

THOR Series

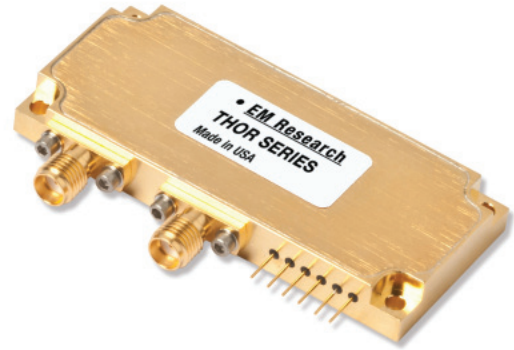
PRODUCT SERIES OVERVIEW

Hi-Rel, Programmable Frequency Synthesizer

1 to 18 GHz (In-Bands)

FEATURES

- Programmable Frequencies to 18 GHz
- Ruggedized, Modular-Mount Package
- Removeable SMA Connectors for Surface-Mountability
- Optionally Hermetically-Sealed per MIL-STD-883
- High Shock and Vibration Tolerance
- Fast Switching Units Available ($\leq 100 \mu\text{Sec}$)



Custom Designs Available

SPECIFICATIONS

Frequency Range	1 to 18 GHz
Bandwidth	$\leq 33\%$
Step Size	100 KHz to 10 MHz
Switching Speed	down to 100 μSec
External Reference	5 to 200 MHz
Internal Reference (Optional)	± 2.5 ppm, Stability
Power Output	up to +14 dBm
Harmonics	< -25 dBc
Spurs	< -60 dBc
Supply Options	+5, +8, +12 VDC
Current	≤ 300 mA

Phase Noise (dBc/Hz)	4000 MHz	18 GHz
1 KHz Offset	< -84	< -75
10 KHz Offset	< -80	< -75
100 KHz Offset	< -93	< -100
1 MHz Offset	< -118	< -122

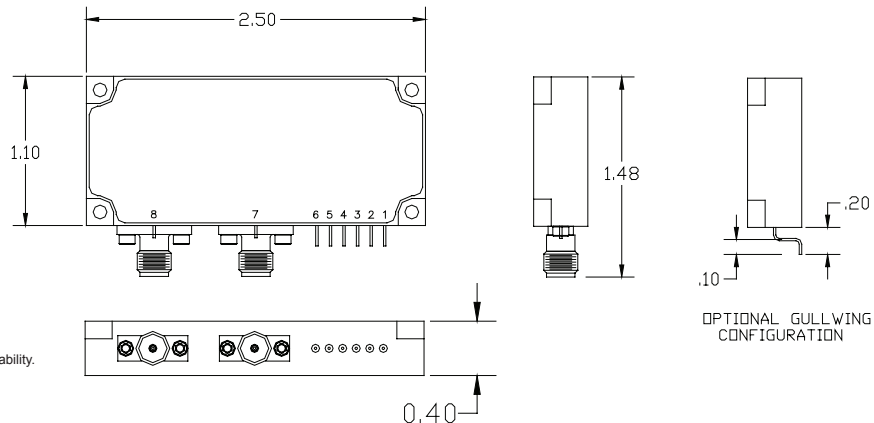
Temperature Ranges (Operating)

Standard	-30°C to $+70^{\circ}\text{C}$
Other Available Ranges	-40°C to $+85^{\circ}\text{C}$
	-50°C to $+105^{\circ}\text{C}$

Package Size	2.5" x 1.1" x 0.4"
	(63.5 x 27.9 x 10.2)mm

Note: All specifications are typical unless otherwise specified and subject to change without notice. Not all performance parameters are available in combination with certain specifications. E.G. Not all power output levels are available at all frequency ranges.

PACKAGE OUTLINE



- Notes:
1. Includes removeable SMA connectors for drop-in, surface-mountability.
 2. Alternate connectors available: GPO, GPPO, K
 3. Demoboards and Reference Modules available.
 4. All dimensions are in inches unless otherwise specified.
 5. Diagrams and pictures shown are examples only.

THOR Series_Prog_Product Overview Datasheet, Rev A, 8.9.12

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