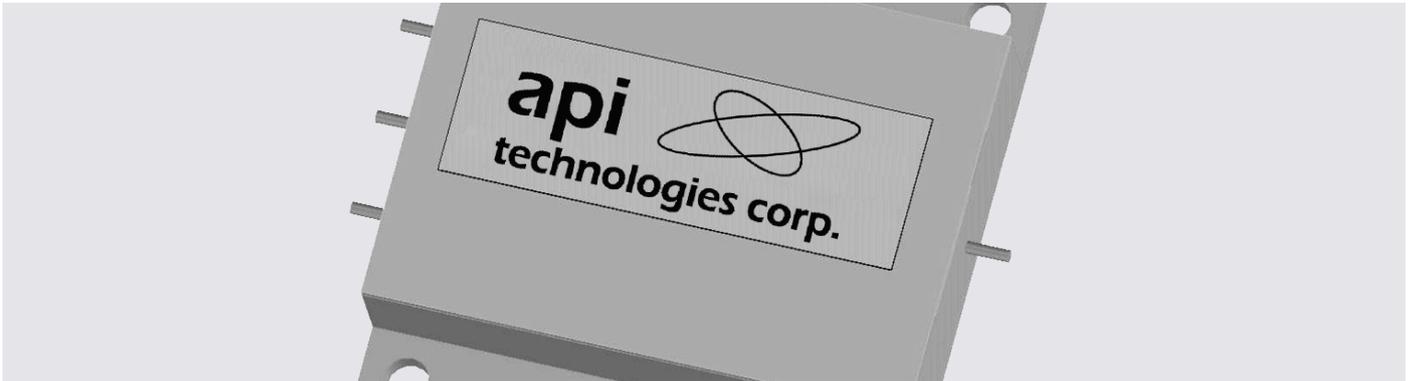


MASYML0007

Low Phase Noise - Phased Locked Oscillator



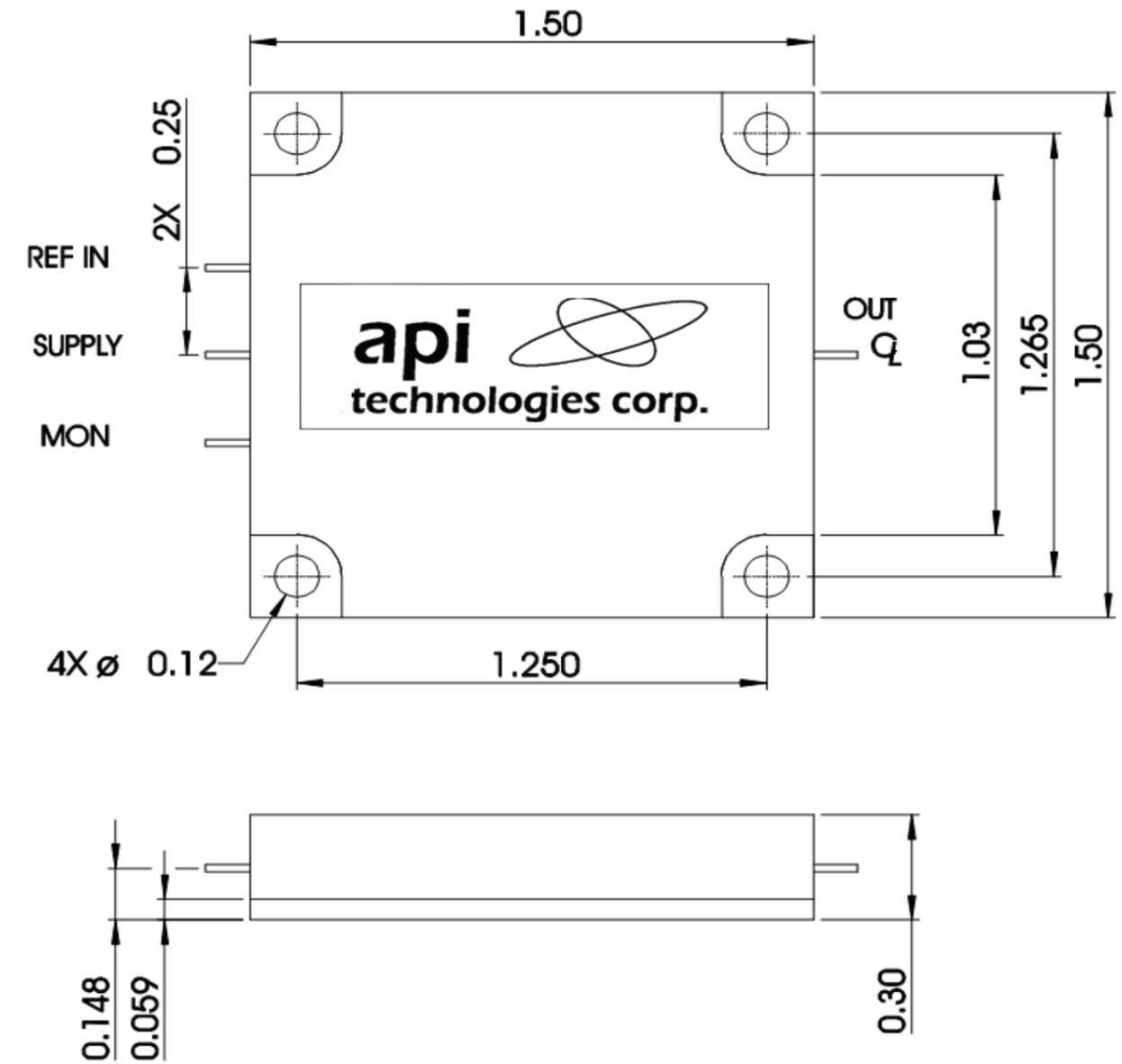
- Low Phase Noise
- Ceramic resonator
- Fixed frequency application
- High Reliability
- Environmentally sealed
- Derivative designs available from 1.0 GHz to 2.0 GHz
- European Manufacture

