

DESCRIPTION

PMI MODEL PEC-40-25-218-20-12-SFF-CMOSVG IS A DUAL GAIN AMPLIFIER THAT OPERATES BETWEEN THE FREQUENCY RANGE 2 – 18GHz.

SPECIFICATIONS

- FREQUENCY RANGE:..... 2 – 18GHz
- GAIN @ –25°C
MAX GAIN POSITION:..... +42dB $\pm$ 2dB Max
MIN GAIN POSITION:..... +27dB $\pm$ 2dB Max
- GAIN @ +25°C
MAX GAIN POSITION:..... +40dB $\pm$ 2dB Max
MIN GAIN POSITION:..... +25dB $\pm$ 2dB Max
- GAIN @ +75°C
MAX GAIN POSITION:..... +37dB $\pm$ 2dB Max
MIN GAIN POSITION:..... +22dB $\pm$ 2dB Max
- Pout @ 1dB COMPRESSION @ –25°C
MAX GAIN POSITION:..... +21dB Min
MIN GAIN POSITION:..... +20dB Typ
- Pout @ 1dB COMPRESSION @ +25°C
MAX GAIN POSITION:..... +21dB Min
MIN GAIN POSITION:..... +20dB Typ
- Pout @ 1dB COMPRESSION @ +75°C
MAX GAIN POSITION:..... +20dB Min
MIN GAIN POSITION:..... +20dB Typ
- SATURATED OUTPUT POWER (BOTH GAINS)
OVER OPERATING TEMP RANGE:..... +26dBm Typ
- NOISE @ –25°C
MAX GAIN POSITION:..... +3.8dB Typ
MIN GAIN POSITION:..... +6.0dB Typ
- NOISE @ +25°C
MAX GAIN POSITION:..... +4.5dB Typ
MIN GAIN POSITION:..... +7.0dB Typ
- NOISE @ +75°C
MAX GAIN POSITION:..... +5.0dB Typ
MIN GAIN POSITION:..... +8.0dB Typ

ENVIRONMENTAL RATINGS

- TEMPERATURE:..... –55°C TO + 85°C (OPERATING)
–65°C TO +125°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: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
X.XX $\pm$ 0.020
X.XXX $\pm$ 0.010

PMI CONFIDENTIAL AND PROPRIETARY

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	–	PRELIMINARY	7/5/19	
	1	UPDATED SPECS	7/26/19	
	2	UPDATED SPECS	7/29/19	

- VSWR IN/OUT:..... 2.0:1 MAX
- INPUT/OUTPUT IMPEDANCE:..... 50 Ω NOMINAL
- INPUT POWER (WITHOUT DAMAGE):..... +20dBm CW Max
- IN-BAND HARMONICS @ OR BELOW
THE 1dB COMPRESSION POINT:..... –10dBc Min
- SPURIOUS OUTPUT SIGNAL @
ANY SIGNAL LEVEL UP TO THE
MAX INPUT LEVEL:..... –80dBc Max
- PULSE RISE TIME WITH INPUT SIGNALS
UP TO 20dBm:..... <5ns
- PULSE OVERSHOOT WITH INPUT SIGNALS
UP TO 20dBm:..... <0.5dB
- PULSE DROOP WITH THE FOLLOWING
PULSES UP TO 250 μ IN DURATION
INPUT SIGNAL UP TO –20dBm:..... <2.0dB
- PULSE RECOVERY TIME WITH THE FOLLOWING
PULSES UP TO 250 μ IN DURATION
INPUT SIGNAL UP TO –20dBm:..... 15ns
- GAIN SWITCHING TIME:..... <500ns
- GAIN SWITCH CONTROL:..... CMOS HIGH "1" – Max GAIN
CMOS LOW "0" – Min GAIN
- DC SUPPLY:..... 780mA Max@ +15V $\pm$ 5% Max GAIN POSITION
610mA Max@ +15V $\pm$ 5% Min GAIN POSITION
- FINISH PAINTED BLUE (MOUNTING SURFACE FREE OF PAINT, GOLD)

PLANAR MONOLITHICS INDUSTRIES, INC.

