

DESCRIPTION

PMI MODEL: IFDLVA-400M1G-45dB-SL IS AN AC COUPLED CW IMMUNE INTERMEDIATE FREQUENCY DETECTOR LOG VIDEO AMPLIFIER (IFDLVA) THAT OPERATES OVER THE 400MHz TO 1000MHz FREQUENCY RANGE WITH A DYNAMIC RANGE OF 45 dB. FURTHERMORE, IT HAS BEEN DESIGNED TO MECHANICALLY INTERFACE WITH A PRINTED CIRCUIT BOARD. IT FEATURES, CUTTING EDGE GaAs TECHNOLOGY WHICH PROVIDES STUNNING PERFORMANCE AND RELIABILITY IN AN ULTRA COMPACT PACKAGE (1.75" X 1.25" X 0.40") MAKING IT AN OPTIMUM SOLUTION FOR HIGH SPEED CHANNELIZED RECEIVER APPLICATIONS.

SPECIFICATIONS @ 25° C

- FREQUENCY: ----- 400 MHz TO 1000 MHz
- VSWR: ----- 1.5:1 TYP, 1.7:1 MAX
- INPUT PULSE WIDTH: ----- 50 ns to CW
- DUTY CYCLE: ----- 10% @ MIN PULSE WIDTH
- DYNAMIC RANGE: ----- -45 dBm TO 0 dBm
- VIDEO OUTPUT: ----- 93 Ω LOAD
- VIDEO SIGNAL LEVEL: ----- +0.20 V to +2.5 V
- LOG SLOPE: ----- 45 mV/dB, ±5%
- FREQUENCY FLATNESS: ----- ±1.5 dB MAX
- LOG SLOPE LINEARITY: ----- ±1.5 dB MAX
- LOG ACCURACY: ----- ±1.75 dB MAX
- VIDEO OUTPUT MATCHING: ----- 3 dB (135 mV) MAX (SET OF 4 UNITS)
- TANGENTIAL SIGNAL SENSITIVITY: ----- -50 dBm MAX
- VIDEO RISE TIME: ----- 50 ns MAX, INPUT RISE TIME <10 ns
- VIDEO OUTPUT DROOP RATE: ----- 30.0 mV IN A 25 ns PERIOD
- VIDEO OUTPUT RECOVERY TIME: ----- 500 ns MAX @ -25 dBm
800 ns MAX @ 0 dBm
- VIDEO OUTPUT SHADOW TIME: ----- 500 ns MAX (SIMULTANEOUS SIGNALS BELOW -30 dBm)
800 ns MAX (SIMULTANEOUS SIGNALS ABOVE -30 dBm)
- DC OFFSET: ----- 0.2 V, ± 1.5 dB MAX
- RF CONNECTOR: ----- SMA FEMALE (REMOVABLE)
- VIDEO CONNECTOR: ----- 0.025" PIN
- SUPPLY VOLTAGE: ----- +12 TO +15 V, 170 mA MAX (NO LOAD)
-12 TO -15 V, 70 mA MAX (NO LOAD)
- SIZE: ----- 1.75" X 1.25" X 0.40"
- FINISH: ----- GOLD PATED

ENVIRONMENTAL RATINGS

- TEMPERATURE: ----- -40 °C TO +85 °C (OPERATING)
- 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

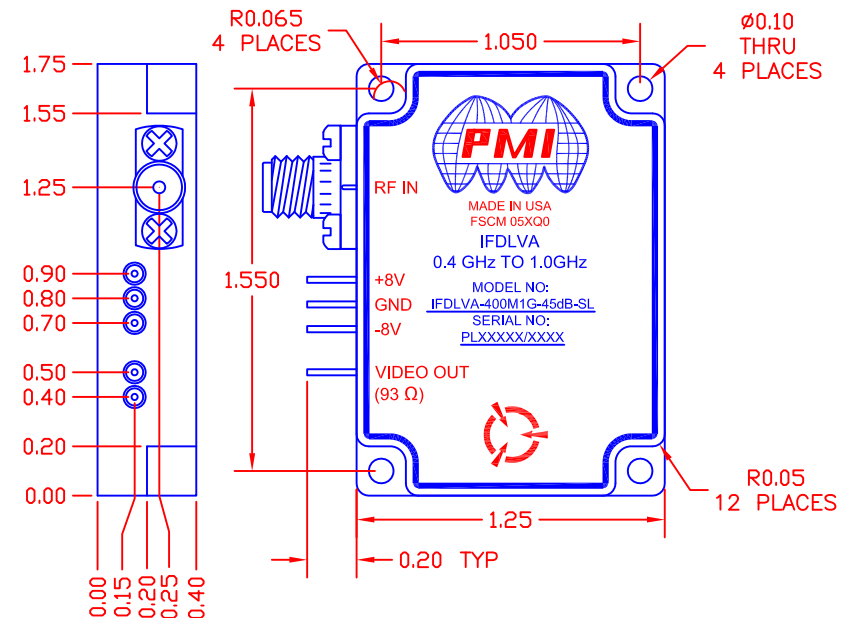
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

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

PMI CONFIDENTIAL AND PROPRIETARY

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	PRELIMINARY	2/19/16	PJK

MECHANICAL OUTLINE



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ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE			
PJK		2/19/16	PRODUCT FEATURE IF DETECTION LOG VIDEO AMPLIFIER IFDLVA-400M1G-45dB-SL			
CHECKED			SIZE	FSCM NO.	DWG NO.	REV.
			A	05XQ0	PRELIMINARY	-
ISSUED			SCALE	N:S		SHEET 1 OF 1