

# Broadband VHF Power Module, 64W

## 30 - 400 MHz

PHA4000-2

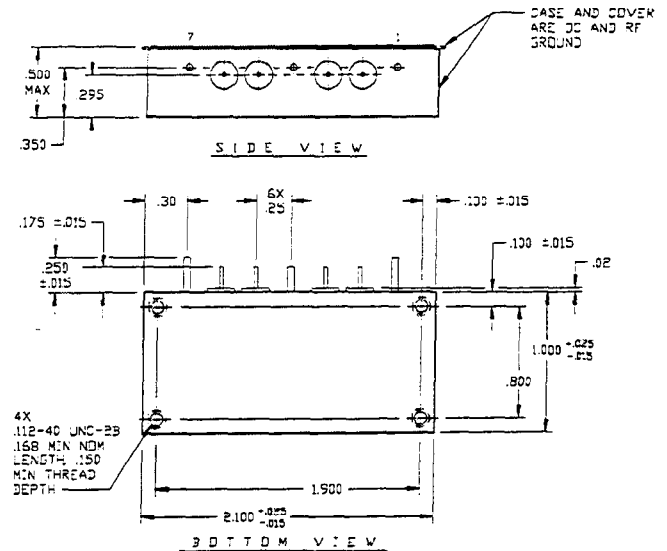
V2.00

### Features

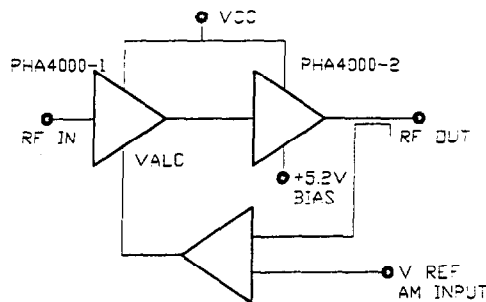
- Broadband Operation 30 to 400 MHz
- High Saturated Output Power - Greater than 54 Watts
- Thousands of Sets in Use Worldwide
- Optimized for Airborne Environment
- Built to MIL Standards

### Absolute Maximum Ratings at 25°C

Parameter	Symbol	Rating	Units
Supply Voltage	$V_{CC}$	30	V
Input Power	$P_{IN}$	16	W
Output Power	$P_{OUT}$	80	W
Bias Voltage	$V_B$	150	mA
Operating Case Temp.	$T_C$	-30 to +100	°C
Storage Temperature	$T_{STG}$	-40 to +125	°C



### Application



### Pin Configuration

Pin	Description
1	Ground (GP1)
2	RF Input (FT1)
3	+5.2 Volts (FT2)
4	Ground (GP2)
5	+27 Volts (FT3)
6	RF Output (FT4)
7	Ground (GP3)

### Electrical Characteristics at 25°C

Parameter	Symbol	Min	Max	Units	Test Conditions
Output Power	$P_{OUT}$	64	-	W	$V_{CC}=27$ V, $P_{IN}=13$ W, $F=30-88, 116-174, 225-400$ MHz
Power Gain	$G_P$	7	-	dB	$V_{CC}=27$ V, $P_{OUT}=64$ W, $F=30-88, 116-174, 225-400$ MHz
Collector Efficiency	$\eta_c$	35	-	%	$V_{CC}=27$ V, $P_{OUT}=64$ W, $F=30-88, 116-174, 225-400$ MHz
Input VSWR	VSWR	-	4:1	-	$V_{CC}=27$ V, $P_{OUT}=64$ W, $F=30-88, 116-174, 225-400$ MHz
Load VSWR Tolerance	VSWR-T	-	2.5:1	-	$V_{CC}=27$ V, $P_{OUT}=64$ W, $F=30-88, 116-174, 225-400$ MHz
Gain Variation With Freq	$G_{VAR}$	-	+/-1.5	dB	$V_{CC}=27$ V, $P_{OUT}=64$ W, $F=30-88, 116-174, 225-400$ MHz
Harmonic Output	-	-	-15	dBc	$V_{CC}=27$ V, $P_{OUT}=64$ W, $F=30-88, 116-174, 225-400$ MHz
Spurious Output	S	-	-80	dBc	$V_{CC}=27$ V, $P_{OUT}=64$ W, $F=30-88, 116-174, 225-400$ MHz