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ISO 9001 CERTIFIED

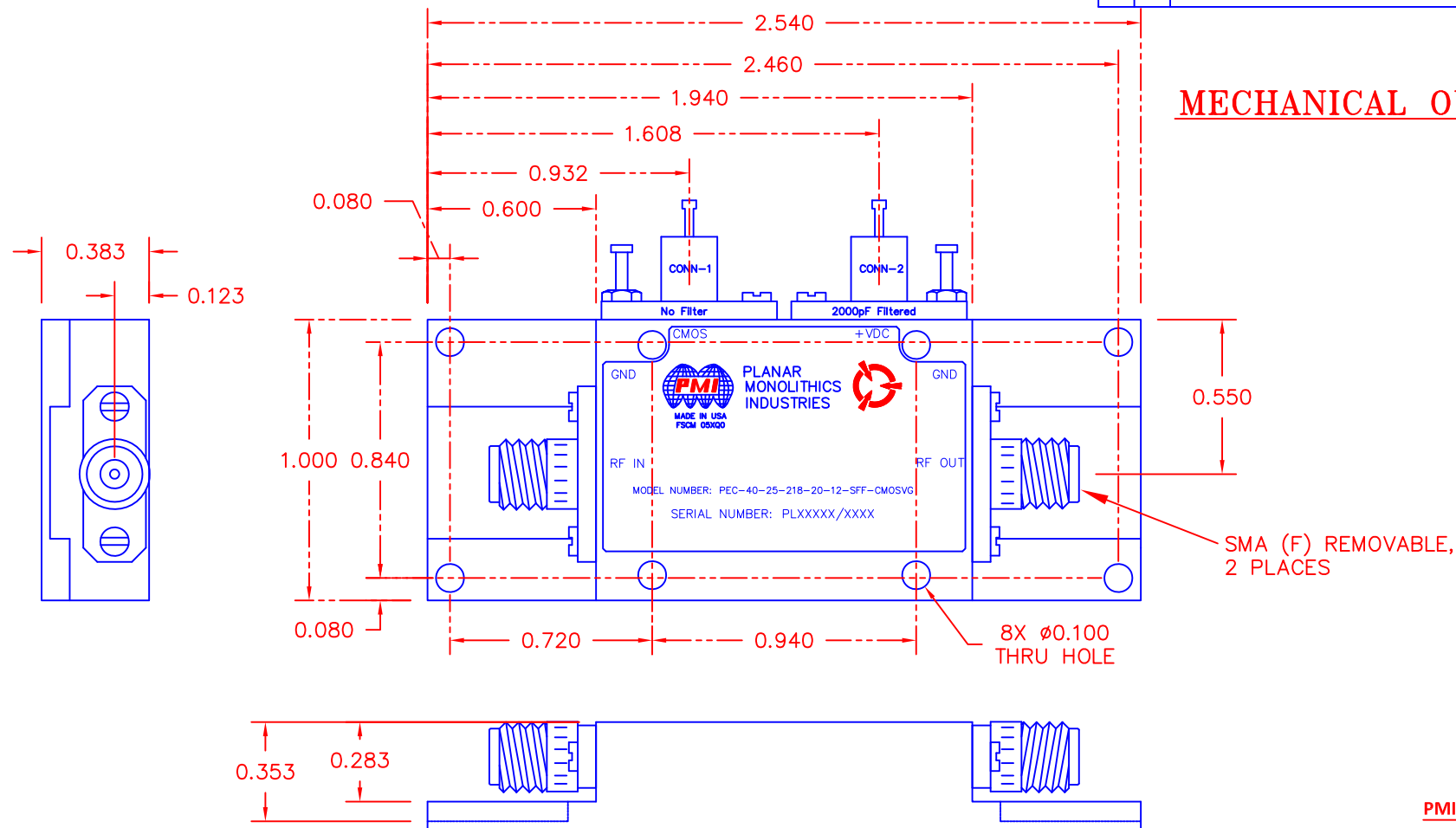


APPROVALS		DATE		TITLE			
DRAWN	JPH		7/26/19	PRODUCT FEATURE PEC-40-25-218-20-12-SFF-CMOSVG			
CHECKED				SIZE	FSCM NO.	DWG NO.	REV.
ISSUED				A	05XQ0	PRELIMINARY	2
				SCALE	N: S	SHEET	1 OF 2

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CHECKED		DATE		PEC-40-25-218-20-12-SFF-CMOSVG			
ISSUED		DATE		SIZE	FSCM NO.	DWG NO.	REV.
				A	05XQ0	PRELIMINARY	2
				SCALE N: S		SHEET 2 OF 2	