



# ULS618

## Features

- Ultra low phase noise  $\leq -90\text{dBc/Hz}@10\text{Hz}$ ,  $\leq -156\text{dBc/Hz}@10\text{kHz}$ ,  $\leq -172\text{dBc/Hz}@1\text{MHz}$  (800MHz)

## Applications

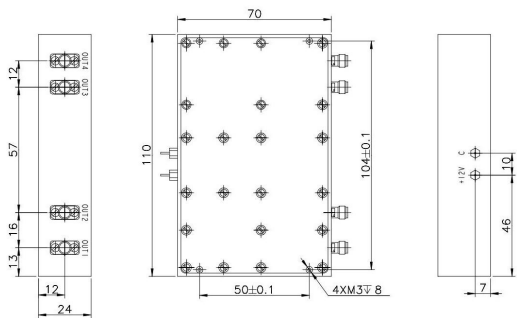
- Frequency standards and sources
- Measuring and calibration equipment

## Technical Specifications

Standard Frequency	100MHz	800MHz	100MHz	800MHz	100MHz	800MHz	100MHz	800MHz
<b>Phase Noise</b> ( dBc/Hz,free-running)	<b>Option: S</b>		<b>Option: H</b>		<b>Option: L</b>		<b>Option: U</b>	
10 Hz	-100	-82	-103	-85	-105	-87	-108	-90
100 Hz	-130	-112	-133	-115	-135	-117	-138	-120
1 KHz	-160	-142	-163	-145	-165	-147	-168	-150
10 KHz	-171	-151	-172	-152	-173	-154	-175	-156
100 KHz	-173	-152	-173	-155	-175	-157	-175	-160
1 MHz	-174	-165	-174	-168	-176	-170	-176	-172
<b>Aging</b> (after 30 days of continuous operation)	$\leq 5 \times 10^{-7}$ / year							
<b>Input voltage range</b>	12 VDC $\pm$ 5%							
Power consumption (at 25°C)	8W / 5W							
Warm up time (at 25°C to $2 \times 10^{-7}$ )	$\leq 5$ min							
<b>Input EFC</b>								
Tuning range	$\geq \pm 5 \times 10^{-7}$ (0 ~ 10 V, Positive)							
<b>Output specifications</b>								
Wave form	Sine wave							
Number of outputs	4							
Port to port isolation (Same frequency)	$\geq 30$ dB							
Power	$10 \pm 3$ dBm							
Harmonics	$\leq -30$ dBc							
Spurious	$\leq -100$ 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							
<b>Size</b> (L×W×H)	110×70×24mm <sup>3</sup>							



**Outline drawing and Electrical connections (mm)**



- OUT1: 100MHz (SMA-F)
- OUT2: 100MHz (SMA-F)
- OUT3: 800MHz (SMA-F)
- OUT4: 800MHz (SMA-F)
- +12V: +12V Power supply
- C : EFC

