



Planar Monolithics Industries, Inc.

RF & Microwave Components and Modules to 40GHz

ISO9001:2008 Certified

May 21, 2014

2.0 to 18.0GHZ Digitally Controlled Oscillator (DTO) PMI Model No. DTO-218-CD-1



PMI Model No. DTO-218-CD-1 is a digitally controlled oscillator (DTO's) covering the frequency range of 2.0GHz to 18.0GHz. This model is designed to withstand stringent military ground or airborne environments. Incorporated in the design is the latest internal digital calibration techniques such that frequency drift over the operating temperature range is minimal. This unit offers fast switching speeds and a stable frequency output with low phase noise.

Frequency Range	2.0 to 18.0GHz
Frequency Accuracy	±2.0MHz Max. @ +25C
Frequency Drift	±0.1MHz/C Max.
Frequency Settling	±3.0MHz Max. within 1usec.
Modulation:	
Bandwidth	DC to 9MHz Min.
Sensitivity Variation	1.1:1 Max.
Frequency Deviation Bandwidth	400MHz Min. @ 2V peak-peak
RF Power:	
Output	+10dBm Min.
Variation	±3.0dB Max. Including temperature and frequency
Phase Noise	-60dBc/Hz typ. @ 100kHz offset
Harmonics	-20dBc Max.
Spurious	-55dBc Max.
Pulling	±1MHz Max. @ VSWR 2:1
Pushing	±500kHz/V Max.
Linearized Frequency Tuning Step Size	LSB 0.5MHz Nominal for full-band
DC Power	
	+15V ± 0.5V
	-15V ± 0.5V
	+5V ± 0.5V
	+28V ±

PLANAR MONOLITHICS INDUSTRIES, INC.

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Model Number DTO-218-CD-1
 Serial Number PL10320

