

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	ORIGINAL RELEASE	11/21/92	<i>Key</i>

DESCRIPTION

AMC MODEL VA-100 IS A HIGH SPEED VIDEO BUFFER AMPLIFIER WHICH OFFERS EXCELLENT SIGNAL FIDELITY IN A 50 OHM SYSTEM. THE -3dB BANDWIDTH IS DC TO 120 MHz WITH LINEAR PHASE/AMPLITUDE CHARACTERISTICS. SLEW RATE LIMITING OCCURS AT 2000 V/ μ S, WITH SETTling TIME OF UNDER 15 nS TO 0.2% AND A MAXIMUM OF 15% FOR 0 TO 2V STEP. INPUT AND OUTPUT CONNECTORS ARE SMA (FEMALE) WITH VSWR OF 1.5:1 MAXIMUM AND OPERATING RANGE IS -54°C TO +85°C. UNIT OPERATES FROM \pm 9V TO \pm 18V @ \pm 25mA. SIZE IS 3.0" x 2.0" x 1.0".

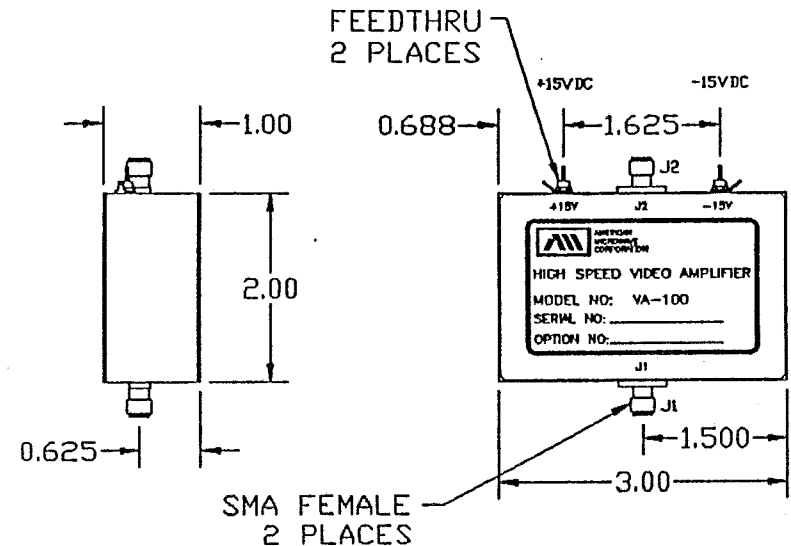
SPECIFICATIONS

- GAIN.....1.00 \pm 2.5% (DC)
- -3dB BANDWIDTH.....120MHz (MINIMUM)
- SLEW RATE.....2000 V/ μ S (MINIMUM)
- RISE TIME (0 TO 2V STEP).....3nS (MAXIMUM)
- OVERSHOOT.....15% (MAXIMUM)
- SETTling TIME.....15nS (MAXIMUM TO 0.2%)
- DC OFFSET..... \pm 25mV (MAXIMUM)
- INPUT/OUTPUT IMPEDANCE.....50 Ω (NOMINAL)
- INPUT/OUTPUT VSWR.....1.5:1 (MAXIMUM)
- POWER SUPPLY (QUIESCENT)
 - +V.....9 TO 18V @ 25mA (MAXIMUM)
 - V.....9 TO 18V @ 25mA (MAXIMUM)
- PROPAGATION DELAY (DC TO 100MHz).....3nS (MAXIMUM)
- SIZE.....3.0" X 2.0" X 1.0"

OPTIONS

- A01.....AVAILABLE GAIN TO 3X
- A02.....MATCHING TO ALTERNATE LOADS INPUT/OUTPUT

MECHANICAL OUTLINE



NOTES:

- 1) DIMENSIONS ARE IN INCHES
- 2) TOLERANCES: X.XX \pm 0.020
X.XXX \pm 0.010
- 3) WEIGHT: 6.48 OZ

ENVIRONMENTAL RATINGS

- TEMPERATURE.....-54°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



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APPROVALS	DATE
DRAWN <i>WSP</i>	11/21/92
CHECKED <i>B. J. J.</i>	

PRODUCT FEATURE
VA-100
DC TO 120 MHz, HIGH SPEED VIDEO BUFFER AMPLIFIER