

RF Devices Division
TRW Electronic Components Group

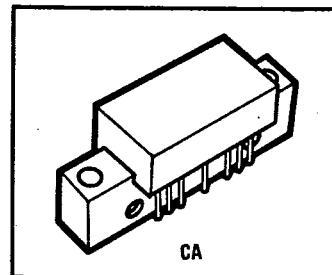


CA2886

T-74-09-01

CA2886 Wide Bandwidth Linear Hybrid Amplifier

- Power Output, 2W
- 20dB Gain
- Instantaneous Bandwidth, 40-500MHz
- Low Noise Figure, 7dB
- Bragg Cell Application



The CA2886 is a high-reliability thin-film hybrid amplifier utilizing an all gold metalization system. Units are designed for wide bandwidth linear operation in 50 to 100 ohm systems. This hybrid provides excellent gain stability with temperature and very low distortion due to push-pull amplifier circuitry. This module is recommended for wide bandwidth, low noise and linear applications.

Absolute Maximum Ratings

| Vcc | RF Power Input | Storage Temperature | Operating Temperature |
|----------|----------------|---------------------|-----------------------|
| 28 Volts | +16dBm | -40°C to +100°C | -20°C to +90°C |

Electrical Characteristics for 50Ω Systems (Tcase = 25°C and 24V)

| Symbol | Characteristic | Conditions | Value |
|--------|-------------------------------------|---------------------------------|------------------------|
| Pg | Power Gain | f = 50MHz | 20 ± .5dB |
| NF | Noise Figure, Broadband | f = 60MHz f = 500MHz | 5.0dB Typ 7.0dB Typ |
| Ito | Third Order Intercept, See Figure 1 | f1 = 500MHz | +43dBm Typ |
| VSWR | Input/Output VSWR for 50Ω Systems | f = 40-500MHz | 2:1 Typ |
| Icc | Supply Current | 24V | 440mA Max |
| PO | Power Output - 1dB Compression | f = 200MHz | 2W |
| PrI | Reverse Isolation | f = 40-500MHz | 25dB Typ |
| FR | Frequency Response | f = 40-500MHz f = 10-700MHz | ±0.5dB Max ±3dB Max |
| dso | Second Harmonic Distortion | Tone at 10mW f2H = 40-500MHz | -66dB Typ |