

**The RF Line**  
**Integrated**  
**Power Amplifier**

... designed for wideband linear applications in the 10 to 1000 MHz frequency range. Contains an all hybrid amplifier module — Motorola's own proven reliable circuitry, used in millions of operating units over twenty years — utilizing Motorola's class A transistors. Designed for high reliability with such standard features as a high-quality power supply, EMI/RFI filter, stainless steel hardware and many MIL-STD components. Each unit undergoes 24-hour burn-in prior to final test and Q:A.

- All Class "A"
- Operates from 115 Vac Power Source
- Frequency Range — 10 to 1000 MHz
- Output Power — 1.3 Watts Minimum
- Gain — 15 dB Typ
- Linearity — +45 dBm Typ ITO
- Noise Figure — 8.0 dB Typ @ f = 500 MHz
- 50 Ohm Input/Output Impedance
- Heavy Duty Machined Housing
- Forced Air Cooling
- Thermally Protected
- 220 Vac Model Available, P/N PAE1000-14-1.3L

**PAA1000-14-1.3L**

**1.6 WATTS**  
**10-1000 MHz**  
**LINEAR POWER**  
**AMPLIFIER**



**CASE 389R-01, STYLE 1**

**ELECTRICAL CHARACTERISTICS**

Symbol	Characteristics	Test Conditions	Min	Typ	Max	Unit
$P_g$	Power Gain	f = 100 MHz	14	15	16	dB
$f_r$	Frequency Response	f = 10-1000 MHz	—	±0.8	±1.5	dB
$P_{o1dB}$	Power Output, 1.0 dB Compression	f = 500 MHz f = 1000 MHz	1.3 1.0	1.6 1.3	—	W
NF	Noise Figure	f = 500 MHz f = 1000 MHz	— —	8.0 9.0	9.0 10	dB
ITO	Third Order Intercept Point	f = 500 MHz f = 1000 MHz	+43 +42	+45 +44	—	dBm
VSWR	Input (Ref. = 50 Ω) Output (Ref. = 50 Ω)	f = 10-1000 MHz f = 10-1000 MHz	— —	2.0:1 2.0:1	2.5:1 2.5:1	—
VSWR Load	VSWR Survival	$P_o = 1.3 W$ f = 10-1000 MHz	—	—	30:1	—
$P_{in}$	AC Input	$V_{in} = 115 Vac, 1.0\phi, 60 Hz$	—	45	55	W