


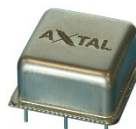
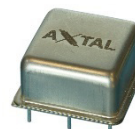
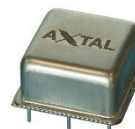

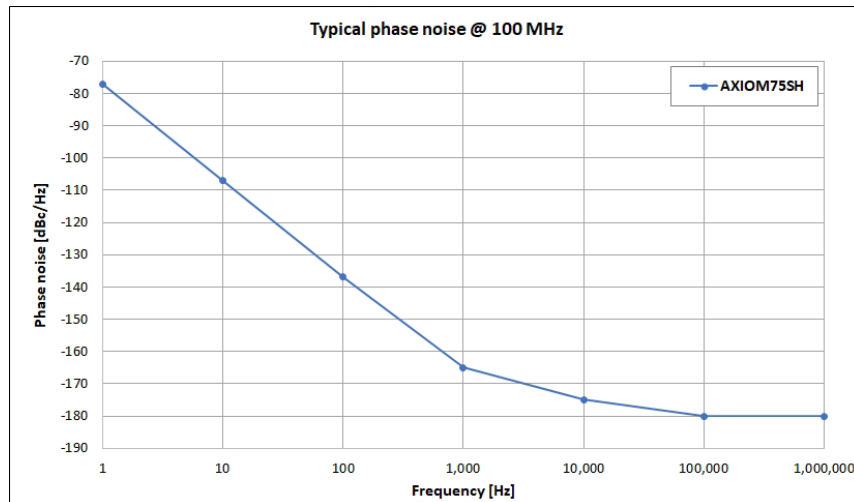
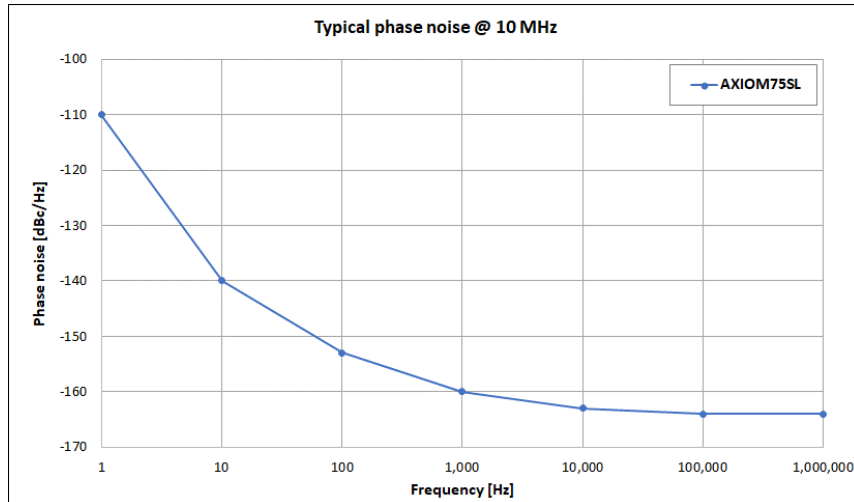


Model							
	AXLE5032S	AXLE7050S	AXIS45SH	AXIOM70SL	AXIOM75SL	AXIOM75SH	AXIOM3838S
Product type	TCXO		VCXO	OCXO			
Category	New Space (Space COTS) – Customizable to match mission requirements						
Features	LEO and New Space Applications - Ultra-Low Noise & High Stability Radiation tested (TID & SEE) – Different product levels available						
Radiation hardness	40 krad (TID) – SEL immune			10 krad (TID)	40 krad (TID) – SEL immune / SET insensitive		
Frequency range	10 ~ 50 MHz		40 ~ 100 MHz	10 MHz	10 MHz	80 ~ 125 MHz	10 MHz
Output	CSW		Sine wave	HCMOS	Sine wave		
Stability	±1 ppm		±5 ppm	±10 ppb	±10 ppb	±50 ppb	±10 ppb
Temperature range	-40°C to +85°C		-30°C to +70°C				
Supply voltage	3.3 V		3.3 ~ 5 V	5 V	8 ~ 12 V		
Manufacturing	MIL-PRF-55310 Product Level “S” or tailored to customer requirements						
Size	5 x 3.2 mm SMD Ceramic	7 x 5 mm SMD Ceramic	20 x 13 mm (CO 02)	25 x 25 mm (CO 43)	25 x 25 mm (CO 43)	25 x 25 mm (CO 43)	38 x 38 x 19 mm SMA / FT



Phase noise Performance



Design, Manufacturing and Quality

Space COTS “New Space Category”

Specially selected commercial components & materials (COTS) / Suitable semiconductor technology for improved radiation hardness

Quartz crystal with High Q material (Low inclusion & etch channel density)

Manufacturing IAW ECSS-Q-ST-70-08C / ECSS-Q-ST-70-38C

-

Pre-cap inspection (Optional)

-

Manufacturing IAW MIL-PRF-55310 Product Level “S” including

Screening, Group-B

Full traceability of all critical components (Quartz, Semiconductors & PCB)

Class 1 “Classical Space Category”

Component selection based on ECSS-Q-ST-60C Class 1

Material selection based on ECSS-Q-ST-70C / ECSS-Q-70-71

Quartz crystal based on ESCC3501 with swept material

ESA certified personnel in Clean-Room environment (ISO Class 3)

Pre-cap inspection of Crystal & Oscillator

Destructive Physical Analysis DPA (Optional)

Screening, Group A-, B- and C-inspection

Complete traceability of all components, materials and manufacturing steps

Heritage

- **PLATiNO Satellite Platform:** 10 MHz Ultra-Low Noise OCXO
- **One Sat Satellite Platform:** 100 MHz Ultra-Low Noise OCXO
- **LEO & New Space Missions:** ESA, DSO Singapore, South-Korea etc.
- **Many other Cube and Small Satellite Missions**

