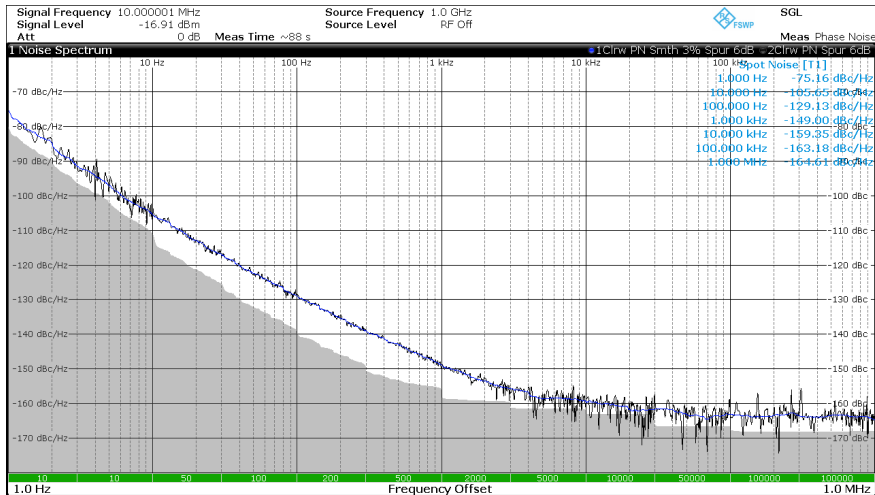


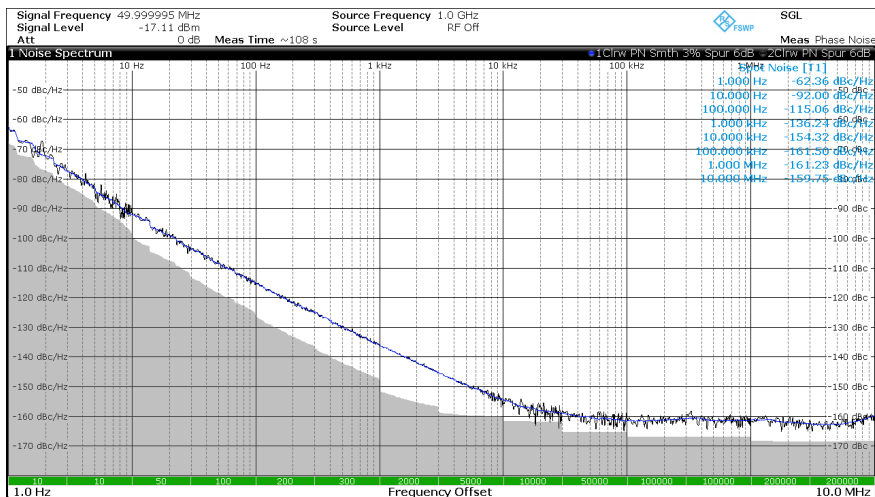
Model				<i>Coming soon</i> 	
	AXLE5032S	AXLE7050S	AXLE7050S-PB	AXLE45S	AXIS45SH
Product type	TCXO				VCXO
Category	New Space (Space COTS) – Customizable to match mission requirements				
Features	LEO and New Space Applications - Low Noise & High Stability Radiation tested (TID & SEE) – Different product levels available				
Radiation hardness	40 krad (TID) – SEL immune				
Frequency range	10 ~ 50 MHz			50 ~ 100 MHz	10 ~ 200 MHz
Output	CSW & HCMOS			Sine wave	Sine wave
Stability	±1 ppm				±5 ppm
Temperature range	-40°C to +85°C				-30°C to +70°C
Supply voltage	3.3 V				3.3 ~ 5 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	7 x 5 mm SMD Ceramic	20 x 13 mm (CO 02)	20 x 13 mm (CO 02)



TCXO Phase noise Performance



10 MHz



50 MHz

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 & More Information

AXTAL designs and manufactures Space products since 2011

AXTAL has a long heritage from LEO to extraplanetary missions (Moon & Mars)

AXTAL can tailor its Space products to the specific mission requirements

→ Please visit our website and see our Space presentation



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in Germany