

Features

- Extremely low phase noise
- Frequency 10~200MHz
- Power supply:
5V, 9V, 12V, 15V
- Wide temperature range
- Frequency adjustment slope: positive or negative



MP36/MP38x

Electrical specification

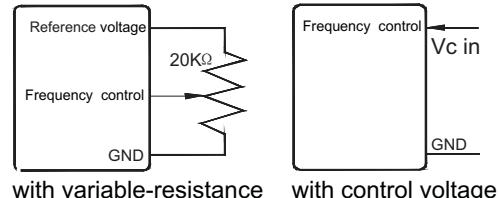
Parameter		Characteristic	
Power supply		12V	5V
Frequency range		10~200MHz	
Frequency stability	Vs. temperature	$\pm 0.02 \sim \pm 0.5$ ppm (see the table)	
	Vs. supply changes	± 0.01 ppm (Max) $\Delta V_{DC} \pm 5\%$	
	Vs. Ageing	$\pm 0.05 \sim \pm 0.5$ ppm/1 st year (Max)	
output Sinewave	Level	10dBm/50Ω	5dBm/50Ω
	Harmonics	≤ -25 dB	
	Non-Harmonic Suppression	≤ -70 dB	
Phase noise 100MHz SC cut Typical	10Hz	-100 dBc/Hz	-100 dBc/Hz
	100Hz	-130 dBc/Hz	-130 dBc/Hz
	1KHz	-158 dBc/Hz	-152 dBc/Hz
	10KHz	-170 dBc/Hz	-165 dBc/Hz
	100KHz	-170 dBc/Hz	-167 dBc/Hz
Input power(turn-on/steady)		4.5W/2W(Max) @25°C	
Operation temperature range		Different range(see the table)	
Storage temperature range		-55~+100°C	
Frequency adjustment (control voltage ± 5 V)		± 2 ppm(Min)(option resistance adjustment)	
Dimension		See MP36,MP38x's outline drawing (option height 14,16,19mm)	

Frequency temperature Stability (ppm)

	± 0.01	± 0.02	± 0.05	± 0.1	± 0.2
0~50°C	LP	KP	JP	HP	GP
-10~60°C	LQ	KQ	JQ	HQ	GQ
-20~70°C		KR	JR	HR	GR
-30~70°C		KS	JS	HS	GS
-40~70°C		KT	JT	HT	GT
-40~85°C			JU	HU	GU
-55~85°C			JW	HW	GW

*OXLN36: $\pm 0.02 \sim \pm 0.2$ ppm

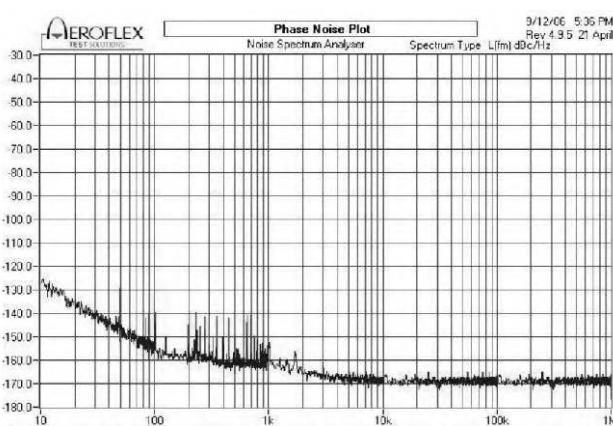
Outside frequency adjustment



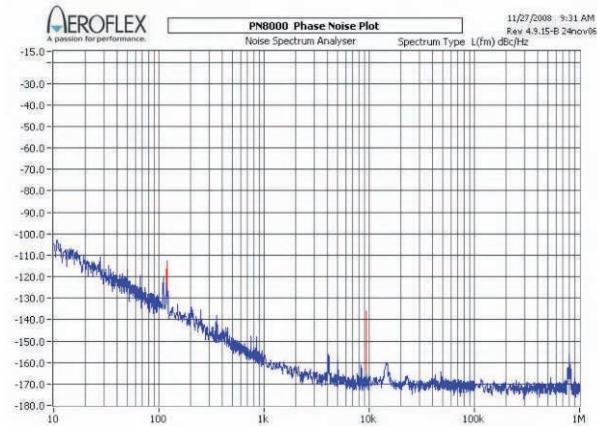
Absolute maximum ratings

Supply voltage---+15V/+6V

Storage temperature--- + 105



Phase noise vs Offset frequency @SC10MHz/12V



Phase noise vs Offset frequency@SC100MHz/12V

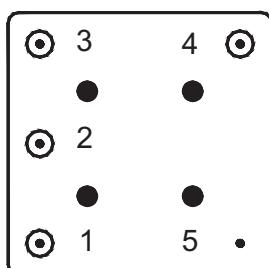
OXLN36/OXLN38x series Ultra Low Phase Noise Crystal Oscillators

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Bottom view

Outline drawing

See appdix for demission detail

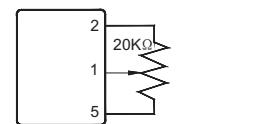


MP3627/MP3838

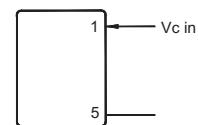
Pin function

- 1:Frequency control
- 2:Reference voltage output or NC
- 3:Power supply
- 4:RF output
- 5:Ground

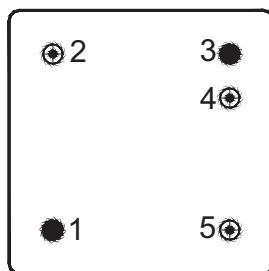
Outside frequency adjustment



with variable-resistance

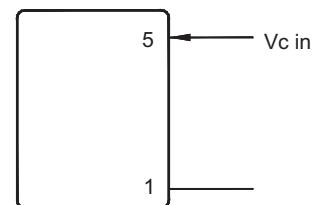


with control voltage

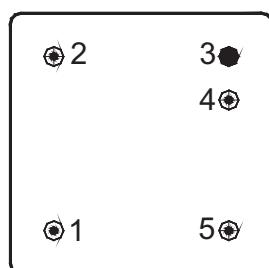


MP381

- 1:Ground
- 2:Power supply
- 3:Ground
- 4:RF output
- 5:Frequency control

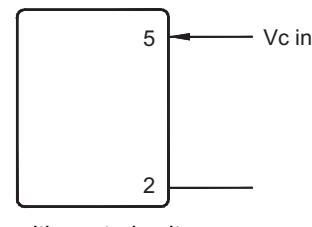


with control voltage

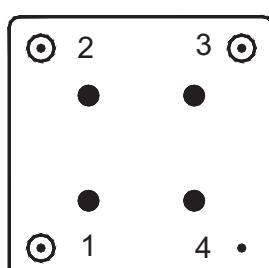


MP382

- 1:Power supply
- 2:Ground
- 3:Ground
- 4:RF output
- 5:Frequency control

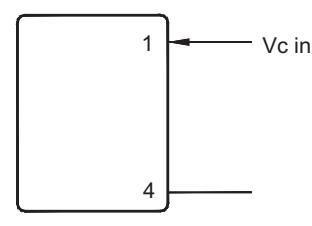


with control voltage



MP383

- 1:Frequency control
- 2:Power supply
- 3:RF output
- 4:Ground



with control voltage