

DESCRIPTION:

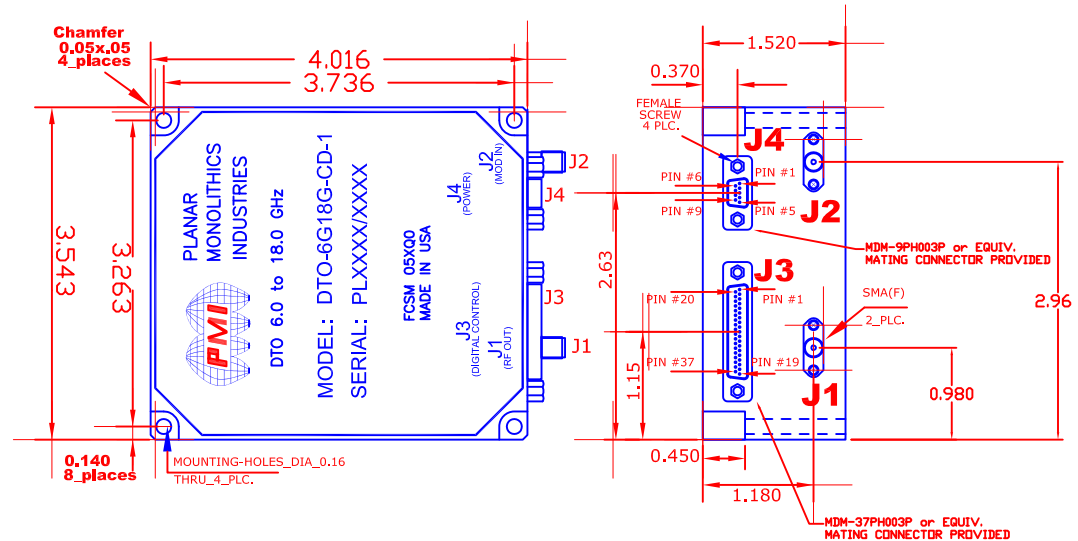
PLANAR MONOLITHICS INDUSTRIES MODEL NUMBER DTO-6G18G-CD-1 IS A DIGITALLY CONTROLLED OSCILLATOR THAT OPERATES OVER THE 6.0GHZ TO 18.0GHZ FREQUENCY RANGE. THIS UNIT FEATURES HIGH SPEED, HIGH ACCURACY AND LOW PHASE NOISE.

| REVISIONS | | | | |
|-----------|------|-----------------|----------|----------|
| ZONE | REV. | DESCRIPTION | DATE | APPROVED |
| | A1 | INITIAL RELEASE | 05/12/14 | |
| | B1 | ECN # 14-0153 | 09/11/14 | |

SPECIFICATIONS:

- FREQUENCY: _____ 6.0GHZ TO 18.0GHZ
- FREQUENCY ACCURACY: _____ +/-5MHZ MAX @ +25C
- FREQUENCY DRIFT: _____ +/-0.1MHZ/C MAX
- FREQUENCY SETTLING: _____ +/-4MHZ MAX WITHIN 1USEC
- MODULATION:
 - BANDWIDTH: _____ DC TO 10MHZ MIN
 - SENSITIVITY VARIATION: _____ 1.1:1 MAX
 - FREQUENCY DEVIATION BW: _____ +/-250MHZ MIN @ 2V P-P
- RF POWER:
 - OUTPUT: _____ +10DBM MIN
 - VARIATION: _____ +/-3DB MAX INC. TEMP AND FREQ
- PHASE NOISE: _____ -60DBC/HZ TYP @ 100KHZ OFFSET
- HARMONICS: _____ -55DBC 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 +/-2V

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



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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

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

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

PLANAR MONOLITHICS INDUSTRIES, INC.

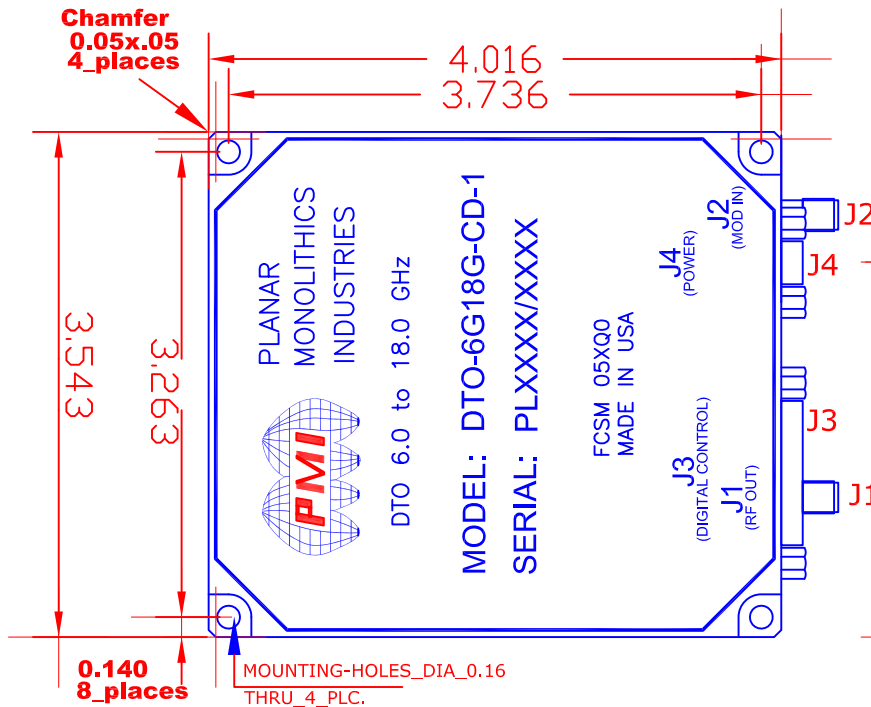
7311-F GROVE ROAD
 FREDERICK, MARYLAND 21704 USA
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 E-MAIL: sales@pmi-rf.com
 ISO 9001 CERTIFIED



