

### RXO7050M

The RXO7050M is a high-frequency and low-jitter performance XO (Crystal Oscillator). With an impressively low RMS phase jitter 0.1 ps typ. (12 kHz to 20 MHz offset). It maintains remarkable performance even in a high-temperature operating range of up to 105°C.

This compact SMD (Surface Mount Device) has a 7.0 x 5.0 mm footprint, offering precise frequency stability. It caters to a wide spectrum of applications with a broad selection of industry-standard frequencies, ranging from 60 to 312.5 MHz. The RXO7050M boasts a short lead time, ensuring swift availability for your projects.

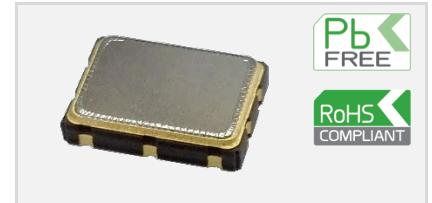
#### Features

- Fast sample turnaround
- LVC MOS, LVPECL, or LVDS output options
- 0.1 ps typ. RMS phase jitter (12 kHz to 20 MHz)
- Wide frequency range

#### Applications

- Base stations
- Ethernet
- DSL/ADSL
- WiMAX/W-LAN
- Wi-Fi

7.0 x 5.0 x 1.5 mm



#### Standard Specifications

Parameter	Min.	Typ.	Max.	Unit	Test Condition / Description
Nominal frequency	60		312.5	MHz	LVPECL or LVDS
Temperature range	-40		105	°C	
Temperature stability			±25 ±30	ppm	Temperature range: -40 to 85°C Temperature range: -40 to 105°C
Frequency stability			±50	ppm	Including frequency calibration, operating temperature range, supply and load variations, and 1 year ageing at 25°C. 10 years ageing available on request
Supply voltage (V <sub>DD</sub> )		3.3		V	With a tolerance of ±5%
Supply current			50 70	mA	For LVDS For LVPECL
RMS phase jitter (@122.88 MHz) <sup>1</sup>		0.1	0.15	ps	Integrated from 12kHz to 20MHz

#### Model Outline and Recommended Pad Layout

**TOP VIEW**

**SIDE VIEW**

**RECOMMENDED PAD LAYOUT**  
- TOP VIEW

**BOTTOM VIEW**

**PIN CONNECTIONS**

1*	E/D
2	NC
3	GND
4	Output
5*	NC (LVCMOS) or Complementary Output (LVPECL/LVDS)
6	V <sub>DD</sub>

\* Depending on specifications

**NOTE:** Outline unit is mm.

<sup>1</sup> RMS phase jitter value varies depending on the output type and frequency.