

DESCRIPTION:

PLANAR MONOLITHICS INDUSTRIES MODEL NUMBER: PFS-618-CD-8B IS A FREQUENCY SYNTHESIZER THAT OPERATES OVER THE 6.0 TO 18.0 GHz FREQUENCY RANGE. THIS UNIT FEATURES HIGH SPEED, HIGH ACCURACY AND LOW PHASE NOISE.

SPECIFICATIONS:

- FREQUENCY RANGE: 6.0 TO 18.0GHz
- FREQUENCY STEP SIZE, NOMINAL (LSB): 51.2MHz
- POWER OUTPUT LEVEL: 10dBm MIN
- POWER VARIATION OVER TEMPERATURE: 5dB P-P(± 2.5 dB) MAX
- FREQUENCY ACCURACY: ± 1 MHz MAX
- FREQUENCY AGING: ± 2 PPM/YEAR
- SETTLING TIME TO 1MHz: ≤ 1 us TYP
- TUNING SPEED ≤ 1 us TYP
- TUNING CONTROL: BINARY, TTL 8 BITS
- SSB NOISE: 6-18 GHz MAX
-78 dBc/Hz @ 1 kHz OFFSET
-96 dBc/Hz @ 100 kHz OFFSET
-100 dBc/Hz @ 10 MHz OFFSET
- SPURIOUS OUTPUT: -50dBc TYP
- HARMONICS: -30dBc MAX
- SUB HARMONICS: -55dBc MAX
- REFERENCE: INTERNAL REFERENCE
- FREQUENCY MODULATION:
MOD BW: DC-10MHz
FREQUENCY DEVIATION: ± 400 MHz MIN, ± 4 V
CONTROL: ANALOG
SENSITIVITY: 1.1 : 1
- POWER SUPPLY: +12V @ 2.5A MAX
-12V @ 0.6A MAX
+5V @ 4A MAX
-5V @ 2A MAX
- CONNECTORS:
CONTROL: 37 PIN Sub-D MALE
POWER: 9 PIN Sub-D MALE
RF OUTPUT: SMA FEMALE
MODULATION INPUT: SMA FEMALE
- OUTLINE: 6.23" (L) x 6.48" (W) x 1.6" (H)

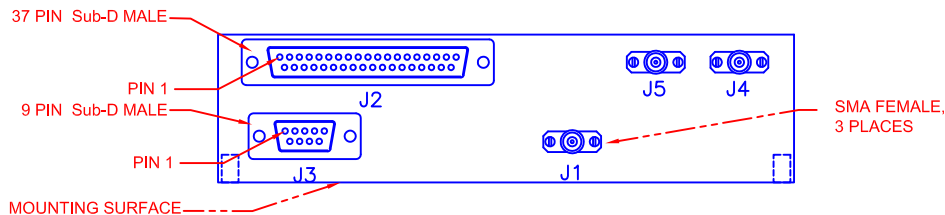
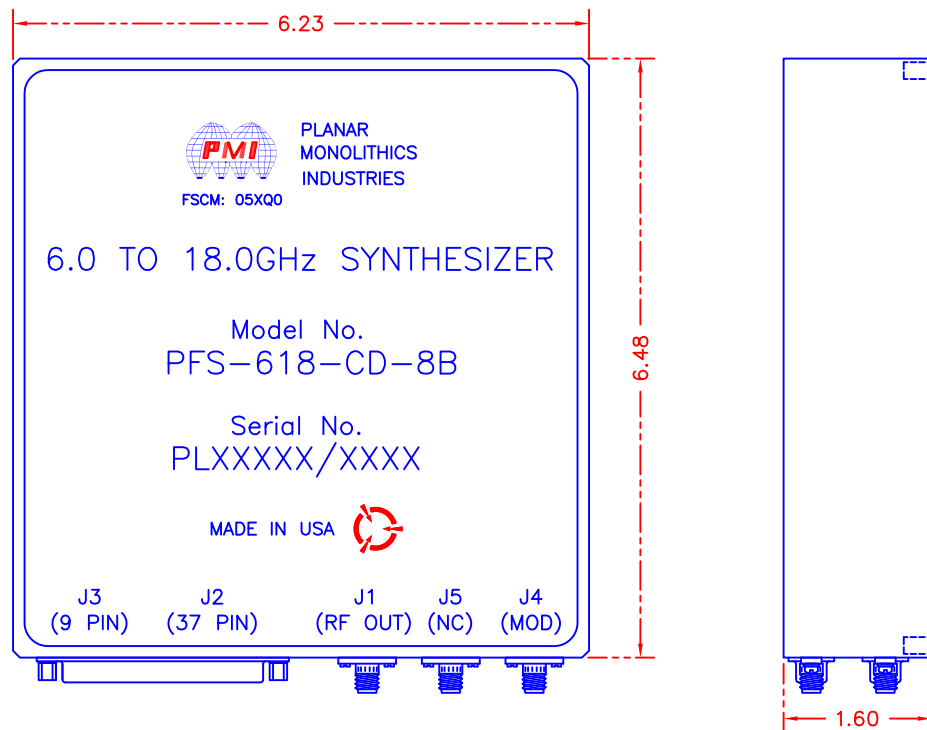
ENVIRONMENTAL RATINGS

