

DESCRIPTION

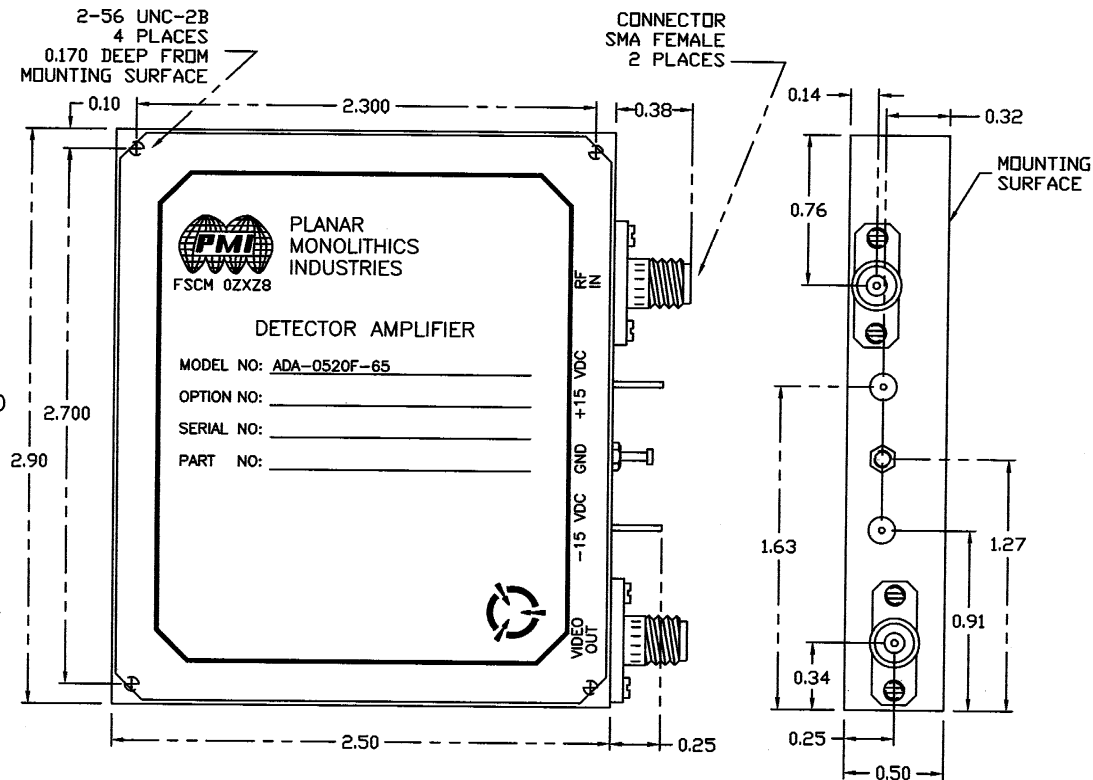
AMC MODEL ADA-0520F-65 IS A 500 MHz TO 20 GHz, -55 TO +10 dBm DYNAMIC RANGE, DC COUPLED, TEMPERATURE COMPENSATED LINEAR AMPLIFIER DETECTOR MODULE WITH 8nS RISE TIME, 10nS FALL TIME AND 8nS PROPAGATION DELAY. OPTIONAL TTL OR ECL COMPATIBLE OUTPUTS ARE ALSO AVAILABLE. THIS UNIT OPERATES ON +15 VDC @ 200 mA AND -15 VDC @ 75 mA (OTHER VOLTAGES AVAILABLE) AND MEASURES 2.5" x 2.9" x 0.5" WITH REMOVABLE SMA CONNECTORS (SMALLER SIZES AVAILABLE)

ZONE		REV.	DESCRIPTION	DATE	APPROVED
		-	JOB # 91031PE	03/06/00	

MECHANICAL OUTLINE

SPECIFICATIONS

● FREQUENCY RANGE.....	500 MHz TO 20.0 GHz
● RF GAIN VS. FREQUENCY.....	±1.5dB MAXIMUM (30dB GAIN)
● VIDEO BAND.....	DC TO 30 MHz, MINIMUM
● RISE TIME (10% TO 90% RF).....	4nS TYPICAL, 8nS MAXIMUM
● FALL TIME(90% TO 10% RF).....	8nS TYPICAL, 10nS MAXIMUM
● INPUT RANGE.....	-55dBm TO +10dBm
● TRANSFER FUNCTION.....	ADJUSTABLE AND AS DESIRED, BASED ON DYNAMIC RANGE
● OUTPUT OFFSET VOLTAGE.....	±20mV, MAXIMUM
● OVERTHOOT/RINGING.....	OUTPUT VOLTAGE RINGING NOT TO EXCEED 0.5dB REFERRED TO INPUT POWER LEVEL
● VSWR (RF).....	2:1 MAXIMUM
● VIDEO LOAD.....	50Ω TYPICAL OR 100 Ω
● TSS (30 MHz BW).....	-61dBm MAXIMUM
● MAXIMUM RF INPUT.....	WITHSTANDS +20dBm CONTINUOUS INPUT POWER (NONOPERATIONAL) WITHOUT DAMAGE, + 15dBm OPERATIONAL
● VIDEO OUTPUT VOLTAGE RANGE.....	ADJUSTABLE AND AS DESIRED (TYPICALLY 0 TO 3 VOLTS)
● TEMPERATURE STABILITY.....	LESS THAN ±1dB OF INPUT POWER
● DC POWER.....	+15V, 300mA MAXIMUM -15V, 80mA MAXIMUM



AVAILABLE OPTIONS

- COMPATIBLE OUTPUTS..... TTL OR ECL OUTPUT
- TRIGGER LEVEL..... ADJUSTABLE

ENVIRONMENTAL RATINGS

- TEMPERATURE:..... -40°C TO +85°C (OPERATING)
-55°C TO +125°C (NONOPERATING)
- HUMIDITY:..... 0 TO 95%, NONCONDENSING
- 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

ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
X.XX ±0.010
X.XXX ±0.005

PART NO.		APPROVALS		DATE	PLANAR MONOLITHICS INDUSTRIES FREDERICK, MARYLAND	
					TITLE	
		DRAWN		03/06/00	OUTLINE DRAWING	
		CHECKED			ADA-0520F-65	
		ISSUED			SIZE	FSCM NO.
					A	0ZXZ8
					DWG NO.	100-5309-2
					REV.	-
					SCALE	N/S
					SHEET	1 of 1