RF2M Microwave Ltd. MASFML0007 is a high reliability phase locked CRO oscillator with excellent phase noise performance. The MASFML0007 is designed for demanding applications that require the ultimate in low phase noise and robust construction. Applications include communications terminals, surveillance radar exciters, airborne transponders and fire control radar. The module is supplied in a flange mount metal package for ease of integration into the user's hardware. Frequency control is handled internally using a customized microcontroller.

Typical Electrical Performance

Parameter	Min	Typ	Max	Unit	Notes
Frequency		1600		MHz	Deivative designs available from 1.0 GHz to 2.0 GHz
RF Output power	-3	0	+3	dBm	
RF Output VSWR		1.2:1			
Switch on Time		200	350	ms	
Harmonic		-20	-15	dBc	
Spurious		-75	-70	dBc	
Phase Noise		-76	-73	dBc/Hz	10Hz offset
		-86	-83	dBc/Hz	100Hz offset
		-96	-93	dBc/Hz	1kHz offset
		-106	-103	dBc/Hz	10kHz offset
		-133	-130	dBc/Hz	100kHz offset
		-153	-150	dBc/Hz	1MHz offset
		-163	-160	dBc/Hz	>10MHz offset
External Ref		100		MHz	With stabilitu of 200ppm (Max) over temperature. Reference phase noise: -98 dBc/Hz @ 10 Hz -110 dBc/Hz @ 100 Hz -120 dBc/Hz @ 1 kHz
Lock Monitor (in lock)	2.0	2.5	3.3	Volt	
Lock Monitor (not lock)	0	0.1	0.8	Volt	
DC Supply voltage		9		Volt	Other voltages may be specified
Power consumption		1		Watt	
Operating Temperature	-40		+85	°C	
NON-Operating/Storage Temperature	-55		+125	°C	

