

# Ferranti Venus

## "C" SERIES LOW COST PHOTOMULTIPLIER POWER SUPPLY

**No Minimum Load Required!**

### Output Range

**Variable DC to High Voltage DC Converter**

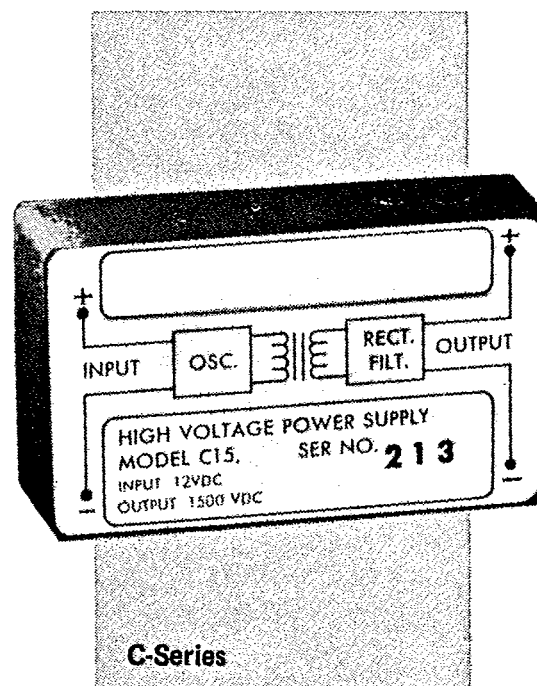
**Mounts on Printed Circuit Board**

**C-15 500 to 1500VDC**

**C-30 1000 to 3000VDC**

### FEATURES:

- High Input/Output Isolation
- Small, Flat, Lightweight
- Low Cost
- Input/Output Floating
- Output Proportional to Input
- Operates on Only 12VDC
- Mounts on Printed Boards
- All Silicon Components
- Short Circuit and Reverse Polarity Protected
- MTBF 105,000 Hours
- Off-The-Shelf Delivery



**C-Series**

### DESCRIPTION:

The "C" series is intended to satisfy the need for a miniature low-cost high voltage source. The package is designed to be operated from a 12 volt source having either plus or minus polarity. Isolation of the output from the input allows the user to have an output high voltage of either polarity as well as being able to ground the high voltage at a remote point. A series diode protects the circuit against reversed input

polarities. The unit is protected against shorts or opens across its output terminals. Reduced output ripple can be achieved by connecting additional capacitance across the output pins external to the unit. The Ferranti Venus "C" series high voltage converters are fully encapsulated, 100% tested before shipment and protected by warranty against defects in material or workmanship.

### APPLICATIONS:

*Photomultipliers • CRT Displays • Scan Converters • Flying Spot Scanners  
Focus and High Voltage Bias Medical Electronics*

"C"

## ELECTRICAL CHARACTERISTICS:

	C-15	C-30
Input Voltage	5 to 12VDC	5 to 12VDC
Input Current	Refer to Graph Below	Refer to Graph Below
Output Voltage	500 to 1500VDC (Proportional to Input $\pm 8\%$ )	1000 to 3000VDC (Proportional to Input $\pm 8\%$ )
Output Current	1.0mA (max.) @ 1.5kV	500 $\mu$ A (max) @ 3kV
Regulation ( $\frac{1}{2}$ to F.L.)	5%	5%
Ripple p-p	0.75%	0.5%
Insulation Strength	3000V Input/Output	3000V Input/Output

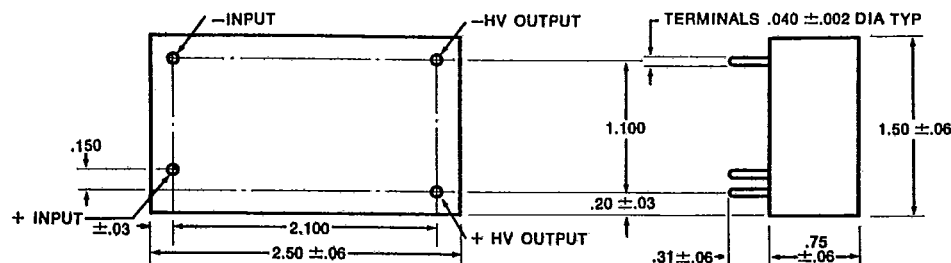
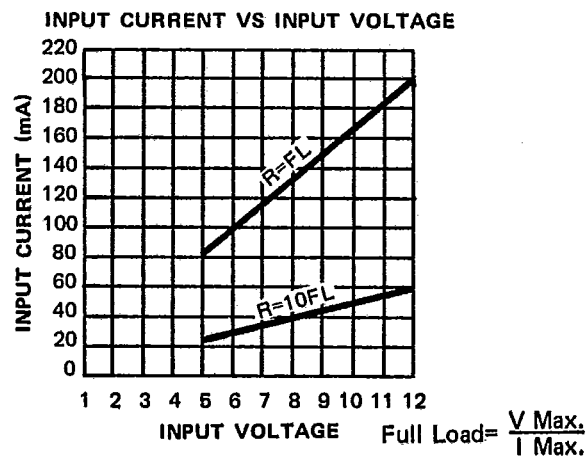
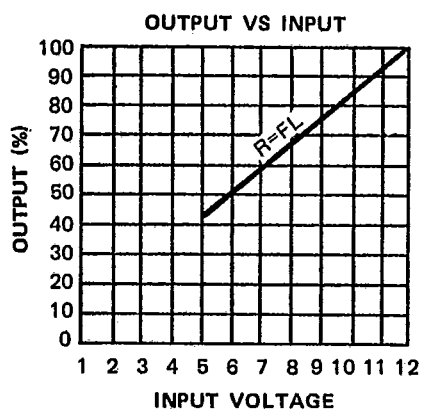
Dimensions	1.5" x 2.5" x 0.75"
Volume	2.8 cu. in.
Weight	4 oz.
Packaging	Solid encapsulation
Terminations	4 P.C. Pins (.043 Dia holes)

## ENVIRONMENTAL CHARACTERISTICS:

Temperature Range	0°C to +65°C (Case)
Temperature Coefficient	.025%/°C
Shock	40 g's per Mil-Std-810 Method 516, Procedure IV

Vibration	20 g's per Mil-Std-810, Method 514, Curve E, Figure 514-3
Thermal Shock	-55°C to 71°C per Mil-Std-810, Method 504, Class 2

## TYPICAL PERFORMANCE @ 25°C



**FERRANTI**  
**INTERNATIONAL**  
Ferranti Venus

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