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## 2400-3000 MHz

MODEL 5223-001

### 100 WATTS LINEAR POWER RF AMPLIFIER

# Solid State Band-specific High Power RF Amplifier

The 5223-001 is a 100 Watt Band-specific amplifier that covers the 2400-3000 MHz frequency range. This small and lightweight amplifier utilizes Class A/AB linear power devices that provide an excellent 3<sup>rd</sup> order intercept point, high gain, and a wide dynamic range.

Due to robust engineering and employment of the most advanced devices and components, this amplifier achieves high efficiency operation with proven reliability.

	<u>Parameter</u>	Specification @ 25° C
<u>Electrical</u>		
1	Frequency Bands	2400-3000 MHz
2	Rated Output Power	100 Watts Minimum
3	Small Signal Gain	+51 dB min
4	Small Signal Gain Flatness	<u>+</u> 1.0 dB max
5	IP <sub>3</sub>	+61 dBm typical
6	Input VSWR	2:1 max
7	Harmonics	-20 dBc typical @ 100 Watts
8	Spurious Signals	< -60 dBc typical @ 100 Watts
9	Input/Output Impedance	50 Ohms nominal
10	AC Input Power	1100 Watts max
11	AC Input	100 – 240 VAC, single phase
12	RF Input	+10 dBm max
13	RF Input Signal Format	CW/AM/FM/PM/Pulse
14	Class of Operation	A/AB
<u>Mechanical</u>		
15	Dimensions	19" x 5.25" x 20"
16	Weight	48 lb. max
17	Connectors	Type-N
18	Grounding	Chassis
19	Cooling	Internal Forced Air
<u>Environmental</u>		
20	Operating Temperature	0° C to +50° C
21	Operating Humidity	95% Non-condensing
22	Operating Altitude	Up to 10,000' Above Sea Level
23	Shock and Vibration	Normal Truck Transport

#### **CIRCUIT PROTECTIONS**

- ♦ Thermal Overload
- ♦ Over Current
- ◊ Over Voltage

#### CIRCUIT CONTROL

- ♦ Standby (amplifier disable)
- ♦ Gain/power setting with 25dB range
- ♦ VSWR protection Reset
- ♦ ALC On/ Off

#### **CIRCUIT INDICATIONS**

- ♦ Forward Power
- ♦ Reflected power
- ♦ VSWR Fault
- ♦ Temp Fault
- ♦ Gain Setting (VVA) percentage

Specifications subject to change without notice



FE Model Shown

#### **ORDERING MODELS**

- ♦ RE R model with Ethernet, IEEE488 and RS232
- ♦ FE F model with Ethernet, IEEE488 and RS232

10/10
Approved By: Date: