

DESCRIPTION:

PLANAR MONOLITHICS INDUSTRIES MODEL NUMBER
DTO-6G19G-CD-1 IS A DIGITALLY CONTROLLED OSCILLATOR THAT
OPERATES OVER THE 6.0GHZ TO 19.0GHZ FREQUENCY RANGE. THIS
UNIT FEATURES HIGH SPEED, HIGH ACCURACY AND LOW PHASE
NOISE.

SPECIFICATIONS:

- FREQUENCY: _____ 6.0GHz TO 19.0 GHz
- FREQUENCY ACCURACY: _____ $\pm 0.1\%$ MAX @ +25C
- FREQUENCY DRIFT: _____ ± 0.1 MHZ/C MAX
- FREQUENCY SETTLING: _____ ± 4 MHZ MAX WITHIN 1USEC
- MODULATION:
 - BANDWIDTH: _____ DC TO 10MHZ MIN
 - SENSITIVITY VARIATION: _____ 1.1:1 MAX
 - FREQUENCY DEVIATION BW: _____ ± 250 MHZ MIN @ 2V P-P
- RF POWER:
 - OUTPUT: _____ +10DBM MIN
 - VARIATION: _____ ± 3 DB MAX INC. TEMP AND FREQ
- PHASE NOISE: _____ -60DBC/HZ TYP @ 100KHZ OFFSET
- HARMONICS: _____ -30DBC
- SUB HARMONICS ($f/2$, $3f/2$): _____ -55DBC MAX
- SPURIOUS: _____ -55DBC MAX, -60DBC TYP
- PULLING: _____ ± 1 MHZ MAX @ VSWR 2:1
- PUSHING: _____ ± 500 KHZ/V MAX
- LINEARIZED FREQUENCY TUNING
 - STEP SIZE: _____ LSB 0.5MHZ NOMINAL FOR FULL-BAND
- DC POWER: _____ +15V ± 0.5 V @ 1.0A
-15V ± 0.5 V @ 0.3A
+5V ± 0.5 V @ 0.5A
+28V ± 2 V @ 3.0A, 6.0A (TURN ON CURRENT)

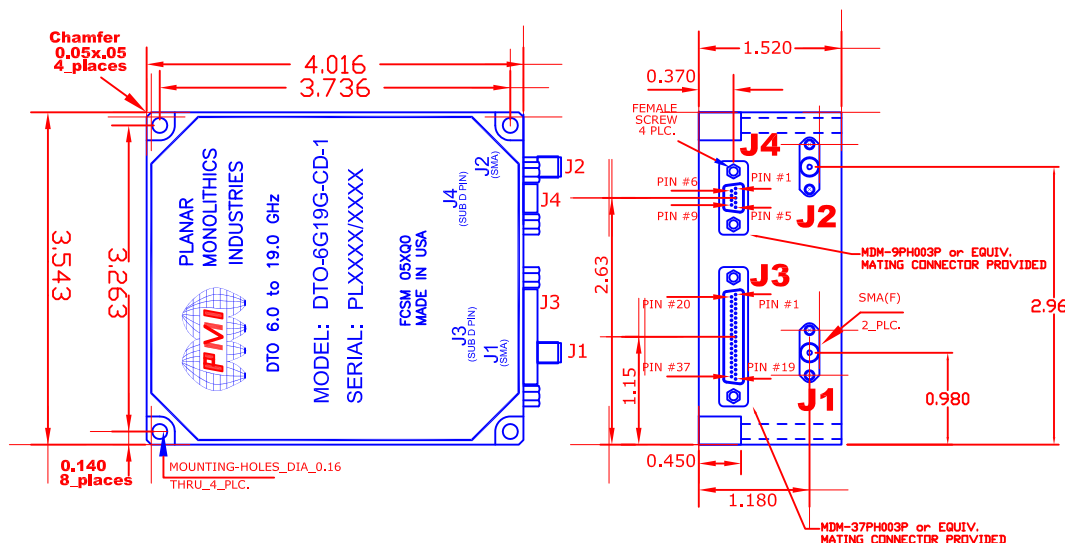
ENVIRONMENTAL RATINGS

- TEMPERATURE: _____ -40°C TO +70°C (OPERATING)
-40°C TO +100°C (STORAGE)
- HUMIDITY: _____ MIL-STD-202F, METHOD 103B COND. B
- SHOCK: _____ MIL-STD-202F, METHOD 213B COND. B
- VIBRATION: _____ MIL-STD-202F, METHOD 204D COND. B
- ALTITUDE _____ MIL-STD-202F, METHOD 105C COND. B
- TEMPERATURE CYCLING _____ MIL-STD-202G, METHOD 107G COND. A

