

brandenburg 2482 SERIES

Miniature Phosphor & PM Modules

Total Power	4 Watts
Input Voltages	$\pm 12^*$, ± 15 VDC or $+24$ VDC
# of Outputs	Single

SPECIAL FEATURES

- $\pm 12V^*$, $\pm 15V$ or $+24V$ dc nominal input
- Excellent line and load regulation
- Low output ripple, noise and temp-co
- Remote voltage programming
- Internal precision reference
- Voltage monitor
- Low Profile
- Surface mount technology
- Current monitor available

ENVIRONMENTAL

Temperature	Operating	-10 to +50°C.
	Storage	-20 to +75°C.
Humidity (RH)	<31°C	80% maximum.
	>30°C	decrease linearly to 50% at 40°C. (non-condensing)

SAFETY

Approved to UL1950
(3.5kV** units approval pending at time of printing).

DESCRIPTION

This range of power supplies are designed for use with phosphor & photomultiplier tube or electron multiplier detector systems.



ELECTRICAL SPECIFICATION

Supply Input	$\pm 15V$ input	24V input ($\pm 12V$ input available *)
Input voltage range	± 13.5 to $\pm 18V$	22.5 to 30V dc
Max. input voltage	20V peak	32V peak (Max duration 5 seconds)
Input current (No load)	$\pm 50mA$	50mA
(Full load)	$\pm 330mA$	330mA
HV output voltage & current	See ordering information	
HV output ripple	See ordering information	
Polarity	Positive or negative (see ordering information)	
Load regulation	<20ppm (0.002%) 0% to 100% load	
Line regulation	<20ppm/V (0.002%) over the full input voltage range	
Stability (after 1hr warm-up)	<15ppm during any 15 minute period and <50ppm during any 8 hour period	
Voltage control	0V to 9.0V (or 5V*) for 0% to 100% of output rating (Input impedance >1M Ω)	
Temperature coefficient	<50ppm /°C at maximum O/P.	
Protection	Output current is limited to approximately 120% of the maximum rated output, until overload condition is removed.	
Reference (Fixed)	Factory set to +9.00V (or +5.00V*) $\pm 0.1\%$ at 25°C, Temp'co <50ppm /°C. For $\pm 15V$ types 2mA max current. For all other types 1mA max current. For external control a 10k Ω potentiometer is recommended (Pin10).	
Reference (Variable)	For local control, an internal multi-turn potentiometer is provided (pin 8).	
Voltage monitor (500V)	Ratio 100 : 1 $\pm 1\%$ (o/p impedance 100k Ω).	
(1, 2 & 3kV)	Ratio 1000 : 1 $\pm 1\%$ (o/p impedance 100k Ω).	
Current monitor (optional)	+5V for max rated current. (Output on pin 9, instead of variable reference output)	

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ORDERING INFORMATION

Input Voltage	Output Voltage	Output Current	Ripple pk-pk	Order Code Footprint A	Order Code Footprint B
±15V	+500V	8mA	5mV	2482-15C110	2482-35C110
±15V	-500V	8mA	5mV	2482-25C110	2482-45C110
±15V	+1kV	4mA	4mV	2482-151210	2482-351210
±15V	-1kV	4mA	4mV	2482-251210	2482-451210
±15V	+2kV	2mA	2mV	2482-152210	2482-352210
±15V	-2kV	2mA	2mV	2482-252210	2482-452210
±15V	+3kV	1.3mA	5mV	2482-153210	2482-353210
±15V	-3kV	1.3mA	5mV	2482-253210	2482-453210
±15V	+3.5kV	1.1mA	5mV	2482-15L210**	2482-35L210**
±15V	-3.5kV	1.1mA	5mV	2482-25L210**	2482-45L210**
+24V	+500V	8mA	5mV	2482-17C110	2482-37C110
+24V	-500V	8mA	5mV	2482-27C110	2482-47C110
+24V	+1kV	4mA	4mV	2482-171210	2482-371210
+24V	-1kV	4mA	4mV	2482-271210	2482-471210
+24V	+2kV	2mA	2mV	2482-172210	2482-372210
+24V	-2kV	2mA	2mV	2482-272210	2482-472210
+24V	+3kV	1.3mA	5mV	2482-173210	2482-373210
+24V	-3kV	1.3mA	5mV	2482-273210	2482-473210
+24V	+3.5kV	1.1mA	5mV	2482-17L210**	2482-37L210**
+24V	-3.5kV	1.1mA	5mV	2482-27L210**	2482-47L210**

*±12V input (±10.8V to ±15V) with +5V control & reference, available to special order.

CONNECTIONS

Connections I/P: Low voltage and I/O control, 12 way PCB card edge connector, 0.156" pitch, (part number:138F51120479, not supplied, order separately).
 O/P: RG-59/U screened cable, length 610mm (24"), unterminated.

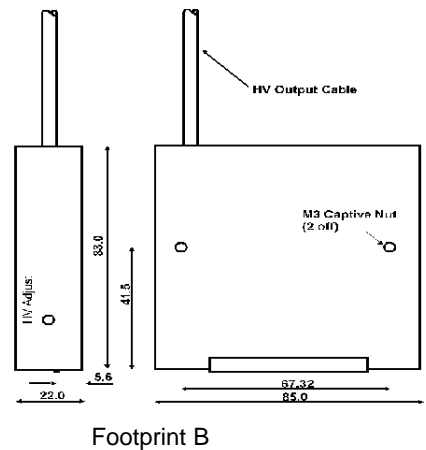
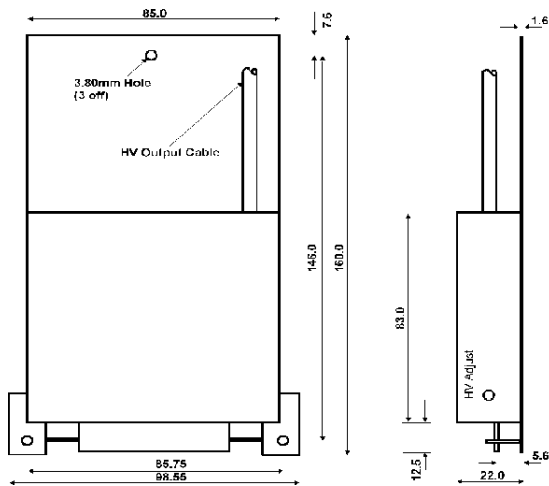
Pin Assignments:
 Pin 3 or 4: +Ve Supply input
 Pin 2 or 6: -Ve Supply input (n/c on 24V)
 Pin 1,7 or 12: Supply & Signal 0V
 Pin 8: Control input
 Pin 10: Fixed reference (9V, 5V* or 10V, 10V only available on 24V models)
 Pin 9: Variable reference (0 to 9V, 5V* or 10V) or current monitor output.
 Pin 11: Voltage monitor

MECHANICAL SPECIFICATION

Dimensions LxWxH footprint A:
 160.27 x 98.55 x 22mm
 (6.31"x 3.88" x 0.866")
 LxWxH footprint B:
 83 x 85 x 22mm
 (3.25" x 3.35" x 0.866")
 Weight 130g (8 oz.) approx.

DRAWINGS

Footprint A



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