



Planar Monolithics Industries, Inc.

RF & Microwave Components and Modules to 40GHz

ISO9001:2008 Certified

6.0 to 18.0GHz, Frequency Synthesizer PMI Model No. PFS-618-CD-1



PMI Model No. PFS-618-CD-1 is a high speed frequency synthesizer that operates over the frequency range of 6.0 to 18.0GHz. This model covers the complete 6.0 to 18.0GHz frequency in 100kHz steps with an output power of +10dBm minimum. The unit is accurate to within ± 1 MHz and settles within 1usec maximum. This model features low SSB Noise and a low spurious output of -55dBc maximum. Harmonics are kept below -30dBc. Frequency Modulation is offered and has a bandwidth of DC to 10MHz with ± 400 MHz minimum at 100MHz / volt. The package is compact in size and measures only 6.48" x 6.23" x 1.6".

Specifications:

Frequency Range	6.0 to 18.0GHz
Frequency Step Size, Nominal (LSB)	100kHz
Power Output Level	+10dBm Min.
Power Variation	5dB P-P (± 2.5 dB) Max.
Frequency Accuracy	± 1 MHz Max.
Frequency Aging	± 2 PPM / Year
Settling Time to 1MHz	1usec
Tuning Control	Binary, TTL 17 Bits (Parallel)
Tuning Speed	1usec
SSB Noise	6.0 to 18.0GHz Max.
@ 1kHz Offset	-78dBc / Hz
@ 100kHz Offset	-96dBc / Hz
@ 10MHz Offset	-100dBc / Hz
Spurious Output	-55dBc Max.
Harmonics	-30dBc Max.
Sub-Harmonics	-55dBc Max.
Reference	Internal Reference
Frequency Modulation	
Modulation Bandwidth	DC to 10MHz
Frequency Deviation	± 400 MHz Min., 100MHz / Volt
Control	Analog
Sensitivity	1.1 : 1
Power Supply	+12V @ 2.5A Max. (1.4A measured) -12V @ 0.6A Max. (0.1A measured) +5V @ 4A Max (1.6A measured) -5V @ 2A Max. (0.1A measured)
Connectors	
Control	37 Pin Sub-D Male
Power	9 Pin Sub-D Male
RF Output	SMA Female
Modulation Input	SMA Female
Size	6.48" x 6.23" x 1.6"

Environmental Ratings:

Temperature:	-20°C to +70 °C Operating
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