- TEMPERATURE: -20°C TO +70°C (OPERATING)

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
X.XX ± 0.020
X.XXX ± 0.005

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	PRELIMINARY	4/29/16	DPD



PMI CONFIDENTIAL AND PROPRIETARY

PLANAR MONOLITHICS INDUSTRIES, INC.

7311-F GROVE ROAD
FREDERICK, MARYLAND 21704 USA
TEL: 301-662-5019 FAX: 301-662-1731
WEBSITE: www.pmi-rf.com
E-MAIL: sales@pmi-rf.com
ISO 9001 CERTIFIED



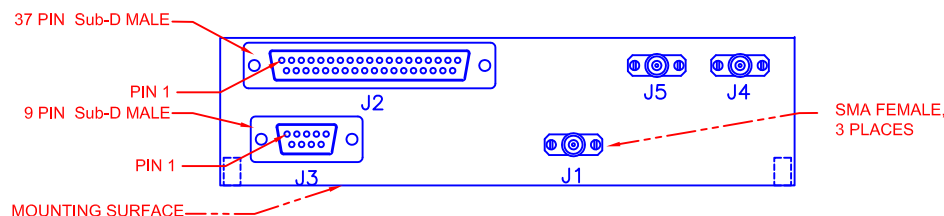
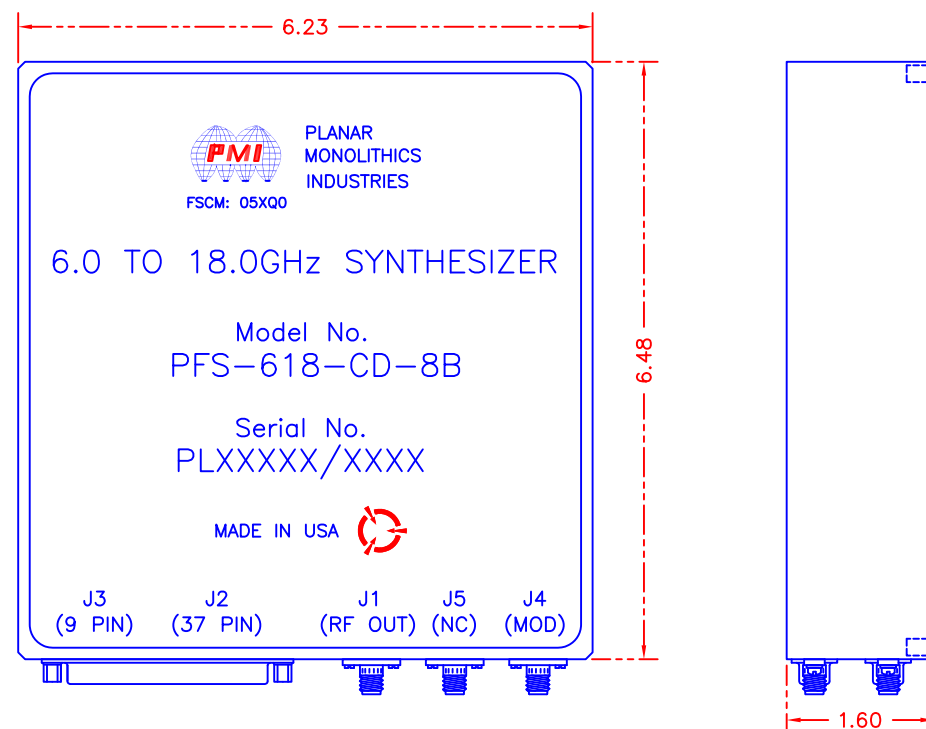
APPROVALS		DATE	TITLE			REV.
DRAWN <i>EMF</i>		4/29/16	PRODUCT FEATURE PFS-618-CD-8B 6.0 TO 18.0GHz SYNTHESIZER			-
CHECKED			SIZE A	FSCM NO. 05XQ0	DWG NO.	PRELIMINARY
ISSUED			SCALE N:S	SHEET 1 OF 3		

