RXO2520M

The RXO2520M Crystal Oscillator (XO) is engineered to deliver exceptional phase jitter performance, as low as 0.1 ps max (measured from 12 kHz to 20 MHz offset). This compact XO, measuring 2.5 x 2.0 x 1.1 mm, is an ideal Surface-Mount Device (SMD) for space-constrained designs.

This XO offers various frequency stability options over a wide operating temperature range, accounting for initial frequency calibration, supply and load variations, and one-year ageing effects. Supporting a broad spectrum of industry-standard frequencies from 13.5 to 200 MHz, the RXO2520M is suitable for diverse applications across data centres, networking, instrumentation, and more.

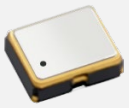
Features

- Frequency (Fn): 13.5 to 200 MHz
- Output: LVPECL, LVDS, HCSL
- Wide frequency range
- Operating temperature: -40 to 125°C
- Low phase noise and RMS jitter

Applications

- Data centre, Telecom, Networking, Server, Storage, Instrumentation
- GB Ethernet, SONET, SATA, SAS, Fibre Channel, PCI-Express

2.5 x 2.0 x 1.1 mm



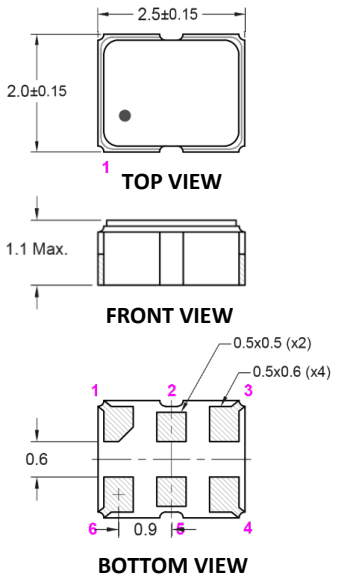
Pb FREE

RoHS COMPLIANT

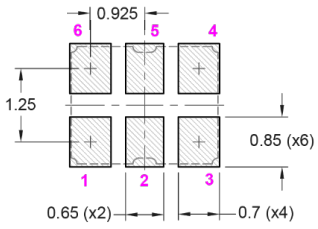
Standard Specifications

Parameter		Min.	Typ.	Max.	Unit	Test Condition / Description
Nominal frequency (Fn)		13.5		200	MHz	LVPECL, LVDS, HCSL or LP-HCSL output
Temperature range		-40		85 ~ 125	°C	
Frequency stability				±25 ~ ±50	ppm	Including frequency calibration, operating temperature range, supply and load variations, and 1 year ageing at 25°C
Supply voltage (V_{DD})	LVPECL LVDS, HCSL		2.5/3.3 1.8/2.5/3.3		V	With a tolerance of ±5%
Supply current	LVPECL LVDS HCSL			70 20 30	mA	
RMS phase jitter				0.1 ~ 0.3	ps	Integrated from 12kHz to 20MHz

Model Outline and Recommended Pad Layout



RECOMMENDED PAD LAYOUT
– TOP VIEW



Pin	Connections
1*	Enable/Disable (E/D)
2	NC
3	GND
4*	Output (Q)
5*	Complementary Output ($\overline{Q}$)
6	V_{DD}

E/D function	Pin 1	Pin 4 & 5
	High or Open	Operating
	Low	High Impedance

NOTE: Outline unit is mm.