



Data Sheet: OCXO 100MHz

Part Number: C2525-C100D1-100M000

1. ELECTRICAL SPECIFICATION

PARAMETER		CHARACTERISTIC
Output	Nominal Frequency	100 MHz
	Waveform	Sine wave
	Level	≥ 10 dBm
	Harmonics	≤ -30 dBc
	Spurious	≤ -75 dBc
Frequency Stability	Vs. Temperature	± 0.1 ppm (-40°C~+75°C, referred to +25°C)
	Vs. Load	± 0.05 ppm (max) / 50Ω ± 5%
	Vs. Supply Changes	± 0.05 ppm (max) / VDC ± 5%
	Vs. Ageing Per Year	± 0.2x10 ⁻⁶ (after 30 working days, typical)
Phase Noise	100Hz	-130 dBc / Hz
	1kHz	-160 dBc / Hz
	10kHz	-170 dBc / Hz
	20kHz	-170 dBc / Hz
Warm up Time Performance *		0 < F45 - F3 < 5Hz; (F3 and F45 are the frequency readings in 3 min. and 45 min. respectively after turned on)
Mechanical Tuning		No
G-Sensitivity		≤ 0.5ppb / G
Electrical Tuning Range		≥ ± 0.5 ppm (4V±4V, positive slope)
Frequency Control Input Impedance		≥ 100 kΩ
Reference Voltage		8V±0.3V
Vref Current Capability		≤100mA
Crystal Cutting Type		SC
Unit Weight (g)		13g ±1.5g
Seal		Tin Solder Seal
Input Power	Voltage	+12 VDC ±5%
	Warm-up Power	≤ 5 Watts for 3 minutes
	Total Power Typical	≤ 2 Watts at 25°C

Note*: This performance will be tested at -40°C and +75°C respectively. When the chamber temperature gets to -40°C, keep 10 min and then turn OCXO on, record F3 and F45, calculate F45-F3. The same testing



procedures are applied to when the chamber temperature gets to +75°C.

2. ENVIRONMENTAL CONDITIONS

Humidity	GJB360A-96, Method 103, Condition A (+40°C ±2°C; 90%~95% R.H.; non-condensing, 96 hours)
Storage temperature	-50°C~+85°C
Vibration (non-operating)	GJB360A-96, Method 201 (0.75mm total p-p, 10Hz~55Hz)
Shock (non-operating)	GJB360A-96, Method 213, Condition J (30g, 11ms, half-sine)

3. PACKAGE

Pin Configuration	
Pin 1	Output
Pin 2	Ground, Case
Pin 3	Control Voltage
Pin 4	Reference Voltage
Pin 5	Vcc Power Supply

Unit:mm

4 CREATING A PART NUMBER