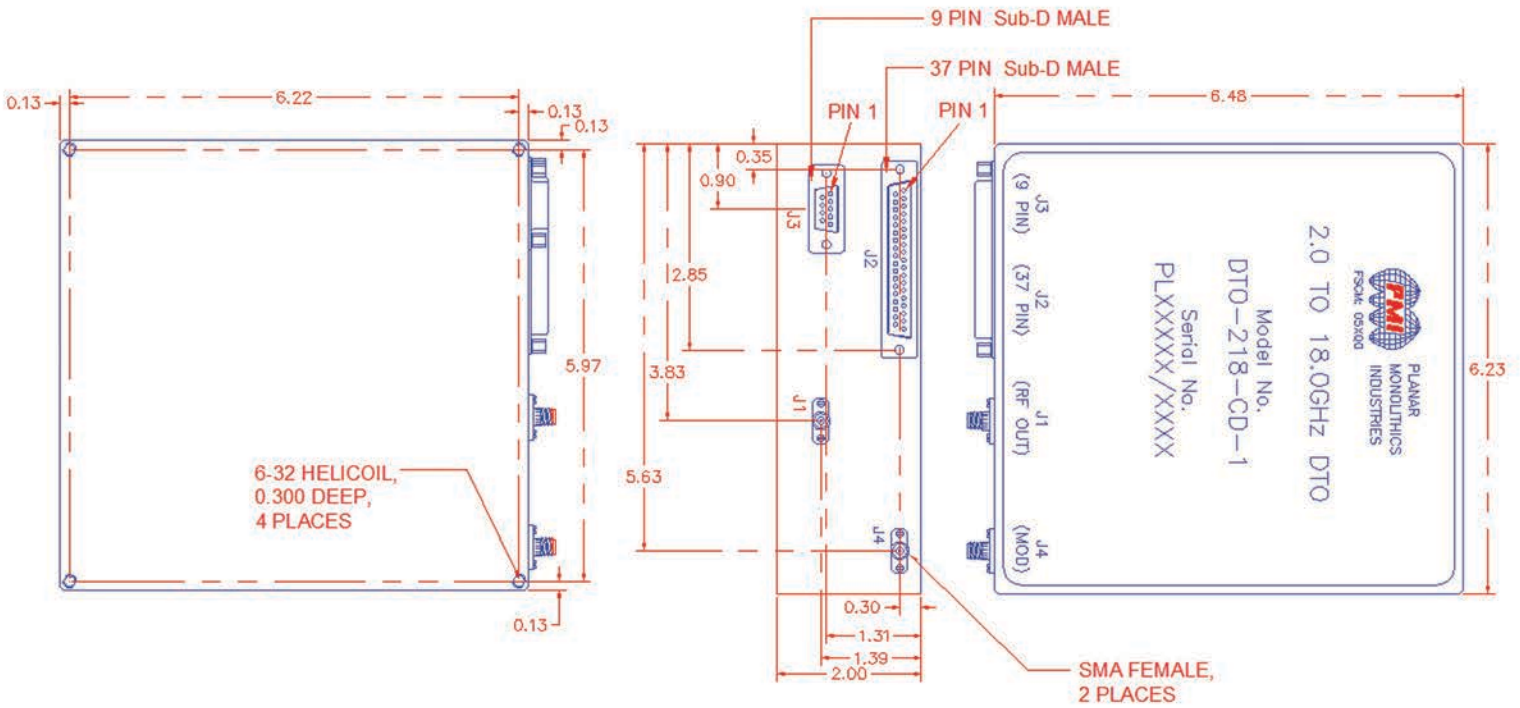
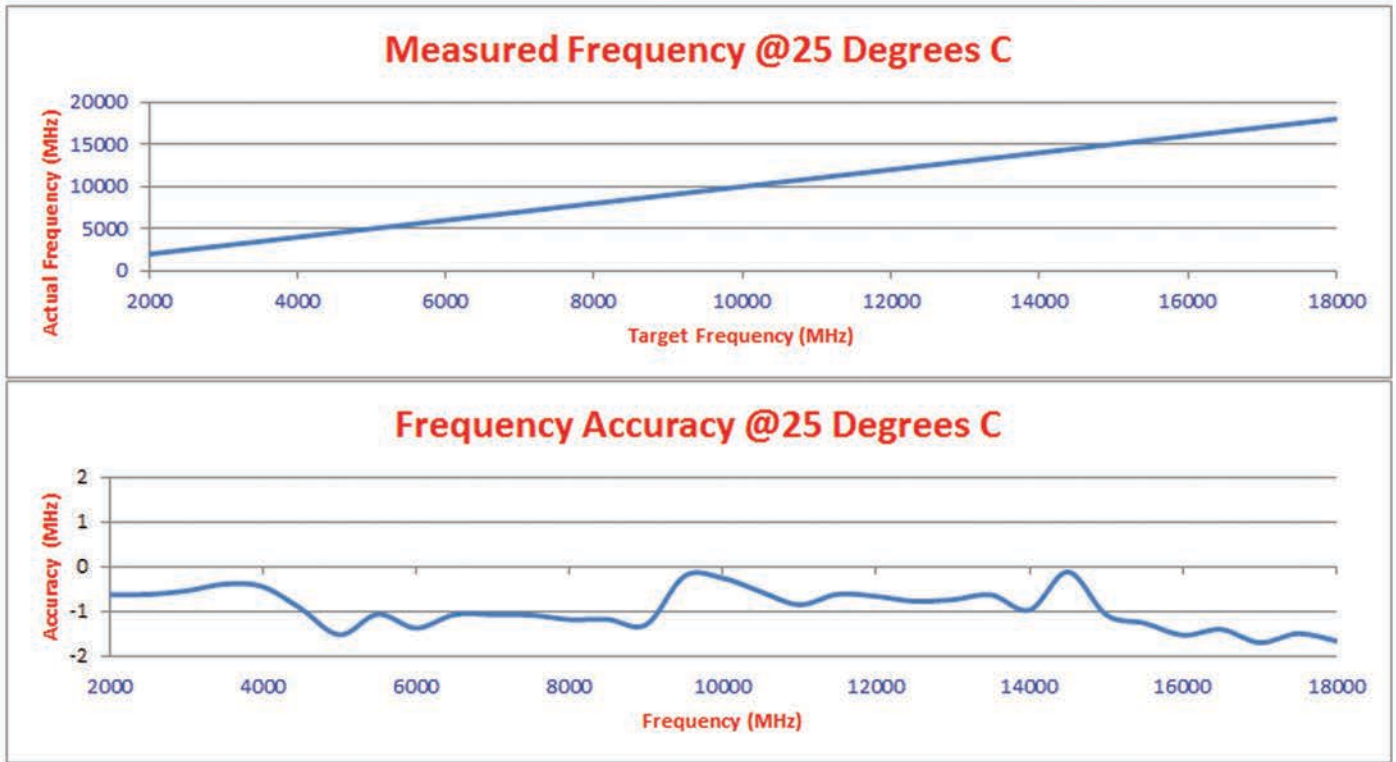
Technician
 Date
 Temperature
 MHz

D. Durbin
 6/30/2012
 0°C, 25°C, +70°C

Frequency Accuracy @ 25°C
 Frequency Drift
 RF Output Power

±
 0.09 MHz / °C
 11.63 dBm Min
 2.95 dB
 > 400 MHz Min

Modulation Bandwidth



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