CONTROL CONNECTOR J2	
1	A7 TUNING WORD (MSB)
2	A5 TUNING WORD
3	A3 TUNING WORD
4	A1 TUNING WORD
5	NC
6	NC
7	NC
8	NC
9	LATCH
10	NC
11	GND
12	NC
13	NC
14	NC
15	NC
16	NC
17	NC
18	NC
19	NC
20	A6 TUNING WORD
21	A4 TUNING WORD
22	A2 TUNING WORD
23	A0 TUNING WORD
24	NC
25	NC
26	NC
27	NC
28	NC
29	GND
30	NC
31	NC
32	NC
33	NC
34	NC
35	MODULATION ENABLE(1)/ DISABLE (0)
36	NC
37	GND

POWER CONNECTOR J3	
PIN NO	FUNCTION
1	+5V
2	-12V
3	+12V
4	GND
5	-5V
6	GND
7	GND
8	GND
9	+12V

CONNECTORS FUNCTIONS	
J1	RF OUTPUT
J2	CONTROL CONNECTOR
J3	POWER CONNECTOR
J4	MODULATION INPUT
J5	NC

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	—	PRELIMINARY	4/29/16	DPD



PMI CONFIDENTIAL AND PROPRIETARY

DESCRIPTION:

PLANAR MONOLITHICS INDUSTRIES MODEL NUMBER: PFS-618-CD-8B IS A FREQUENCY SYNTHESIZER THAT OPERATES OVER THE 6.0 TO 18.0 GHz FREQUENCY RANGE. THIS UNIT FEATURES HIGH SPEED, HIGH ACCURACY AND LOW PHASE NOISE.

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
X.XX ±0.020
X.XXX ±0.005

PLANAR MONOLITHICS INDUSTRIES, INC.

7311-F GROVE ROAD
FREDERICK, MARYLAND 21704 USA
TEL: 301-662-5019 FAX: 301-662-1731
WEBSITE: www.pmi-rf.com
E-MAIL: sales@pmi-rf.com
ISO 9001 CERTIFIED

