



High Performance

Low noise &
Fast settling.

Reusable

Up to 32 pre-defined
frequencies.

Save Cost

No NRE, No MOQ.
No worries about inventory.



PLO

Reliable Signal Source

Our phase-locked oscillator is a pre-configured source that is suitable for any RF front-end systems. The SFSO and the MFSO series offer users the choice of single frequency output or multiple frequencies output. It features excellent phase noise performance, wide band coverage, and superior flexibility.

📍 2F-2, No.736, Zhongzheng Rd., Zhonghe Dist.,
New Taipei City 235, Taiwan

☎ 886-2-8226-9168

✉ operation@tmytek.com

🌐 www.tmytek.com **TMXLAB** lab.tmytek.com

📘 /TMYtek

🌐 /TMY Technology



Phase-Locked Oscillator

NO NRE, NO MOQ! Deliver within 2 weeks.

Phase-locked Oscillator 1.925 to 45 GHz

Features

- Fastest delivery in the world : 7 – 14 days^{*1}
- Wide frequency coverage up to 45 GHz
- Very low noise
- Up to 32 pre-configured frequencies
- SMT, EVB-board, and Connectorized Module are available
- Integrated with TMYTEK's ReF™ Technology

Specifications

| Parameter | Conditions | Units | Value |
|-------------------------------|------------------|----------------|---------------|
| Frequency | | | |
| | Band 1 RF Port 1 | GHz | 1.925 - 8 |
| | Band 1 RF Port 2 | GHz | 7.7 - 16 |
| | Band 2 | GHz | 16 - 32 |
| | Band 3 | GHz | 32 - 45 |
| Phase Noise (@100 kHz Offset) | | | |
| | Band 1 RF Port 1 | RF = 6 GHz | dBc/Hz -92.5 |
| | Band 1 RF Port 2 | RF = 12 GHz | dBc/Hz -86.5 |
| | Band 2 | RF = 28 GHz | dBc/Hz -87 |
| | Band 3 | RF = 32 GHz | dBc/Hz -77 |
| Spurs | | | |
| | | | dBc < 40 |
| 2nd Harmonic | | | |
| | | | dBc < 20 |
| Output Power | | | |
| | Band 1 RF Port 1 | 1.925 to 8 GHz | dBm +2 - +8 |
| | Band 1 RF Port 2 | 7.7 to 16 GHz | dBm -1 - +5 |
| | Band 2 | 16 to 32 GHz | dBm +10 - +15 |
| | Band 3 | 32 to 45 GHz | dBm +12 - +18 |
| Loading Impedance | | | |
| | | Ω | 50 |
| Settling Time | | | |
| | | μs | 90 |
| External Reference | | | |
| | | MHz | 10 - 800 |

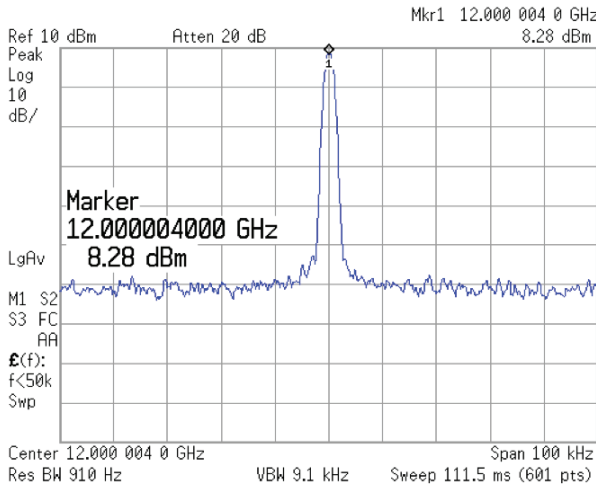
^{*1} For quantities of 1 to 200 pieces.

Frequency Selection

| Series | Tones | Frequency | Band | Minimum Step Size |
|--------|----------|-----------------------------|----------------------------|---------------------------------------|
| SFSO | One tone | Fixed | ... | ... |
| MFSO | One tone | Select up to 32 frequencies | Band 1 Band 2 Band 3 | 1 MHz 2 MHz 4 MHz ^{*2} |

TMYTEK's ReF™ Technology can reconfigure the module with different frequencies. With this technology, not only you will free your working space with redundant stocks, you will also save money for your next project. ^{*3}

Typical Performance



Spectrum at 12 GHz Carrier

^{*2} Based on 100 MHz REF CLK.

^{*3} Upgrade from SF to MF is not suitable for this service.

Package Details

Available in three different package styles:

SMT Module^{*4}



| Width | Length | Height | Unit |
|-------|--------|--------|------|
| 25.4 | 25.4 | 5.5 | mm |

Evaluation Board^{*4}



| Width | Length | Height | Unit |
|-------|--------|--------|------|
| 45.4 | 79.5 | 10 | mm |

Connectorized Package



| Width | Length | Height | Unit |
|-------|--------|--------|------|
| 57.1 | 126 | 26 | mm |
| 106.1 | 126 | 56.1 | mm |
| 106.1 | 166 | 56.1 | mm |

^{*4} Only available in Band 1.