

Multi-Function Assemblies

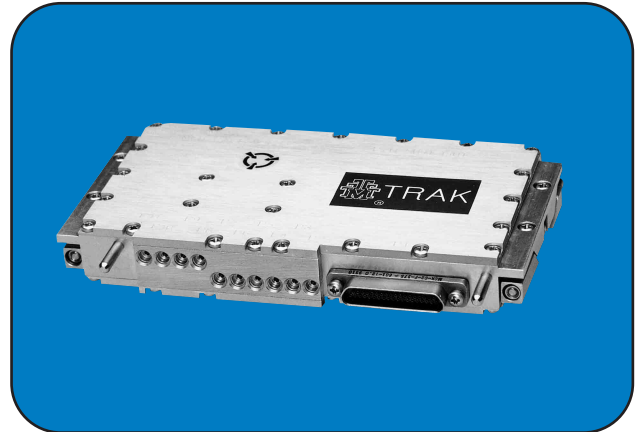
Multi-Output Reference Oscillator Assembly, .125 - 2 GHz

Model: MFS025



Features:

- 10 Output Channels: 0.125 - 2000 MHz
- Small Package: < 8.5 cubic inches
- Excellent Short Term Stability: < 0.1 ppm
- Wide Operating Temperature: - 55 to + 95 °C
- Excellent Vibration Performance
- Multiple Built-in-Test Points



Electrical Specifications

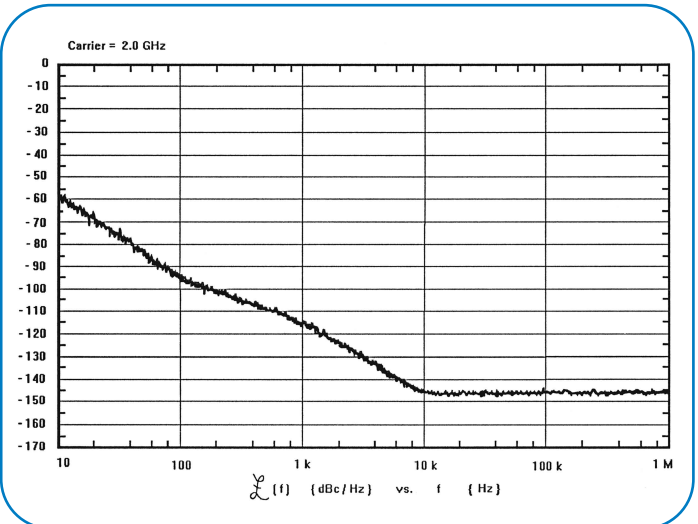
	Ports 2-5	Ports 6-7	Ports 8-11
Operating Frequency:	2 GHz	1 GHz	125 MHz
Accuracy:	± 0.5 ppm, typical		
Short Term Stability:	< 0.1 ppm / 10 sec		
Allan Variance,			
Under Vibration: ^{Note 1}	5 x 10 ⁻¹¹ , typical		
Static Condition:	2 x 10 ⁻¹¹ , typical		
Long Term Stability:	10 ppm over 10 years		
Output Power (dBm, nominal):			
+16 ^{Note 2}	-26	-4	
Output Power Tolerance:	±1.5 dB	±3 dB	±2 dB
SSB Phase Noise (dBc/Hz, typical): ^{Note 3}			
Offset			
100 Hz	- 95	- 101	- 119
1 kHz	- 115	- 121	- 139
10 kHz	- 146	- 152	- 165
100 kHz	- 146	- 152	- 165
1 MHz	- 146	- 152	- 165
Spurious (dBc, typical):	- 80	- 40	- 70
Harmonics (all ports):	- 30 dBc, maximum		
Output VSWR (all ports):	2.0:1, typical		
Frequency Pushing:	< 0.1 ppm per volt		
BITE Scheme:	RF Power at each frequency (1 = Failure)		
DC Power:	+ 15 V ± 5 % @ 300 mA, nominal		
	+ 5 V ± 5 % @ 20 mA, nominal		
	- 5 V ± 5 % @ 10 mA, nominal		
Power Consumption:	4.65 W, nominal		

Environmental Specifications

Operating Temperature: - 55 to + 95 °C, baseplate
Environment: Airborne

Mechanical Specifications

Size (excluding connectors):
4.5 x 2.5 x 0.75 inches
114 x 64 x 11.6 mm
Weight: 9.6 oz (300 g), nominal
Connectors: GPO (RF); MIL-C-83513/2 (DC)



Note 1: The value of $\sigma^2(\tau)$ is relative to operating vibration per MIL-STD-202, Method 214, Test Condition Ib @ Level = 0.04 g²/Hz and $\tau = 10$ msec.
Note 2: Output power for Ports 4 and 5 is + 3 dBm and - 30 dBm, respectively.
Note 3: Static conditions only. See plot for typical values at 2 GHz.

Specifications subject to change without notice.