

Oscillators TCXO and VCTCXO

General application

Pilot circuit, telecommunications

Features

TCXO - Temperature Compensated Crystal Oscillator. The oscillator is the most suitable when a low frequency tolerance is required in a wide temperature range.

VCTCXO variant (i.e. Voltage-Controlled Crystal Oscillator) can be produced as well. This variant enables the change in oscillation frequency with external voltage.



Typical specifications

Type	TCXO-1A	TCXO-1B	TCXO-1C
Frequency range	5 000 - 24 000 kHz		
Freq. stability vs. temperature range (at -30°C ... +90°C)	< ±2.0 ppm	< ±2.5 ppm	< ±3.0 ppm
Frequency stability vs. supply voltage drift ±10 %	< ±0.5 ppm		
Frequency stability vs. aging	< ±1 ppm / year		
Supply voltage	+5 V ±10 %		
Supply current	≤ 3 mA		
Frequency adjustment by internal trimmer	> ±5 ppm		
Pulling voltage V_{CTRL} (for VCTCXO type)	0,5 V to 4,5 V		
Frequency adjustment by V_{CTRL} (for VCTCXO type)	±5 ppm		
Output voltage	450 mV _{pp}		
Load	680 Ω / 15 pF		
Input impedance	> 100 kΩ		
Operating temperature range	-30°C ... +90°C		
Waveform	clipped sinus		

Differences from standard values and other parameters can be consulted.

Outline dimensions [mm]

