

## RADIO FREQUENCY LINEAR AMPLIFIER CATHODE DRIVEN Class AB<sub>2</sub>

### TYPICAL OPERATION

(Frequencies to 30 MHz) Class AB<sub>2</sub>, Cathode Driven, Peak Envelope or Modulation Crest Conditions

Plate Voltage .....	2500	3000	3500	4000	Vdc
Cathode Voltage <sup>1</sup> .....	0	0	0	0	Vdc
Zero-Signal Plate Current <sup>3</sup> .....	130	165	205	240	mA dc
Single-Tone Plate Current .....	800	800	800	800	mA dc
Two-Tone Plate Current .....	540	560	570	565	mA dc
Single-Tone Grid Current <sup>3</sup> .....	255	250	275	250	mA dc
Two-Tone Grid Current <sup>3</sup> .....	140	130	140	112	mA dc
Peak rf Cathode Voltage <sup>3</sup> .....	115	105	120	115	vAc
Peak Driving Power <sup>3</sup> .....	102	105	110	100	W
Single-Tone Useful Output Power <sup>3</sup> .....	1250	1600	1870	2055	W
Resonant Load Impedance .....	1750	2080	2430	2780	ohms
Intermodulation Distortion Products <sup>2</sup>					
3rd Order .....	-37	-35	-30	-33	dB
5th Order .....	-42	-47	-43	-48	dB

<sup>1</sup> Positive cathode bias may be provided by a zener diode

<sup>2</sup> The intermodulation distortion products are referenced against one tone of a two-equal-tone signal

<sup>3</sup> Approximate values.

### MAXIMUM RATINGS:

DC Plate Voltage .....	5500 V
DC Plate Current .....	0.9 Adc
Grid Dissipation .....	50 W
Plate Dissipation .....	1200 W

## RADIO FREQUENCY POWER AMPLIFIER CATHODE DRIVEN Class C

### TYPICAL OPERATION

Carrier Conditions, Frequencies to 30 MHz

Plate Voltage .....	5000	Vdc
Cathode Voltage .....	+65	Vdc
Plate Current .....	800	mA dc
Grid Current .....	240	mA dc
Plate Load Resistance .....	3200	ohms
Driving Power .....	43	W
Plate Output Power .....	2700	W
Power Gain .....	18	dB

### MAXIMUM RATINGS:

DC Plate Voltage .....	5500 V
DC Plate Current .....	0.9 Adc
Grid Dissipation .....	50 W
Plate Dissipation .....	1200 W