

ROX5252T1

The ROX5252T1 is providing an ultimate frequency stability versus all operational conditions.

Features

- Hold over below 1 μ s over 24 hours, including temperature change
- Standard frequencies: 5, 10, 12.8 MHz

Applications

- Instrumentation
- Stratum 2 timing modules
- Base Stations

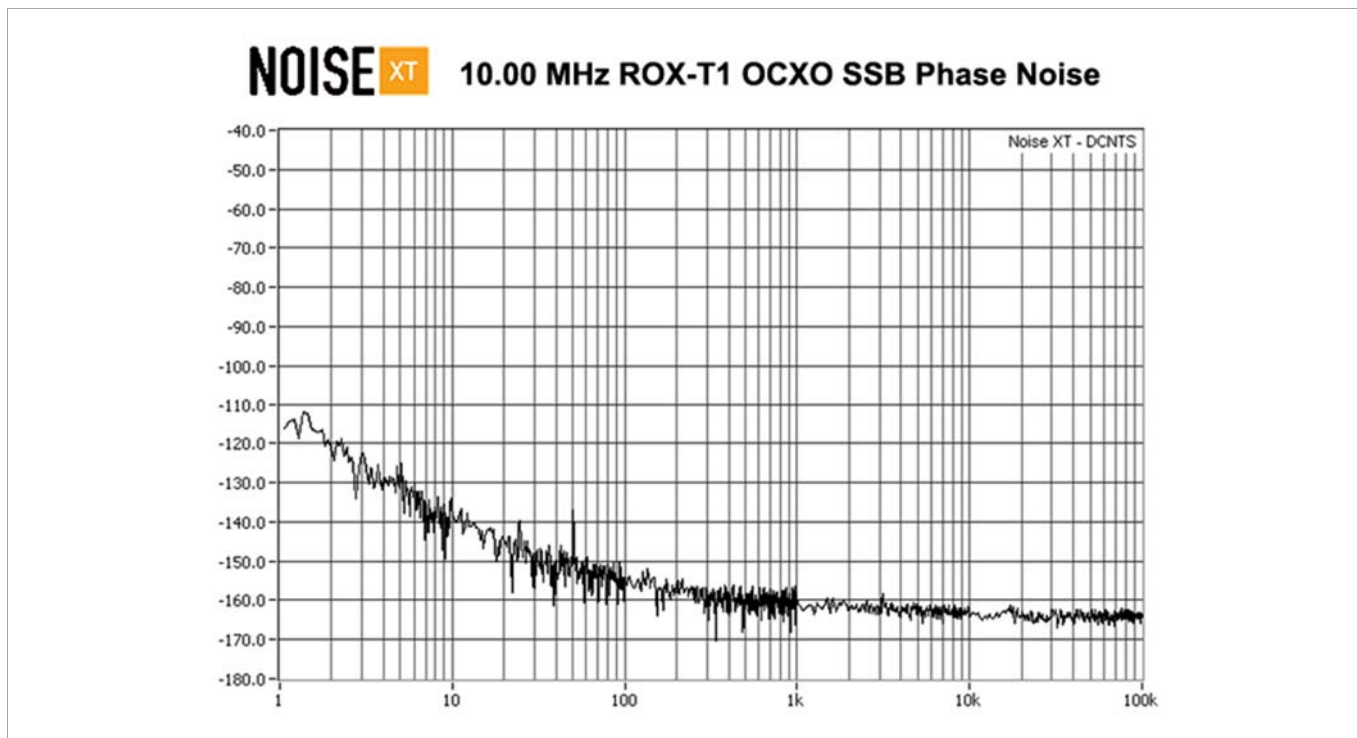
52 x 52 mm



Standard Specifications

Parameter	Min.	Typ.	Max.	Unit	Test Condition / Description
Nominal frequency		5 – 12.8		MHz	Standard frequencies: 5,10, 12.8 MHz
Operating temperature range	-20		70	°C	
Frequency stability over temperature			± 0.1	ppb	
Free-run accuracy over 20 years			± 0.02	ppm	Telcordia GR-1244 requirement is ± 4.6 ppm
Supply voltage stability			± 0.05	ppb	$\pm 5\%$ at 25°C
24 hours holdover performance			± 3	μ s	After 3 days of continuous power on, constant load, no supply variation, 50°C window in operating temperature range, temperature gradient (10 °C / hour)
Hysteresis effect			0.1	ppb	Over -20 to +70°C, gradient 10°C / hour
Long term stability (Ageing)			± 0.02 ± 3 ± 20	ppb/day ppb/year ppb/20 years	After 1 week operation
Short term 1s to 10s integration time			± 0.002	ppb	
Retrace effect at 25°C			± 5	ppb	After 24 hours off and 1 hour on
Supply voltage (V _{CC})		12		V	$\pm 5\%$.
Power consumption			7 2.5	W W	During warm-up Steady state at 25°C calm air
Warm-up time			± 8	minutes	Within 10 ppb of prior steady state output frequency at time of power-off. 24 hours on min. + 24 hours off max.
Harmonics		-40		dBc	
Start-up time			1	sec	
Oscillator output - Sinewave	5		9	dBm	Signal level with 50 Ω load
Environmental					
Vibration			10	g	IEC 68-2-06 test Fc-Severity 500/10
Shocks (3 directions)			50	g	IEC 68-2-27 test Ea severity 50A
Storage temperature	-55		90	°C	

SSB Phase Noise: ROX-T1 OCXO (Typical value at 25°C)



Model Outline: ROX5252T1 OCXO

