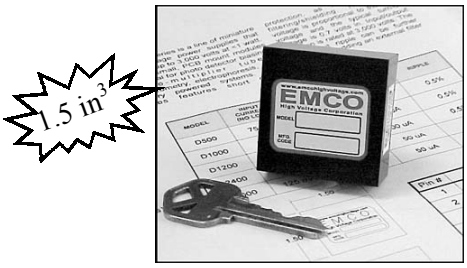
Miniature DC to HV DC Converters

0 to + or -100 through 0 to + or -6,000 VDC @ 1.5 Watts
G Series

www.emcohighvoltage.com
EMCO
High Voltage Corporation



The G Series is a line of miniature, versatile component level building blocks that provide up to 6,000 VDC, positive or negative, in a compact PC mount package. The isolated output is directly proportional to the input, and is linear from approximately 0.7 volts in. Excellent filtering techniques and a low noise quasi-sinewave oscillator provide clean, reliable DC to HV DC conversion with low ripple, and low EMI/RFI. The isolated output allows for user selectable output polarity. An output center-tap option which, when grounded, provides both positive and negative outputs from one compact, low cost module. The pin pattern on the G Series allows for a direct drop-in replacement for many larger high voltage modules. The GPMT model has been specifically designed for biasing PMT's. Contact our Applications Department for immediate technical assistance.

FEATURES
Low Ripple
Miniature Case Size
Low EMI/RFI Sinewave Oscillator
Proportional Input/Output
User-Selectable Output Polarity
Low Cost/High Performance

OPTIONS
Output Center Tap, See CT Series
AC Output, See AC Series
External Mounting Box, See AB Series
Low Power Consumption, See GP Series

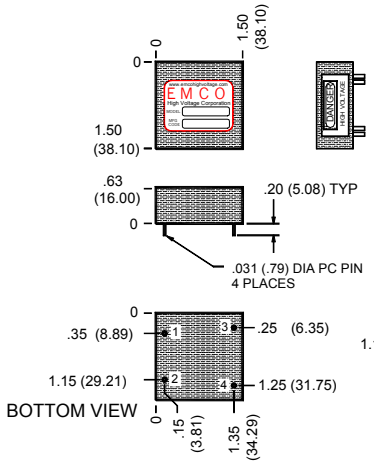
APPLICATIONS
Non-impact Printers
Sustaining Ion Pumps
Piezo Devices
Vacuum Gauges
Photomultiplier Tubes
Spectrometry
Electrostatic Chucks
Lamp Ignition and Drive
Displays (see AC output option)

PHYSICAL CHARACTERISTICS
SIZE: 1.5 x 1.5 x 0.63 (38.1 x 38.1 x 16.0)
WEIGHT: 1.5 Ounces (43 Grams) Approx.
PACKAGING: Fully Encapsulated
CASE MATERIAL: Glass-filled Epoxy
PINS: .031 (.79) Diameter, 0.2 (5.1) Long

ELECTRICAL SPECIFICATIONS
INPUT VOLTAGE: 0 to 12 Volts
TYPICAL TURN-0N VOLTAGE: 0.7 Volts
INPUT CURRENT, FULL LOAD: 250 mA
OUTPUT VOLTAGE: *See Table*
OUTPUT CURRENT: *See Table*
RIPPLE: *See Table*
LOAD REGULATION: 10% (No Load to Full Load)
ISOLATION: 3,500 Volts (Input to Output)
OPERATING TEMP: -10° to +60° C

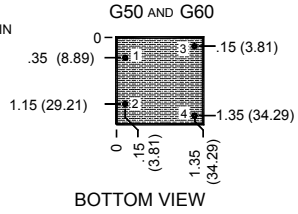
MODEL	INPUT CURRENT (NO LOAD)	INPUT CURRENT (FULL LOAD)	OUTPUT VOLTAGE	OUTPUT CURRENT	RIPPLE
G01	<100 mA	<250 mA	0 to +/-100	15 mA	1.75%
G02	<100 mA	<250 mA	0 to +/-200	7.5 mA	0.75%
G03	<100 mA	<250 mA	0 to +/-300	5 mA	0.75%
G05	<100 mA	<250 mA	0 to +/-500	3 mA	0.025%
G06	<100 mA	<250 mA	0 to +/-600	2.5 mA	0.1%
G10	<100 mA	<250 mA	0 to +/-1,000	1.5 mA	0.1%
G12	<150 mA	<275 mA	0 to +/-1,200	1.25 mA	0.1%
G15	<125 mA	<275 mA	0 to +/-1,500	1 mA	0.5%
G20	<165 mA	<275 mA	0 to +/-2,000	0.75 mA	0.5%
G25	<125 mA	<275 mA	0 to +/-2,500	0.6 mA	1.0%
G30	<125 mA	<300 mA	0 to +/-3,000	0.5 mA	1.0%
G40*	<125 mA	<300 mA	0 to +/-4,000	0.37 mA	1.0%
G50*	<125 mA	<300 mA	0 to +/-5,000	0.3 mA	2.0%
G60*	<125 mA	<300 mA	0 to +/-6,000	0.25 mA	2.0%
Photomultiplier Model					
GPMT	<20 mA	<75 mA	0 to +/-1,250	350 uA	.05%

*Caution: Models G40, G50 & G60 do not have internal bleeder resistors on the output. Provisions must be made externally to discharge the output capacitors if this feature is desired.



Pin #	Function
1	(+) Input
2	(-) Input
3	(+) Output
4	(-) Output

Dimensions are in Inches
Dimensional Tolerances: ± .03 (.76)
(Metric Equivalents in Parenthesis)



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