefits

- No crystal or capacitors required
- Eliminates crystal qualification time
- 50% + board saving space
- Most cost effective than Quartz oscillators, Quartz crystals and Clock ICs.
- completely quartz-free

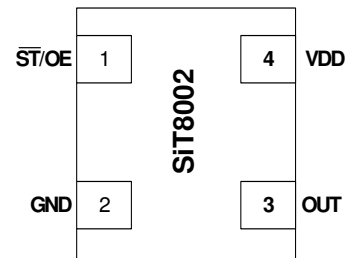
Applications

- Automotive
- Industrial
- Automation
- Space
- Satellite

Block Diagram



Pinout



Pin Description

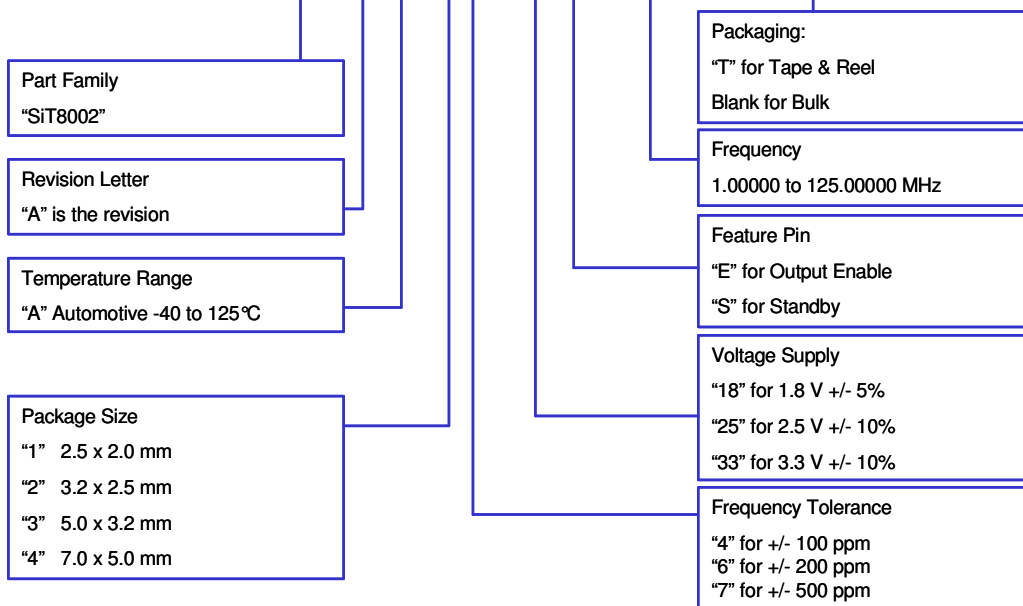
Pin No.	Name	Pin Description
1	ST/OE	Standby/ Output Enable
2	GND	Connect to Ground
3	OUT	1 to 125 MHz Programmed Clock output
4	VDD	Connect to 1.8V or 2.5V or 3.3V

Pin1

Pin #1 Functionality
OE
H or Open; specified frequency output
L: output is high impedance
ST
H or Open; specified frequency output
L: output is low level (weak pull down) oscillation stops

Ordering Information

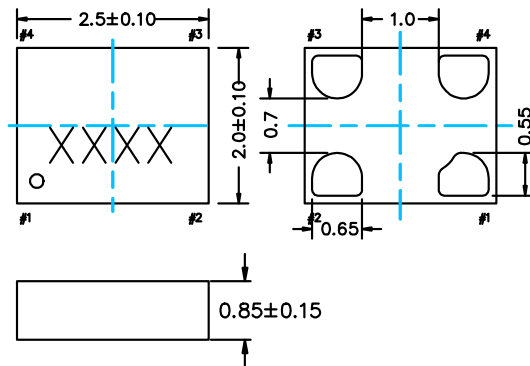
SiT8002AA - 14 - 33E - 123.12345T



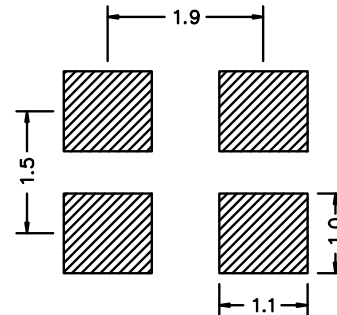
Package Information ^[3]

Dimension (mm)

2.5 x 2.0 x 0.85mm



Land Pattern (recommended) (mm)

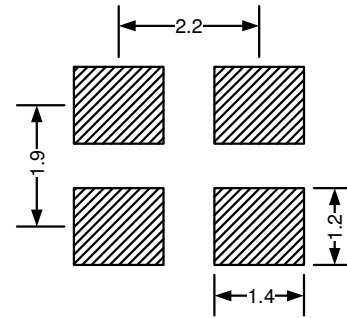
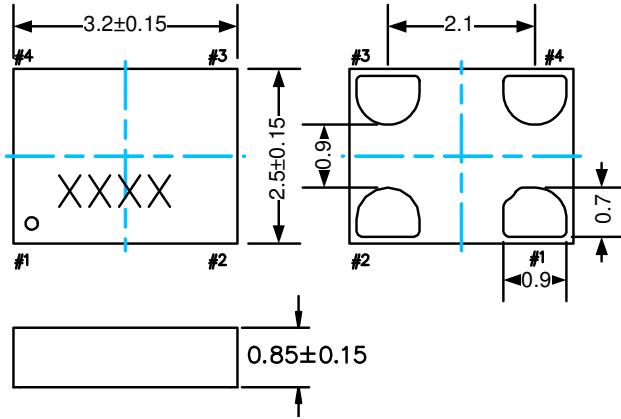


Package Information (continued)^[3]

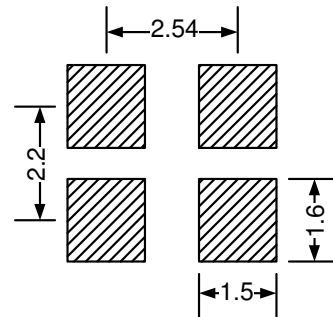
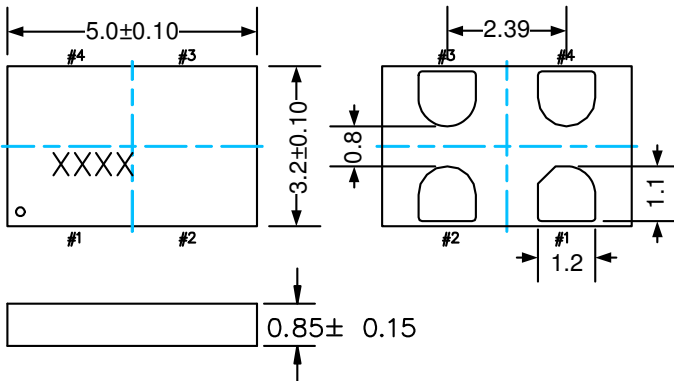
Dimension (mm)

Land Pattern (recommended) (mm)

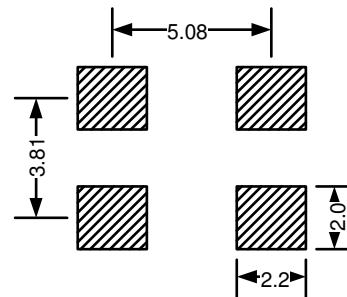
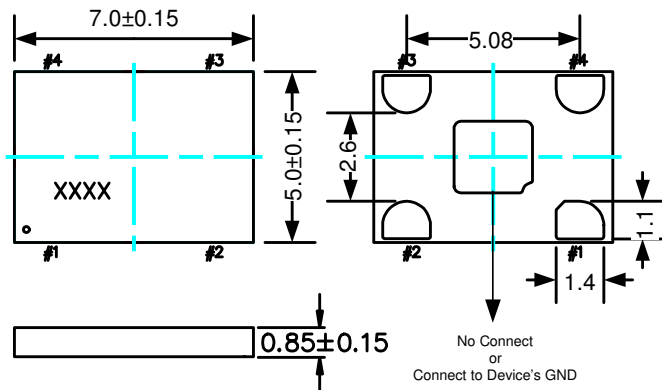
3.2 x 2.5 x 0.85mm



5.0 x 3.2 x 0.85mm



7.0 x 5.0 x 0.85mm



Note:

3. xxxx top marking denotes manufacturing lot number.