




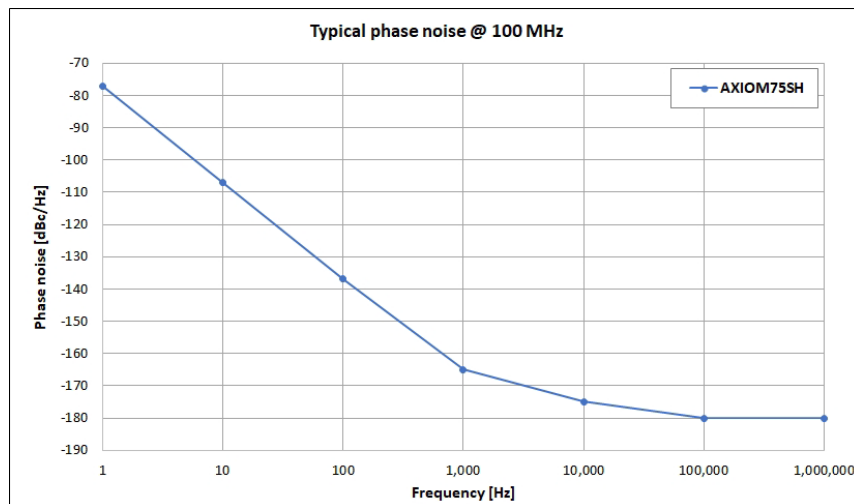
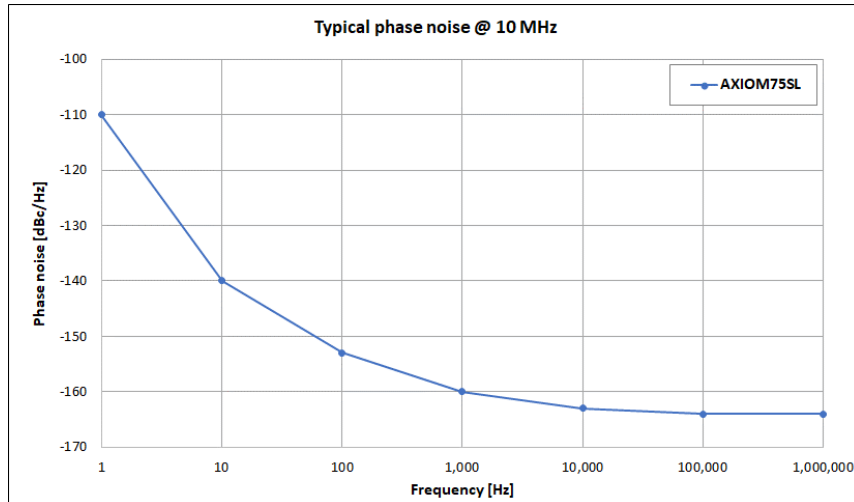


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|---------------------------|--|---|---|---|---|
| Model |  |  |  |  |  |
| | AXLE7050S | AXIOM70SL | AXIOM75SL | AXIOM75SH | AXIOM3838S |
| Product type | TCXO | OCXO | | | |
| Category | New Space (Space COTS) | | | | |
| Features | LEO and New Space Applications - Ultra-Low Noise & High Stability Radiation tested – Different product levels available | | | | |
| Radiation hardness | 40 krad (TID) | 10 krad (TID) | 40 krad (TID) – SEL immune | | |
| Frequency range | 10 ~ 50 MHz | 10 MHz | 10 MHz | 80 ~ 125 MHz | 10 MHz |
| Output | CSW | HCMOS | Sine wave | | |
| Stability | ±1 ppm | ±10 ppb | ±10 ppb | ±50 ppb | ±10 ppb |
| Temperature range | -40°C to +85°C | -20°C to +70°C | | | |
| Supply voltage | 3.3 V | 5 V | 12 V | | |
| Manufacturing | MIL-PRF-55310 Product Level "S" – ECSS-Q-ST-70-08C/38C | | | | |
| Size | 7 x 5 mm SMD Ceramic | 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” | Class 1 “Classical Space Category” |
|---|--|
| Specially selected commercial components & materials (COTS) / Suitable semiconductor technology for improved radiation hardness | Component selection based on ECSS-Q-ST-60C Class 1 |
| Quartz crystal with High Q material (Low inclusion & etch channel density) | Material selection based on ECSS-Q-ST-70C / ECSS-Q-70-71 |
| Manufacturing IAW ECSS-Q-ST-70-08C / ECSS-Q-ST-70-38C | |
| - | ESA certified personnel in Clean-Room environment (ISO Class 3) |
| Pre-cap inspection (Optional) | Pre-cap inspection of Crystal & Oscillator |
| - | Destructive Physical Analysis DPA (Optional) |
| Manufacturing IAW MIL-PRF-55310 Product Level “S” including | |
| Screening, Group-B | Screening, Group A-, B- and C-inspection |
| Full traceability of all critical components (Quartz, Semiconductors & PCB) | 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**

