

DESCRIPTION

AMC MODEL DVA-50 PROVIDES A LINEAR AMPLIFIED VIDEO OUTPUT VOLTAGE PROPORTIONAL TO THE INPUT RF VOLTAGE, WHERE THE VIDEO OUTPUT = $K \times V_{IN}$. (A TYPICAL VALUE FOR K IS 6, FOR A VIDEO OUTPUT BETWEEN 0 AND 5 VOLTS.) THIS UNIT OPERATES FROM 6 TO 18 GHz WITH TYPICAL TRANSFER LAW LINEARITY OF ± 0.5 dB BETWEEN INPUT POWER LEVELS OF -5 AND +15dBm. FREQUENCY FLATNESS OVER THE 6 TO 18 GHz RANGE IS ± 1.5 dB WITH A SIGNAL TO NOISE RATIO GREATER THAN 60db AT -5dBm INPUT POWER. INPUT VSWR IS BETTER THAN 2.0:1. CURRENT DRAW IS UNDER 30mA PER SUPPLY BETWEEN ± 9 AND ± 18 VOLTS. SIZE IS 2.2" x 1.5" x 0.4".

SPECIFICATIONS

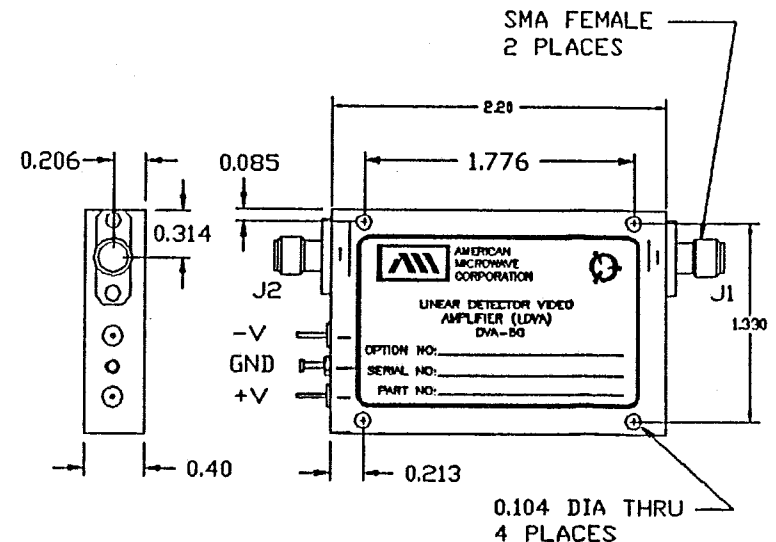
- FREQUENCY RANGE 6 TO 18 GHz
- FREQUENCY FLATNESS ± 1.5 dB MAXIMUM
- VSWR (RF) 2:1 MAXIMUM
- INPUT POWER RANGE -5 TO +15 dBm
- MAXIMUM INPUT POWER +20dBm
- VIDEO OUTPUT 0 TO 5 VOLTS MAXIMUM
- VIDEO LOAD 50 Ω MINIMUM
- SIGNAL TO NOISE RATIO 60dB MINIMUM, @ -5 dBm INPUT
- OUTPUT LINEARITY ± 0.5 dB TYPICAL, ± 0.7 MAXIMUM
- RISE TIME 20nS MAXIMUM
- FALL TIME 50nS MAXIMUM
- BASELINE STABILITY ± 10 mV
- OUTPUT STABILITY ± 0.75 dB MAXIMUM (0 TO 60°C)
- DC POWER (NO VIDEO LOAD)
 - +V +9 TO 18 VOLTS @ 30mA MAXIMUM
 - V -9 TO 18 VOLTS @ 30mA MAXIMUM
- CONNECTORS
 - RF INPUT/VIDEO OUTPUT SMA (FEMALE)
 - POWER SUPPLY SOLDER PIN
- SIZE 2.2" X 1.5" X 0.4"

AVAILABLE OPTIONS (SPECIFY)

- A01 EXTENDED FREQUENCY RANGE (0.5 TO 18 GHz)
- A02 -54° TO +85° OPERATING TEMPERATURE
- A03 ALTERNATE VIDEO TRANSFER GAIN
- A04 OTHER RISE/FALL TIMES

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	ORIGINAL RELEASE	11/22/92	<i>[Signature]</i>

MECHANICAL OUTLINE




NOTES:

- 1) DIMENSIONS ARE IN INCHES
- 2) TOLERANCES: X.XX ± 0.020
X.XXX ± 0.010
- 3) WEIGHT: 2.9 OZ

ENVIRONMENTAL RATINGS

- TEMPERATURE 0°C TO +60°C (OPERATING)
-65°C TO +100°C (STORAGE)
- HUMIDITY MIL-STD-202F, METHOD 103B COND.
- SHOCK MIL-STD-202F, METHOD 213B COND.
- VIBRATION MIL-STD-202F, METHOD 204D COND.
- ALTITUDE MIL-STD-202F, METHOD 105C COND.
- TEMPERATURE CYCLE MIL-STD-202F, METHOD 107D COND.

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		PRODUCT FEATURE DVA-50 6 TO 18 GHz, DC-COUPLED LINEAR DETECTOR VIDEO AMPLIFIER	
APPROVALS	DATE	SIZE	A
DRAWN <i>WSP</i>	11/22/92	SHEET 1 OF 2	DWG. # 100-2836
CHECKED <i>B.P.</i>	11/22/92		