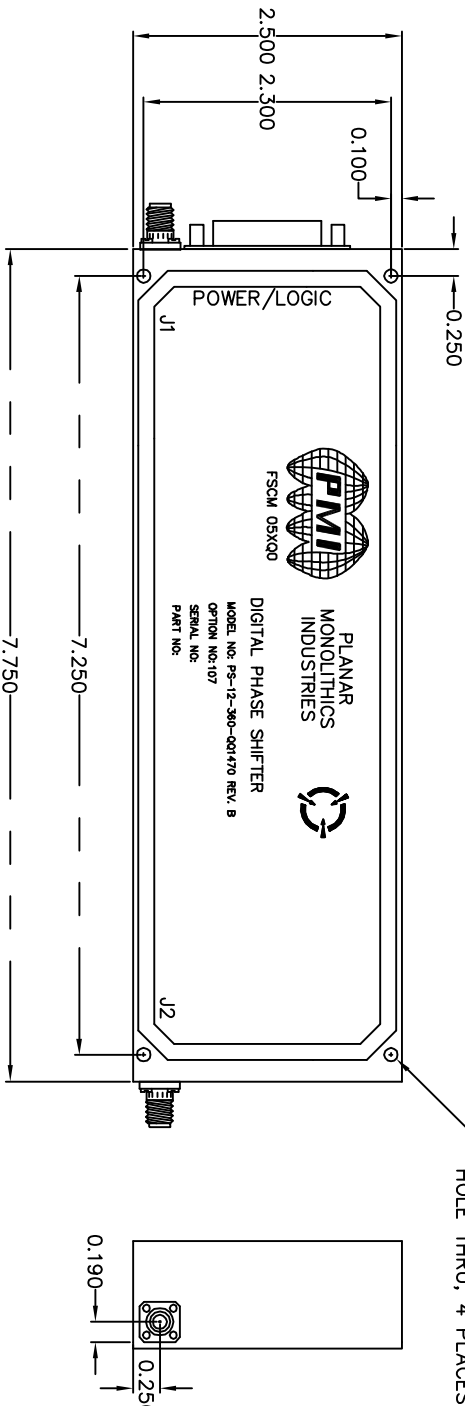
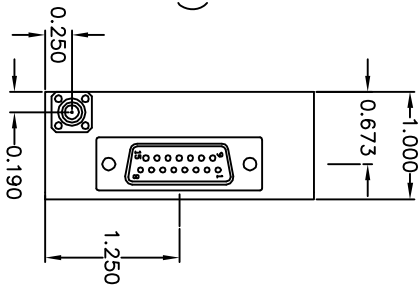


DESCRIPTION

PMI MODEL NUMBER PS-12-360-QQ1470 REV. B DPT. 107 IS A 1.7 GHZ DIGITALLY CONTROLLED ANALOG PHASE SHIFTER WITH CAPABILITY FOR PHASE SHIFTING FROM 0 TO 360°. THE UNIT CONSISTS OF AN ANALOG PHASE SHIFTER AND A DIGITAL-TD-ANALOG CONVERTER. EIGHT LOGIC INPUT LINES ALLOW 256 DISCRETE VALUES OF PHASE.

SPECIFICATIONS

- FREQUENCY RANGE..... 1.7 GHz
(AVAILABLE UP TO 18 GHz)
- RF IMPEDANCE –(NOMINAL)..... 50 OHMS
- VOLTAGE..... +15V @ 90 mA
–15V @ 60 mA
- LOGIC INPUT..... TTL CONTROL
- PHASE SHIFT (MIN)..... 360°
- STEP SIZE (LSB)..... 1.41° LSB
- INSERTION LOSS (MAX)..... 6.0 dB MAX
- AMPLITUDE RIPPLE MAX..... ±1.50 DB
- VSWR MAX..... 2.0 TO 1 MAX INPUT AND OUTPUT
- SWITCHING SPEED..... 200 NS
- TEMPERATURE COMPENSATION..... MAXIMUM PHASE DRIFT SHALL BE NO MORE THAN ±5° OR ±5%, WHICHEVER IS GREATER, OVER THE SPECIFIED TEMPERATURE RANGE
- PHASE SHIFT ACCURACY..... ± 1.0° MAXIMUM AT ALL PHASE STATES
- MONOTONICITY..... ± 1.0 DB AT ALL PHASE STATES
- MONOTONICITY..... GUARANTEED
- RF POWER (OPERATING)
PEAK OR CONTINUOUS WAVE..... 10 mW
- CONNECTORS
- RF INPUT/OUTPUT..... SMA FEMALE
- POWER AND CONTROLS..... MALE 15 PIN SUBMINIATURE "D" CONNECTOR
- SIZE..... 7.75 x 2.50 x 1.00
- FINISH..... PAINTED GRAY



ELECTRICAL CONNECTOR PIN ASSIGNMENTS	
PIN LETTER	FUNCTION

1	LOGIC INPUTS (LSB)
2	LOGIC INPUTS
3	LOGIC INPUTS
4	LOGIC INPUTS
5	LOGIC INPUTS
6	LOGIC INPUTS
7	LOGIC INPUTS
8	LOGIC INPUTS (MSB)
9	NC
10	NC
11	NC
12	NC
13	+ 15 VDC
14	- 15 VDC
15	GROUND

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	ORIGINAL RELEASE	11/22/08	
	B	IMPROVED PHASE ACCURACY	1/26/10	

1) DIMENSIONS ARE IN INCHES

2) TOLERANCES: XXX ±0.020

X.XXX ±0.010

NOTES:

1) DIMENSIONS ARE IN INCHES

2) TOLERANCES: XXX ±0.020

X.XXX ±0.010

ENVIRONMENTAL RATINGS

- TEMPERATURE..... –40° C TO +85° 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 CYCLE..... MIL-STD-202F, METHOD 107D COND. A

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

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ISO 9001:2000 CERTIFIED



PRODUCT FEATURE

PS-12-360-QQ1470 OPT. 107
1.7 GHz, 0-360° PHASE SHIFTER

APPROVALS

DATE

DRAWN
gsm

10/19/04

CHECKED

SIZE
A

FSCM NO.
05XQ0

DWG NO.
27009241

REV.
B

ISSUED

SCALE
N:S

SHEET

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