| APPROVALS | | DATE | TITLE | | | |
|------------------|--|----------|--|----------|----------|--------|
| DRAWN <i>flk</i> | | 05/12/14 | PRODUCT FEATURE DTO-6G18G-CD-1 6.0 TO 18.0GHZ HIGH PERFORMANCE DTO | | | |
| CHECKED | | | SIZE | FSCM NO. | DWG NO. | REV. |
| | | | A | 05XQ0 | 27018038 | B1 |
| ISSUED | | | SCALE | N:S | SHEET | 1 OF 2 |

**CONTROL CONNECTOR
J3**

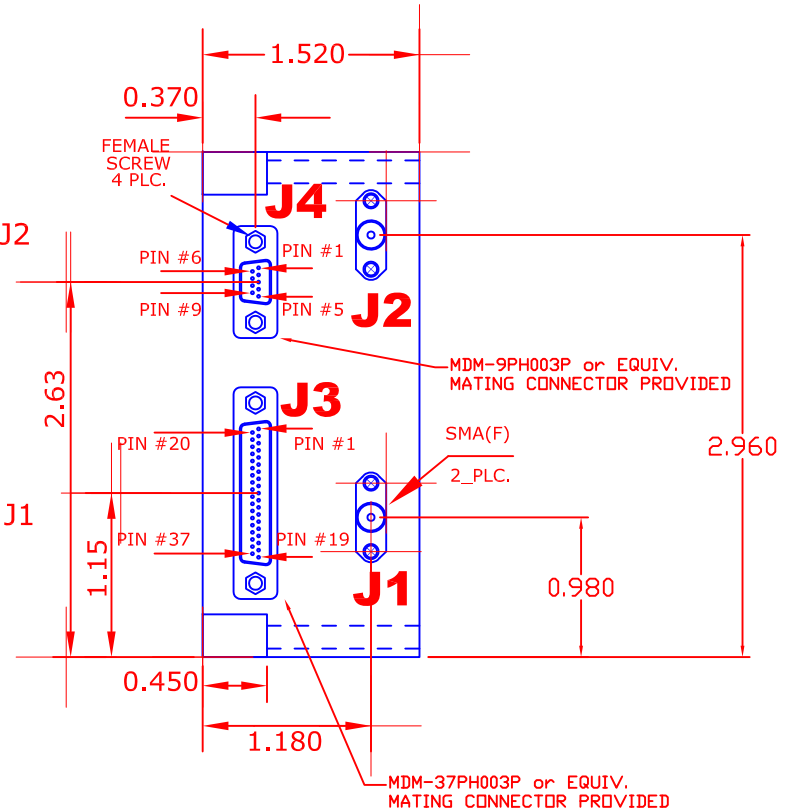
| | |
|----|------------------------|
| 1 | A14 TUNING WORD (MSB) |
| 2 | A12 TUNING WORD |
| 3 | A10 TUNING WORD |
| 4 | A8 TUNING WORD |
| 5 | A6 TUNING WORD |
| 6 | A4 TUNING WORD |
| 7 | A2 TUNING WORD |
| 8 | V0 VCO CONTROL BIT |
| 9 | LE |
| 10 | N.C. |
| 11 | N.C. |
| 12 | N.C. |
| 13 | N.C. |
| 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:
X.XX ±0.020
X.XXX ±0.010

| REVISIONS | | | | |
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| DRAWN <i>flk</i> | | 05/12/14 | PRODUCT FEATURE DTO-6G18G-CD-1 6.0 TO 18.0GHZ HIGH PERFORMANCE DTO | | |
| CHECKED | | | SIZE A | FCSM NO. 05X00 | DWG NO. 27018038 |
| ISSUED | | | | | REV. B1 |
| | | | SCALE N:S | SHEET 2 OF 2 | |

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