

Multi-Function Assemblies

Comb Source Assembly, 1.8 - 5.4 GHz

Model: MFS074



Features:

- Combines: Oscillator, Multiplier, and Comb Generator
- Low Noise: - 120 dBc/Hz @ 100 Hz (Fout @ 100 MHz)
- Low Vibration Sensitivity: $5 \times 10^{-10}/g$
- Small Integrated Package: 1.76 cubic inches
- Excellent Stability: ± 0.2 ppm



Electrical Specifications

Reference Oscillator Output, E 2

Frequency:	100 MHz
Power Level: (typical)	+ 13 dBm \pm 2 dB
Harmonics:	- 35 dBc, maximum
Spurious:	- 65 dBc, maximum
Phase Noise (dBc/Hz, typical):	

Offset

100 Hz	- 120
1 kHz	- 145
10 kHz	- 155
100 kHz	- 160

RF Output, J1

Frequency:	1.8 - 5.4 GHz
Comb Spacing:	600 MHz
Power Level:	- 3 dBm, minimum
Spurious:	> 60 dBc, typical
Phase Noise (@ 5.4 GHz; dBc/Hz, typical):	

Offset

100 Hz	- 85
1 kHz	- 110
10 kHz	- 120
100 kHz	- 125

General

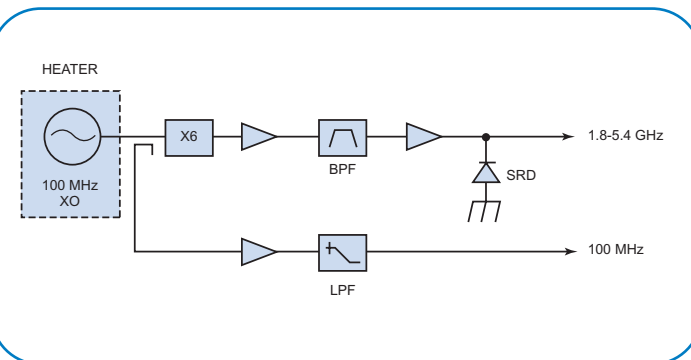
Temperature Stability:	± 0.2 ppm, typical
Vibration Sensitivity:	$5 \times 10^{-10}/g$
Port to Port Isolation:	50 dB, minimum
DC Power (nominal):	
	(+ 25 °C) + 15 V @ 150 mA (2.25 W)
	(- 54 °C) + 15 V @ 210 mA (3.15 W)

Environmental Specifications

Operating Temperature:	- 54 to + 85 °C, baseplate
Vibration:	20 g _{rms} (20 to 2000 Hz)
Shock:	100 g, 11 msec
Altitude:	70,000 ft
Environment:	Airborne

Mechanical Specifications

Size: (nominal)	2.2 x 1.6 x 0.5 inches 56 x 41 x 13 mm
Weight:	2.1 oz (60 g), nominal
Connectors:	SMA Female (J1, RF) Solder terminals (E2 and DC)



Specifications subject to change without notice.