HIGH POWER MMW AMPLIFIER
35 GHz 800 Watts CW RF Power
MODEL SERIES VKQ 2488

DESCRIPTION

Model VKQ2488 is a series of air-cooled CW Extended Interaction Klystrons used for communications, radar, instrumentation and scientific applications.
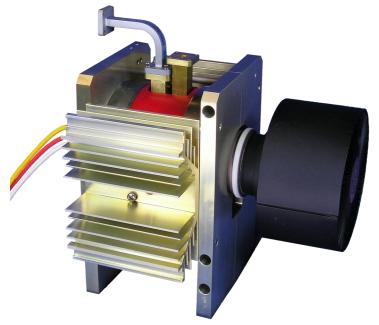
Frequencies are available from 24 GHz to 38 GHz producing 800 Watts CW power with a 1dB bandwidth of 500 MHz. This high gain vacuum electron device is remarkably compact, has long life and a highly stable output.
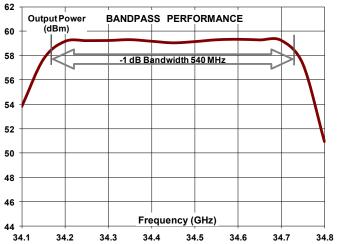
The VKQ 2488 series of EIKs may be integrated with a CPI power conditioner providing a compact self-contained and reliable High Power Amplifier (HPA) transmitter subsystem.
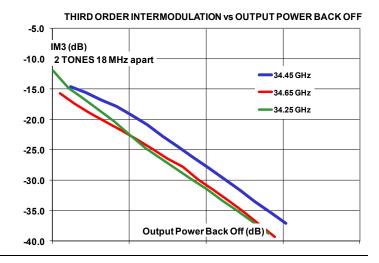
TYPICAL ELECTRICAL PERFORMANCE	
Center Frequency	34.5 GHz
CW Output Power	800 W
Bandwidth (-1dB)	540 MHz
Drive Power to Saturate	10 mW
Cathode Voltage	-9.55 kV
Cathode Current	443 mA
Anode Voltage	+5.72 kV
Collector Depression	35.6%
Efficiency	31%

TYPICAL ENVIRONMENT		
Temperature:	Operating	0ºC to +60ºC
Temperature:	Non-operating	-40ºC to +75ºC
Humidity		100% rel, non-condensing
Altitude		3000 metres max.
Waveguide Pressurization		200 kPa max.

COOLING	
Type:	Forced Air
Flow Rate: Collector:	600 lbs/hr
Pressure Drop: Collector	1.0 inches of water, nom

BANDPASS PERFORMANCE
Output Power (dBm) vs Frequency (GHz)
-1 dB Bandwidth 540 MHz

THIRD ORDER INTERMODULATION vs OUTPUT POWER BACK OFF
IM3 (dB), 2 TONES 18 MHz apart
— 34.45 GHz
— 34.65 GHz
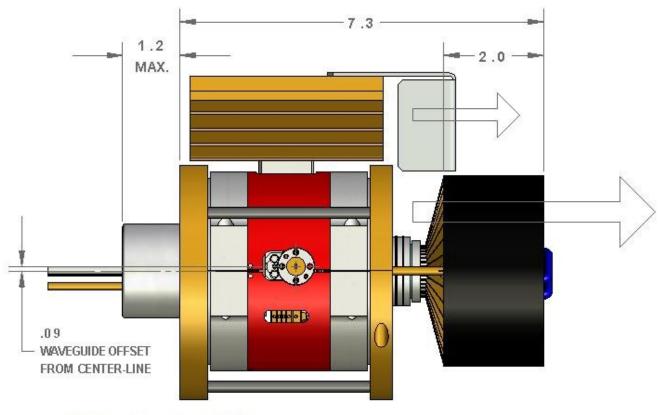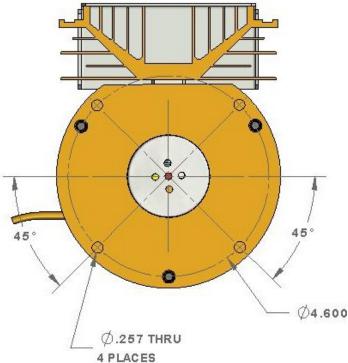— 34.25 GHz
Output Power Back Off (dB)

The values listed represent typical performance from testing.
Formal controlled specifications, with minimum and maximum values, for use in equipment design, may be obtained from CPI.
For more information please contact your local CPI sales office or CPI Canada, they may be found on our web site at: **www.cpii.com**

OUTLINE DRAWING

MECHANICAL	
Input and Output Waveguides:	WR‑28
Input and Output Flanges:	Mate with UG‑599/U
Power Supply/Connections:	Colour Coded Flying Leads, 18.0 inches min length
Weight:	13.0 kg

For information on this and other CPI products please contact CPI Canada, a field office or local representative
they may be found on our web site at: **www.cpii.com**