

### RXO7050M

The RXO7050M Crystal Oscillator (XO) is engineered to deliver exceptional jitter performance, achieving a low RMS phase jitter of 0.1 ps max. (measured from 12 kHz to 20 MHz offset). The 7.0 x 5.0 x 1.4 mm Surface-Mount Device (SMD) is an ideal solution where low RMS jitter is required.

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 800 MHz, the RXO7050M is suitable for diverse applications across data centres, networking, instrumentation, and more.

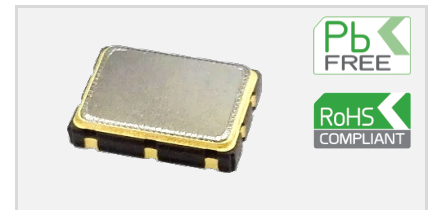
#### Features

- Frequency (Fn): 13.5 to 800 MHz
- Output: LVPECL, LVDS or HCSL
- Wide frequency range
- Operating temperature: -40 to 85°C
- Low phase noise and RMS jitter

#### Applications

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

#### 7.0 x 5.0 x 1.4 mm



#### Standard Specifications

Parameter	Min.	Typ.	Max.	Unit	Test Condition / Description
Nominal frequency (Fn)	13.5 13.5		800 160	MHz	For LVPECL, LVDS For HCSL
Temperature range	-40		85	°C	Temperature options up to 105°C are available on request
Frequency stability			±25 ~ ±100	ppm	Including frequency calibration, operating temperature range, supply and load variations, and 1 year ageing at 25°C
Supply voltage (VDD)	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 40 40	mA	
RMS phase jitter	13.5 ~ 160 MHz 160 ~ 800 MHz		0.1 ~ 1 2	ps	Integrated from 12kHz to 20MHz

#### Model Outline and Recommended Pad Layout

Pin	Connections
1*	Enable/Disable (E/D)
2	NC
3	GND
4*	Output (Q)
5*	Complementary Output ( $\bar{Q}$ )
6	V <sub>DD</sub>

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

**NOTE:** Outline unit is mm.