Mechanical Outline

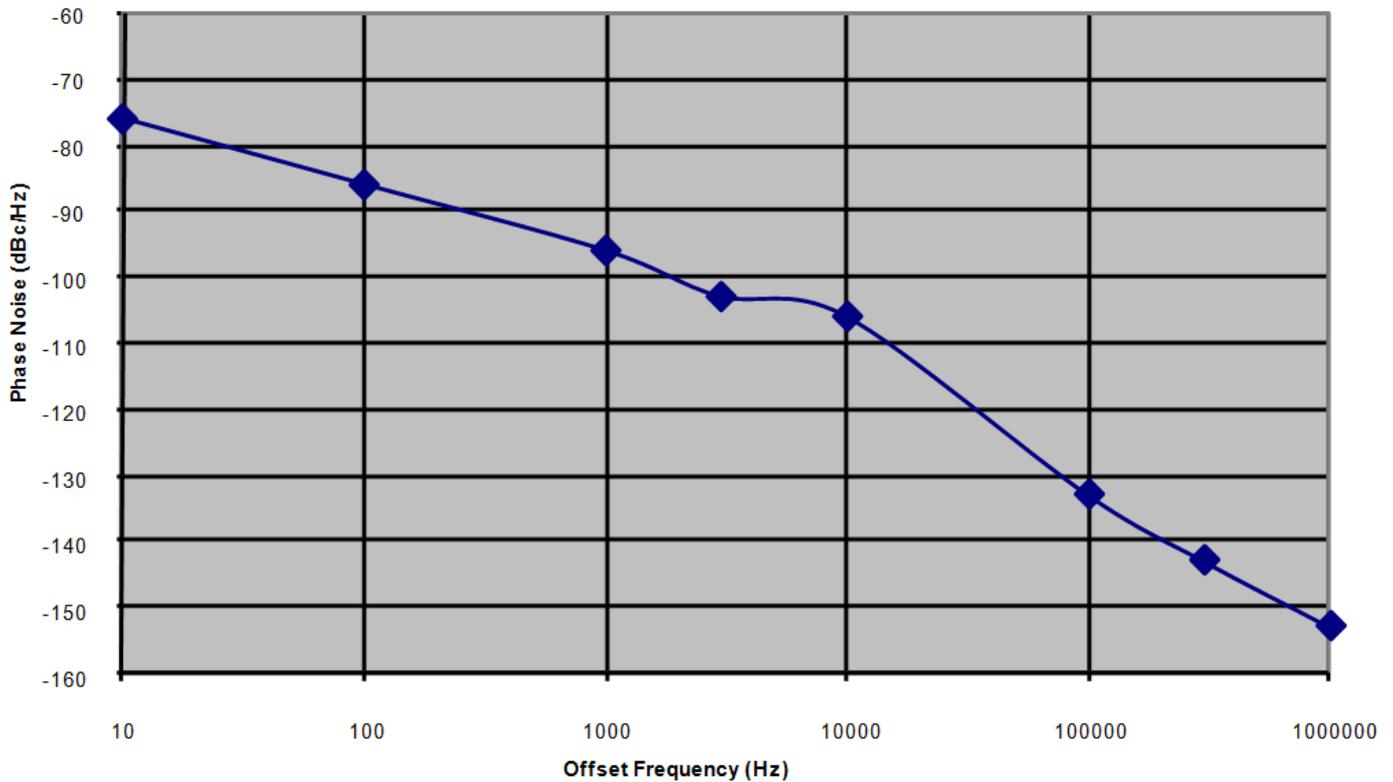


NOTES:-

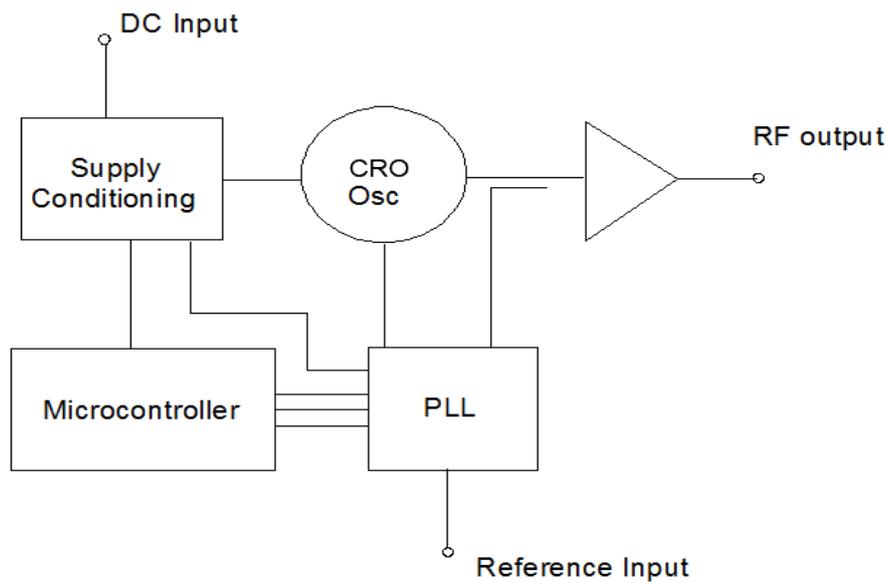
1. CONDUCTOR PINS WITH GLASS/METAL SEALS. PIN \varnothing 0.018 SEALS. PIN \pm 0.020.

Typical Electrical Performance

Typical Phase Noise



Block Diagram



Whilst every effort is made to ensure the accuracy of the information contained in this brochure, no responsibility can be accepted for any errors and/or omissions.

Descriptions and specifications of products are subject to change without notice.