

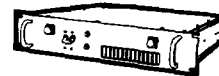
The RF Line
Ultrawide Band Linear
Power Amplifier

... designed for wideband linear applications in the 25 to 1000 MHz frequency range. Motorola class A hybrid amplifiers provide excellent ITOs, high gain, and wide dynamic range. Designed for high reliability with such standard features as a high-quality power supply, EMI/RFI filter, stainless steel hardware and many MIL-STD heavy duty components. Each unit undergoes 24-hour burn-in prior to final test and Q/A.

- All Class "A"
- All Hybrid RF Amplifier Circuitry
- Operates from 115 Vac Power Source
- Frequency Range — 25 to 1000 MHz
- Output Power — 5.0 Watts Minimum
- Gain — 42 dB
- Linearity — +46.5 dBm Typ ITO
- Noise Figure — 7.5 dB Typ @ $f = 1000$ MHz
- 50 Ohm Input/Output Impedance
- Heavy Duty Machined Housing with Dip Brazed Plenum Assembly
- Forced Air Cooling
- 220 Vac Model Available, P/N PAE1000-42-5L

PAA1000-42-5L

5.0 WATTS
25-1000 MHz
LINEAR POWER
AMPLIFIER ASSEMBLY



CASE 389F-01, STYLE 1

ELECTRICAL CHARACTERISTICS

Symbol	Characteristics	Test Conditions	Min	Typ	Max	Unit
SSG	Small Signal Gain	$f = 25-1000$ MHz	40	42	—	dB
f_r	Frequency Response	$f = 25-1000$ MHz	—	± 1.5	± 2.5	dB
P_o	Power Output	$f = 25-1000$ MHz	5.0	6.0	—	W
NF	Noise Figure	$f = 25-1000$ MHz	—	7.5	8.5	dB
ITO	Third Order Intercept Point	$f = 25-1000$ MHz	+45.5	+46.5	—	dBm
dso	Second Harmonic Attenuation	$f = 0.05-2.0$ GHz	25	35	—	dB
VSWR	Input (Ref. = 50 Ω) Output (Ref. = 50 Ω)	$f = 25-1000$ MHz $f = 25-1000$ MHz	—	2.0:1 1.5:1	2.5:1 2.5:1	—
VSWR Load	VSWR Survival	$P_o = 5.0$ W CW $f = 25-1000$ MHz	—	—	∞ :1	—
P_{in}	AC Input	$V_{in} = 115$ Vac, 1.0 ϕ , 60 Hz	—	200	225	W