

RF Devices Division
TRW Electronic Components Group

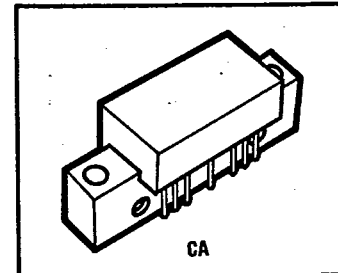


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CA2885

CA2885 Wide Bandwidth Linear Hybrid Amplifier

- Power Output, 2.00W
- 18.5dB Gain
- Instantaneous Bandwidth, 40-500MHz
- Low Noise Figure, 7dB
- Bragg Cell Application



The CA2885 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	18.5 ± .5dB
NF	Noise Figure, Broadband	f = 60MHz f = 500MHz	5.0dB Typ 7.0dB Typ
I _{ro}	Third Order Intercept, See Figure 1	f ₁ = 500MHz	+43dBm Typ
VSWR	Input/Output VSWR for 50Ω Systems	f = 40-500MHz	2:1 Typ
I _{cc}	Supply Current	24V	440mA Max
P _o	Power Output - 1dB Compression	f = 200MHz	2W
P _{ri}	Reverse Isolation	f = 40-500MHz	25dB Typ
FR	Frequency Response	f = 40-500MHz f = 10-700MHz	±0.5dB Max ±3dB Max
d _{so}	Second Harmonic Distortion	Tone at 10mW f _{2H} = 40-500MHz	-66dB Typ