

Low Phase Noise Frequency Synthesizer 1 to 18GHz



P/N	Freq. (GHz)	Step Size ² (MHz)	Power Output (dBm)	Flatness (dB)	Phase Noise (dBc/Hz)					Harmonic ⁴ (dBc) Max	Spurious (dBc) Max	Switching Speed (us) Typ.	Power Supply ⁵ (V/mA) Max	Case
					Freq. (GHz)	@1 KHz	@10 KHz	@100 KHz	@1 MHz					
MFS1020	1-2	10	+10	≤±1.5	1	-108	-110	-110	-125	-10	-60	≤150	+12/1200	MFS-1
					2	-102	-104	-104	-120				+5/1200	
													+24/50	
MFS2040	2-4	10	+10	≤±1.5	2	-102	-104	-104	-120	-10	-60	≤150	+12/1200	MFS-1
					4	-96	-100	-100	-118				+5/1200	
													+24/50	
MFS4080	4-8	10	+10	≤±1.5	4	-96	-100	-100	-118	-10	-60	≤150	+12/1400	MFS-1
					8	-90	-94	-94	-105				+5/1400	
													+24/50	
MFS80120	8-12	10	+10	≤±1.5	8	-90	-94	-94	-105	-10	-60	≤150	+12/1500	MFS-1
					12	-85	-90	-90	-103				+5/1500	
													+24/50	
MFS80180	8-18	10	+10	≤±1.5	8	-90	-94	-94	-105	-10	-60	≤150	+12/1600	MFS-1
					12	-85	-90	-90	-103				+5/1600	
					18	-82	-85	-85	-100				+24/50	
MFS20180	2-18	10	+10	≤±1.5	2	-102	-104	-104	-120	-10	-60	≤150	+12/1600	MFS-1
					4	-96	-100	-100	-118					
					8	-90	-94	-94	-105					
					12	-85	-90	-90	-103					
					18	-82	-85	-85	-100					

Notes:

- Narrowband low phase noise frequency synthesizer also available.
- Step Size: When step size meets 1MHz, phase noise will deteriorate 2-8dB and switching speed will deteriorate 100us.
- Frequency Stability: $\pm 1 \times 10^{-7}$ with built-in OCXO or with external reference.
- Harmonics: ≤ -55dBc with additional switch filter option. (For outline drawing, Pls. refer to MFS-2).
- Power supply: with switch filter option, additional -5V/200mA power supply will be needed.
- For Commercial Application: Operating Temperature: -10~+50°C. For Industrial Application: Operating Temperature: -20~+60°C. For other Application: Operating Temperature: -40~+70°C、-55~+85°C.