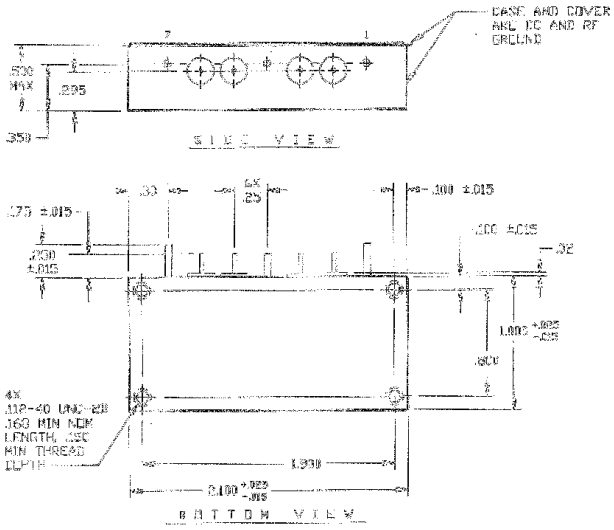
Broadband VHF Power Module, 13W
30 - 400 MHz

PHA4000-1

V4.00

Features

- Broadband Operation 30 to 400 MHz
- 60 dB Gain Control Range
- Thousands of Sets in Use Worldwide
- Optimized for Airborne Environment
- Built to MIL Standards

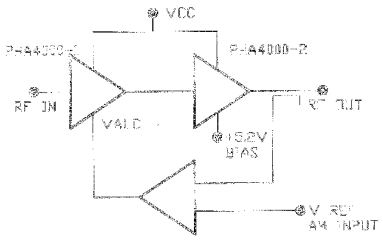


Absolute Maximum Ratings at 25°C[1]

Parameter	Absolute Maximum
Supply Voltage	30V
Input Power	0.025W
Output Power	16W
ALC Voltage	-4.0 to +10V
Operating Case Temp.	-30 to +100°C
Storage Temperature	-40 to +125°C

1. Operation of this device outside any of these limits may cause permanent damage.

Application



Pin Configuration

Pin	Description
1	Ground (GP3)
2	RF Input (FT4)
3	V Gain Control (FT3)
4	Ground (GP2)
5	+27 Volts (FT2)
6	RF Output (FT1)
7	Ground (GP1)

Electrical Characteristics at 25°C

Parameter	Symbol	Test Conditions	Units	Min.	Max.
Output Power	P_{OUT}	V_{CC}=27 V, P_{IN}=0.02 W, F=30-88, 116-174, 225-400 MHz	W	13	-
Power Gain	G_P	V_{CC}=27 V, P_{OUT}=13 W, F=30-88, 116-174, 225-400 MHz	dB	28	-
Collector Efficiency	η_C	V_{CC}=27 V, P_{OUT}=13 W, F=30-88, 116-174, 225-400 MHz	%	25	-
Input VSWR	VSWR	V_{CC}=27 V, P_{OUT}=13 W, F=30-88, 116-174, 225-400 MHz	-	-	3:1
Load VSWR Tolerance	VSWR-T	V_{CC}=27 V, P_{OUT}=13 W, F=30-88, 116-174, 225-400 MHz	-	-	2.5:1
Gain Variation With Freq	G_{VAR}	V_{CC}=27 V, P_{OUT}=13 W, F=30-88, 116-174, 225-400 MHz	dB	-	+/-3
Harmonic Output	-	V_{CC}=27 V, P_{OUT}=13 W, F=30-88, 116-174, 225-400 MHz	dBc	-	-15
Spurious Output	S	V_{CC}=27 V, P_{OUT}=13 W, F=30-88, 116-174, 225-400 MHz	dBc	-	-80

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