



ULS614

Features

- Ultra low phase noise $\leq -96\text{dBc/Hz@10Hz}$, $\leq -163\text{dBc/Hz@10kHz}$, $\leq -172\text{dBc/Hz@1MHz}$ (400MHz)

Applications

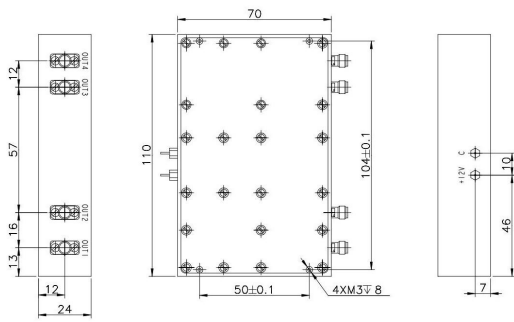
- Frequency standards and sources
- Measuring and calibration equipment

Technical Specifications

Standard Frequency	100MHz	400MHz	100MHz	400MHz	100MHz	400MHz	100MHz	400MHz
Phase Noise (dBc/Hz,free-running)	Option: S		Option: H		Option: L		Option: U	
10 Hz	-100	-88	-103	-91	-105	-93	-108	-96
100 Hz	-130	-118	-133	-121	-135	-123	-138	-126
1 KHz	-160	-148	-163	-151	-165	-153	-168	-156
10 KHz	-171	-159	-172	-160	-173	-161	-175	-163
100 KHz	-173	-160	-173	-163	-175	-165	-175	-165
1 MHz	-174	-165	-174	-168	-176	-170	-176	-172
Aging (after 30 days of continuous operation)	$\leq 5 \times 10^{-7}$ / year							
Input voltage range	12 VDC \pm 5%							
Power consumption (at 25°C)	8W / 5W							
Warm up time (at 25°C to 2×10^{-7})	≤ 5 min							
Input EFC								
Tuning range	$\geq \pm 5 \times 10^{-7}$ (0 ~ 10 V, Positive)							
Output specifications								
Wave form	Sine wave							
Number of outputs	4							
Port to port isolation (Same frequency)	≥ 30 dB							
Power	10 ± 3 dBm							
Harmonics	≤ -30 dBc							
Spurious	≤ -100 dBc							
Frequency stability vs Temperature (-40°C to 70°C)	$\leq 2 \times 10^{-7}$							
Load	$50 \Omega \pm 5\%$							
g sensitivity	$\leq 5 \times 10^{-10}$ / g							
Vibration	MIL-STD-202G							
Size (L×W×H)	110×70×24mm ³							



Outline drawing and Electrical connections (mm)



- OUT1: 100MHz (SMA-F)
- OUT2: 100MHz (SMA-F)
- OUT3: 400MHz (SMA-F)
- OUT4: 400MHz (SMA-F)
- +12V: +12V Power supply
- C : EFC

