



Model 3900B-1S4

ISO 9001 CERTIFIED

6 - 640 MHz, pulsed,
solid-state, RF power
amplifier system

Electrical specifications:

Frequency range
Pulse power (min.) into 50 ohms
Frequency range
Pulse power (min.) into 50 ohms
CW power (max.) into 50 ohms
Gain (typ.)
Gain flatness
Input/Output impedance
Input VSWR
Pulse width (Max/ch)
Duty cycle
Amplitude rise/fall time
Amplitude droop

Noise figure
Output noise (blanked)
Blanking delay

(-1) Ch B:
10 - 220 MHz
300 W
221-245 MHz
100 W
30 W
60 dB
±3 dB
50 ohms
< 2:1
20 ms
Up to 10%
200 ns typ.
CH B: <5% to 10 ms typ.; 7% max.
CH A: <10% to 10 ms typ.; 15% max.
8 dB typ.
< 20 dB over thermal
< 1 µs on/off, TTL signal

(-2) Ch A:
550-620 MHz
50 W
621 -640 MHz
30 W
15 W
55 dB
±3 dB
120 ms
150 ns typ.
10 dB typ.

Protection

1. VSWR: infinite VSWR at rated power
2. Over duty cycle/pulse width
3. Over temperature

Supplemental characteristics:

Connectors, rear panel (2ea)

1. RF input: BNC (F)
2. RF outputs: Type N (F)
3. Noise blanking: BNC (F)
4. Interface: 25 pin D(F), EMI filtered

Controls, front panel

1. AC power
2. Pulse Width
3. Duty cycle

Indicators, front panel

1. AC power on
2. Over pulse width
3. Over duty cycle
4. Over temperature
5. CW mode

System monitors

1. Thermal fault
2. DC power supply fault
3. Over duty cycle/pulse width

Cooling
Operating temperature
AC line voltage
AC power requirements
Package
Size (HWD, inches)
Net weight

Internal forced air
+10 to 40°C
120/240 VAC, ±10%, 50 - 60 Hz
1300 watts
Rack mount
5.25 x 19 x 24
75 lbs