

Coaxial

# RF Instrument Amplifier

TIA-900-10

50Ω High Power 100 to 900 MHz

## Features

- instrument model with built-in power supply, 110V operation
- high power output at 3.5dB compression, 45dBm typ.
- high gain, 34 dB typ.
- high reverse isolation, 80 dB typ.
- 100% burn-in at +25°C, 48 hrs
- thermally self-protected, LED indicator
- protected by US Patent 5,101,171

## Applications

- testing
- laboratory use



CASE STYLE: AP176

Connectors	Model	Price	Qty.
BNC	TIA-900-10		contact sales dept.

## RF Instrument Amplifier Electrical Specifications

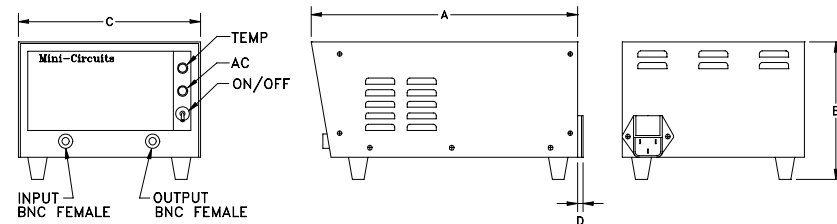
MODEL NO.	FREQUENCY (MHz)		GAIN (dB)		MAXIMUM POWER (dBm)			DYNAMIC RANGE		VSWR (:1)		AC POWER		
	$f_L$	$f_U$	Min.	Flatness Max.	Output (1 dB Compr.) Typ.	Min. (no damage)	Input	NF (dB) Typ.	IP3 (dBm) Typ.	In	Out	Volt (V)	Freq. Hz	VA Max.
TIA-900-10	100	900	28	±2.5	+42	+40	+25	13	+51	2.5	2.5	110	50/60	475

1. Gain and maximum output power specified at 25°C±5°C; over temperature, specifications degrade approximately 1dB.
2. VSWR specified at 350-900 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.

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ISO 9001 ISO 14001 AS 9100 CERTIFIED

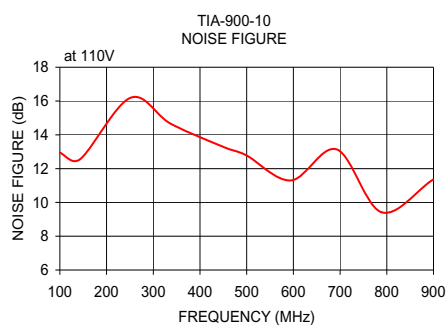
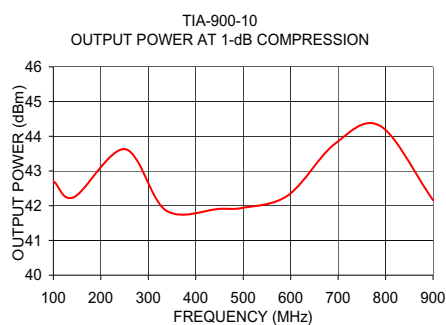
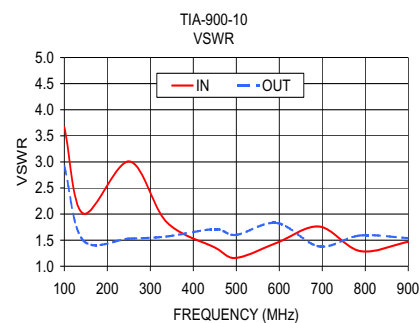
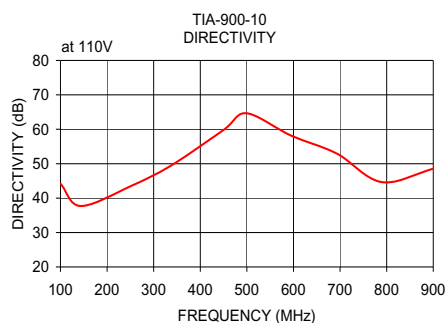
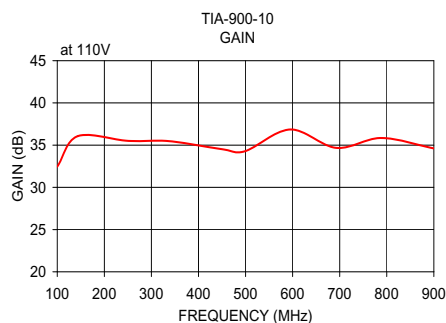
P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at [minicircuits.com](http://minicircuits.com)

IF/RF MICROWAVE COMPONENTS

For detailed performance specs & shopping online see web site

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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	32.45	44.22	3.67	2.92	12.95	42.71
143.60	36.07	37.71	2.01	1.50	12.56	42.25
251.10	35.50	43.52	3.01	1.53	16.19	43.63
337.60	35.47	49.49	1.85	1.57	14.65	41.86
449.80	34.52	59.78	1.36	1.71	13.29	41.91
498.90	34.28	64.65	1.16	1.60	12.79	41.94
594.70	36.86	58.18	1.45	1.83	11.30	42.30
692.90	34.67	52.96	1.76	1.38	13.14	43.78
788.70	35.85	44.67	1.29	1.59	9.42	44.30
900.00	34.61	48.53	1.47	1.54	11.37	42.16



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