

VMX3045 400 kW X-band Coaxial Pulsed Magnetron

Applications

Linear Accelerators

Features

- High frequency stability
- •Tunable +/- 30 MHz
- •400 kW peak output power
- •400 W average output power
- •Long life >2000 hours



The VMX3045 is a high power, coaxial pulsed magnetron that provides up to 400kW of peak output power and 400 W of average output power at .001 duty cycle and 3.5 uS pulse width. The VMX3045's combination of high power and small size, make it ideally suited for mobile linear accelerators.

The values listed above represent specified limits for the product and are subject to change. The data should be used for basic information only. Formal, controlled specifications may be obtained from CPI for use in equipment design.





VMX3045

Electrical Specifications	
Frequency	9.3 GHz ± 30 MHz
Peak Power Output	400 kW
Average Power Output	350 – 450 W
Pulse Voltage	27 – 29.5 kV
Peak Anode Current	28 A
Average Anode Current	28 mA
Pulse Width	3.5 uS, ±0.25 uS
Duty Cycle	0.001
Filament Voltage	15 V Max
Filament Current	3.6 A Max
Warm-up Time	150 S Min
Load VSWR	1.1:1 Max

Specifications	
Cooling	Forced air
Flow Rate (operating)	40 cfm
Body Temperature	-55°C to +140 °C
Mounting Position	Any
Support	Mounting flange
Coupling	WR112 mates with UG-51/U choke flange
Tuning	10 turns, ~3 MHz per turn
Weight	13 lbs

The values listed above represent specified limits for the product and are subject to change. The data should be used for basic information only. Formal, controlled specifications may be obtained from CPI for use in equipment design.11/5/2013

