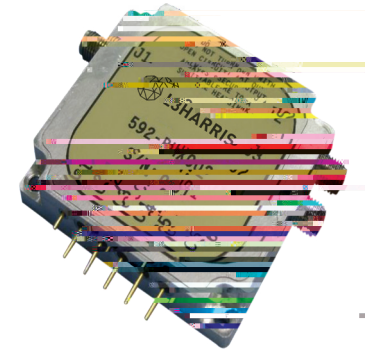


4 WATT POWER AMPLIFIER

Wideband power amplifier covering 6-18 GHz

TECHNICAL SPECIFICATIONS

Freq enc Range	6-18 GHz
F ndamen al Ra ed O p Po era 1dB Compr ion @ 25 C	18-20 dB
Varia ion in Ra ed O p Po era P1dB Compr ion Tempera re	±0.5 dB
a ra ed O p Po er	±0.5 dB
Inp Po er Windo for a ra ed O p Po er	±0.5 dB
Ampli de Ma ching o Reference	±0.5 dB
Pha e Ma ching o Reference	±0.5 dB
Small ignal Gain	18-20 dB
Harmonic O p Le el @ P1dB	-30 dBc
O p T o-Tone Third Order	-30 dBc
L/R i ch Performance	±0.5 dB
L/R i ching peed	±0.5 dB
L/R i ch Video Leakage	±0.5 dB
L/R i ch I ola ion	±0.5 dB
Mod la ion:	
PRF i ching Time	±0.5 dB
In/O V WR	±0.5 dB
Load V WR *	±0.5 dB
Po er ppl_	±0.5 dB
No e :	±0.5 dB



KEY FEATURES

- > Wideband operation from 6 to 18 GHz
- > High efficiency and linearity
- > Excellent thermal stability
- > Low noise and distortion
- > High reliability and long life
- > Small size and low cost
- > Available in various packages

APPLICATIONS

- > Radar systems
- > Satellite communication
- > Military and aerospace
- > Test and measurement

OPTIONS

- > Different package options
- > Customized designs

1. $h_{fe} = \frac{I_C}{I_B} = \frac{10 \text{ mA}}{1 \text{ mA}} = 10$
 2. $V_{CE} = V_{CC} - I_C R_C = 10 \text{ V} - 10 \text{ mA} \times 1 \text{ k}\Omega = 0 \text{ V}$
 3. $V_{CE} = 0 \text{ V}$ (saturation)
 4. $V_{CE} = 10 \text{ V}$ (cutoff)
 5. $V_{CE} = 5 \text{ V}$ (Q-point)

4 Watt Power Amplifier

$\frac{1}{2} V_{CE} I_C = \frac{1}{2} \times 10 \text{ V} \times 10 \text{ mA} = 50 \text{ mW}$

1. $V_{CE} = 10 \text{ V}$
 2. $V_{CE} = 0 \text{ V}$
 3. $V_{CE} = 5 \text{ V}$
 4. $V_{CE} = 10 \text{ V}$
 5. $V_{CE} = 5 \text{ V}$

$V_{CE} = 10 \text{ V}$
 $V_{CE} = 0 \text{ V}$
 $V_{CE} = 5 \text{ V}$