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
X.XX ± 0.020
X.XXX ± 0.010

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	1	INITIAL RELEASE	02/26/14	



- LOGIC INPUT
LOGIC '0' (BIT OFF) -0.3 to +0.8V
LOGIC '1' (BIT ON) +2.0 to +5.0V

PMI CONFIDENTIAL AND PROPRIETARY

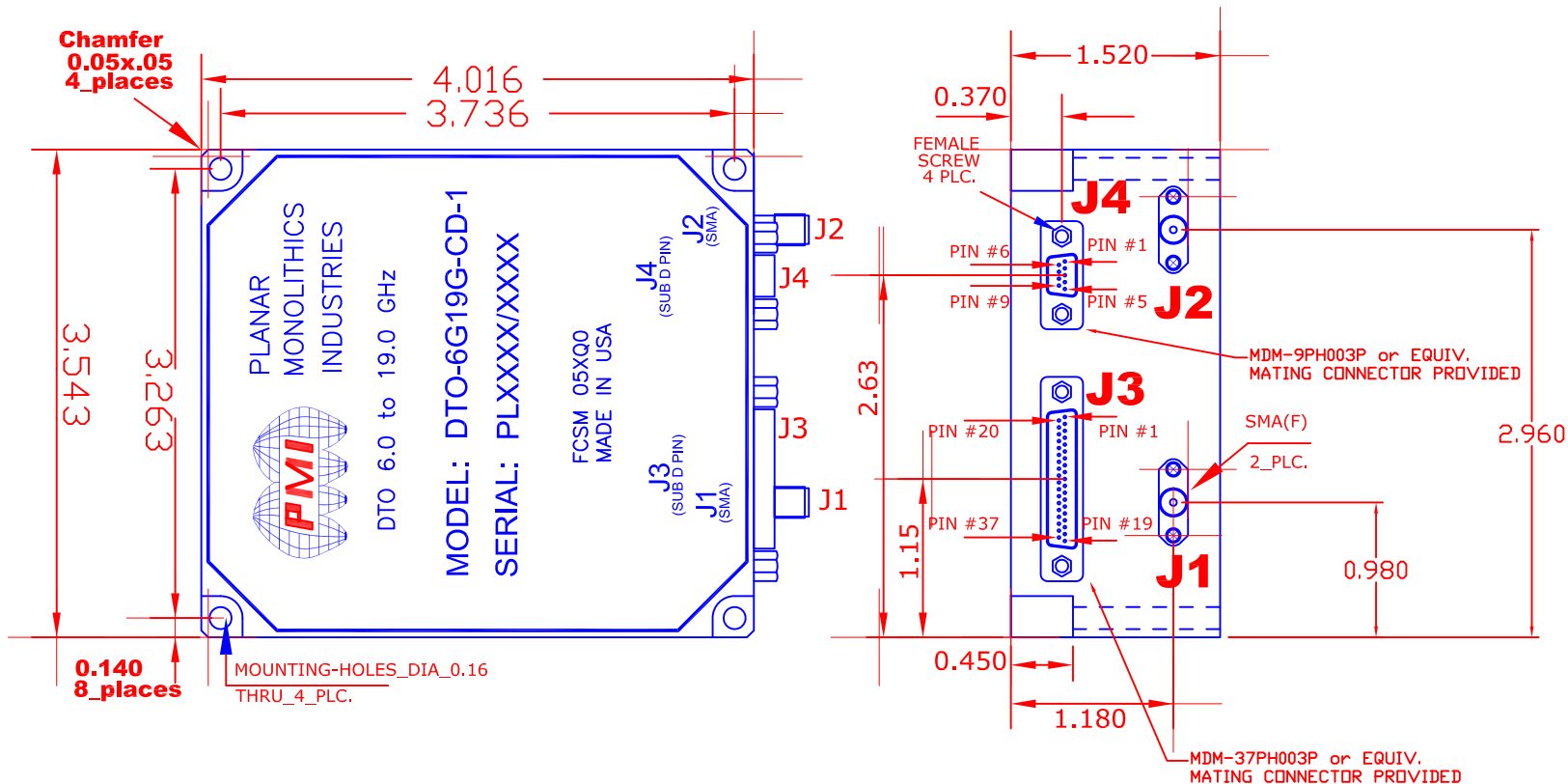
PLANAR MONOLITHICS INDUSTRIES, INC.

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ISO 9001 CERTIFIED



APPROVALS		DATE		TITLE	
DRAWN		2/10/11		PRODUCT FEATURE	
CHECKED				DTO-6G19G-CD-1	
ISSUED				6.0 TO 19.0GHZ HIGH PERFORMANCE DTO	
SIZE		FSCM NO.		DWG NO.	
A		05XQ0		27021831	
SCALE		N:S		SHEET	
				1 OF 2	

CONTROL CONNECTOR J3	
1	A14 TUNING WORD (MSB)
2	A12 TUNING WORD
3	A10 TUNING WORD
4	A8 TUNING WORD
5	A6 TUNING WORD
6	A4 TUNING WORD
7	A2 TUNING WORD
8	V0 VCO CONTROL BIT
9	LE
10	N.C.
11	N.C.
12	N.C.
13	N.C.
14	N.C.
15	N.C.
16	N.C.
17	N.C.
18	N.C.
19	GND
20	A13 TUNING WORD
21	A11 TUNING WORD
22	A9 TUNING WORD
23	A7 TUNING WORD
24	A5 TUNING WORD
25	A3 TUNING WORD
26	A1 TUNING WORD
27	A0 - TUNING WORD (LSB)
28	GND
29	N.C.
30	N.C.
31	N.C.
32	N.C.
33	N.C.
34	N.C.
35	N.C.
36	N.C.
37	GND



POWER CONNECTOR J4	
PIN NO	FUNCTION
1	+5V
2	-15V
3	+15V
4	+28V RETURN
5	+28V
6	RETURN FOR +5, +15, -15
7	RETURN FOR +5, +15, -15
8	+28V RETURN
9	+28V

ALL DIMENSIONS ARE IN INCHES
 TOLERANCES:
 XXX ±0.020
 XXXX ±0.010

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ISSUED				6.0 TO 19.0GHZ HIGH PERFORMANCE DTO	
		SIZE	FCSM NO.	DWG NO.	REV.
		A	05XQ0	27021831	1
		SCALE N:S		SHEET 2 OF 2	

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