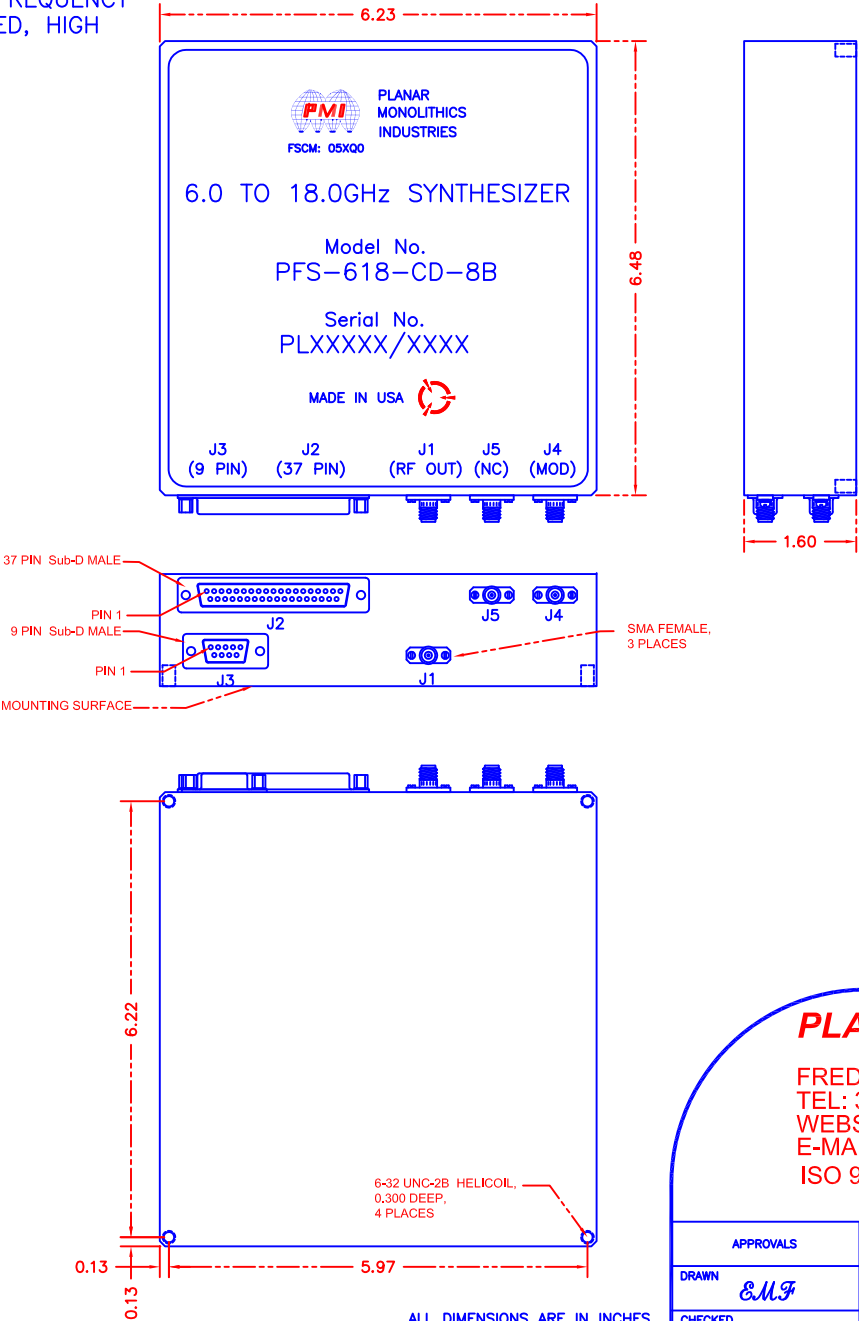


APPROVALS		DATE	TITLE			REV.	
DRAWN		4/29/16	PRODUCT FEATURE			—	
CHECKED			PFS-618-CD-8B				
ISSUED			6.0 TO 18.0GHz SYNTHESIZER				
			SIZE	FSCM NO.	OWG NO.	PRELIMINARY	
			A	05XQ0			
			SCALE	N:S		SHEET	2 OF 3

DESCRIPTION:

PLANAR MONOLITHICS INDUSTRIES MODEL NUMBER:
PFS-618-CD-8B IS A SYNTHESIZER THAT
OPERATES OVER THE 6.0 TO 18.0 GHz FREQUENCY
RANGE. THIS UNIT FEATURES HIGH SPEED, HIGH
ACCURACY AND LOW PHASE NOISE.

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	—	PRELIMINARY	8/17/12	DPD



PMI CONFIDENTIAL AND PROPRIETARY

PLANAR MONOLITHICS INDUSTRIES, INC.
7311-F GROVE ROAD
FREDERICK, MARYLAND 21704 USA
TEL: 301-662-5019 FAX: 301-662-1731
WEBSITE: www.pmi-rf.com
E-MAIL: sales@pmi-rf.com
ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE		PRODUCT FEATURE	
DRAWN <i>EMF</i>		4/29/16			PFS-618-CD-8B	
CHECKED					6.0 TO 18.0GHz SYNTHESIZER	
ISSUED			SIZE	FSCM NO.	DWG NO.	REV.
			A	05XQ0	PRELIMINARY	—
			SCALE	N:S	SHEET	3 OF 3

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
X.XX ±0.020
X.XXX ±0.005