

Coaxial

RF Instrument Amplifier

TIA-1000-4

50Ω High Power 100 to 1000 MHz

Features

- instrument model with built-in power supply, 110V/220V operation
- high power output at 3.5dB compression, 42dBm typ.
- high reverse isolation, 55 dB typ.
- 100% burn-in at +25°C, 48 hrs
- thermally self-protected, LED indicator
- protected US Patent 5,101,171



Applications

- testing
- laboratory use

CASE STYLE: AP176

Connectors	Model	Price	Qty.
BNC	TIA-1000-4	\$1,995.00 ea.	(1-9)
Add-2 to model for 220V operation			

RF Instrument Amplifier Electrical Specifications

MODEL NO.	FREQUENCY (MHz)		GAIN (dB)		MAXIMUM POWER (dBm)			DYNAMIC RANGE		VSWR (:1)		AC POWER		
	f _L	f _U	Min.	Flatness Max.	Output (1 dB Compr.) Typ.	Min.	Input (no damage)	NF (dB) Typ.	IP3 (dBm) Typ.	In	Out	Volt (V)	Freq. Hz	VA Max.
TIA-1000-4	100	1000	19	±1.5	+39	+36	+25	12	+48	2.5	2.5	110	50/60	400

1. Gain and maximum output power specified at 25°C±5°C, over temperature, specifications degrade approximately 1dB gain flatness ±2.5 dB max.

2. VSWR specified at 350-1000 MHz

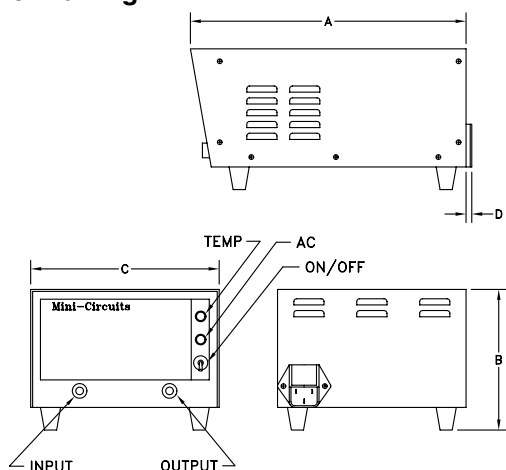
3. Open load is not recommended, potentially can cause damage. With no load derate max input power by 20 dB

Maximum Ratings

Operating Temperature 0°C to 55°C

Storage Temperature -40°C to 70°C

Outline Drawing



Outline Dimensions (inch mm)

A	B	C	D	wt
19.5	6.0	12.5	0.2	grams
495.30	152.40	317.50	5.08	9500

Keep area adjacent to fan and louvers clear to permit air flow to pass.

Caution: Do not insert anything especially conductors or fingers into case opening. Physical injury, shock or death may occur.

INTERNET <http://www.minicircuits.com>

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REV. OR
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TIA-1000-4
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Page 1 of 2

Typical Performance Data/Curves

TIA-1000-4

FREQUENCY (MHz)	GAIN (dB)	DIRECTIVITY (dB)	VSWR (:1)		NOISE FIGURE (dB)	POUT at 1 dB COMPR. (dBm)
	110V	110V	IN	OUT	110V	110V
100.00	23.15	23.27	3.33	3.27	13.27	40.63
202.20	24.07	23.74	2.57	1.14	14.65	40.14
313.40	22.86	31.20	2.25	2.30	14.30	37.90
389.30	23.04	34.78	1.51	1.41	13.14	38.79
500.50	22.93	39.37	1.11	1.40	12.02	38.58
614.50	23.49	40.43	1.58	1.18	11.69	40.33
725.70	24.15	38.75	1.33	1.24	9.76	41.58
801.60	23.34	34.20	1.17	1.06	7.26	42.06
912.80	22.38	30.28	1.19	1.23	8.32	41.00
1000.00	23.23	28.13	1.74	1.52	8.82	37.01

