DESCRIPTION

PMI MODEL: PDVAT-100M20G-30-8B IS A 0.1 TO 20 GHz VARIABLE ATTENUATOR/MODULATOR WITH 8 BIT BINARY TTL CONTROL AND 30 dB ATTENUATION RANGE WITH 0.25 dB STEP SIZE.

REVISIONS					
ZONE	REV.	DESCRIPTION	DATE	APPROVED	
	1	ORIGINAL RELEASE	11/11/15		
	A1	ECN # 16-0188	12/06/16		

MECHANICAL OUTLINE

SPECIFICATIONS

FREQUENCY RANGE:	0.1 TO 20 GHz
INSERTION LOSS:	4.0 dB MAXIMUM
ATTENUATION FLATNESS:	±1.5 dB @ 10 dB ±2.5 dB @ 20 dB ±4.0 dB @ 30 dB
ATTENUATION ACCURACY:	±1.0 dB FROM 0 TO 30 dB
• MONOTONICITY:	GUARANTEED

TEMPERATURE VARIATION: ----- ±2.5 dB FROM -10° TO 85°C TYPICAL ±3.5 dB FROM -40° TO 95°C TYPICAL

SWITCHING TIME: ----- 1.5 μs MAXIMUM

SMALL SIGNAL BANDWIDTH: ------ 150 kHz TYPICAL (6 dB WITH ±3 dB SINEWAVE)

LARGE SIGNAL BANDWIDTH: ----- 75 kHz TYPICAL (30 dB WITH ±30 dB SINEWAVE)

RETURN LOSS: ------ -12 dB TYPICAL -8.5 dB MAXIMUM

• POWER RATING: ----- +20 dBm*

DIGITAL CONTROL: ----- 8 BIT TTL, 0.25 dB MINIMUM ATTENUATION STEP

ANALOG CONTROL (OPTION): ----- 0 TO 6 V ANALOG VOLTAGE, 10 dB/VOLT POWER SUPPLY: ------ +12 V TO +15 V @ 150 mA MAXIMUM

CONNECTORS:

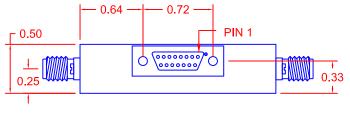
RF INPUT/OUTPUT: ----- FIELD REPLACEABLE SMA FEMALE POWER AND CONTROLS: ----- 15 PIN MICRO-D FEMALE

SIZE: ----- 2.00" x 1.80" x 0.50"

FINISH: ------ BLUE EPOXY POLIMIDE COATING IAW

MIL-C-22750. TYPE I OVER EPOXY POLIMIDE

PRIMER IAW MIL-P-23377. TYPE I. CLASS 1 OR 3.



MDM-15S

MADE IN USA

PIN DIODE ATTENUATOR

0.1 GHz TO 20.0 GHz



J3 PIN OUT TABLE

FUNCTION 1 dB

Ø0.12 THRU (4 PLACES)

MODEL NO: PDVAT-100M20G-30-8B 0.65 SERIAL NO: PLXXXXX/XXXX PART NO:

0.10 -

ENVIRONMENTAL RATINGS

• TEMPERATURE: ----- -40 °C TO +85 °C (OPERATING) -65 °C TO +125 °C (STORAGE) • HUMIDITY: ----- MIL-STD-202, METHOD 103B COND. B SHOCK: ----- MIL-STD-202, METHOD 213B COND. B VIBRATION: ----- MIL-STD-202, METHOD 204D COND. B • ALTITUDE: ---- MIL-STD-202, METHOD 105C COND. B TEMPERATURE CYCLE; ------ MIL-STD-202, METHOD 107D COND, A

ALL DIMENSIONS ARE IN INCHES (mm) TOLERANCES: XXX ±0,020 X XXX

1.05

1.80

PLANAR MONOLITHICS INDUSTRIES. INC.

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TITLE APPROVALS M. Berry 11/11/15

PRODUCT FEATURE PDVAT-100M20G-30-8B

SIZE FSCM NO. DWG NO. Α 27027802 **A1** 05XQ0 SCALE N:S SHEET 1 OF 1

NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

PMI CONFIDENTIAL AND PROPRIETARY

^{*} REDUCED POWER PERFORMANCE AT LOW FREQUENCIES