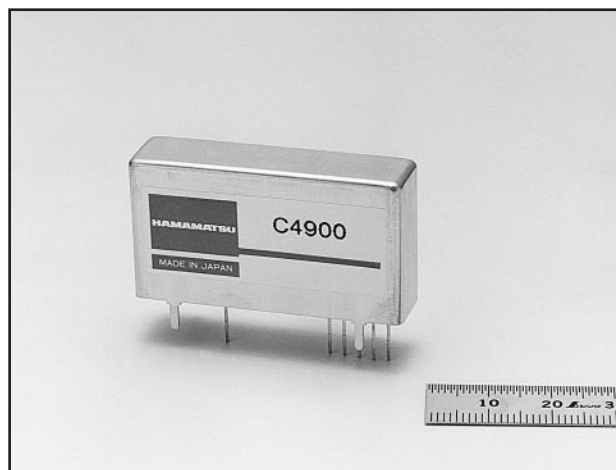


The C4900 series are compact PC-board mountable high voltage power supplies, especially designed for photomultiplier tubes. The design offers better performance and improved fail-safe protection.
The C4900 and -01 output negative polarity and the C4900-50 and -51 output positive polarity high voltages.

FEATURES

- Compact and Lightweight
- High stability
- Low Power Consumption
- Fast Response
- Wide Variable Output Range
- Ample Protective Fail-safe Functions



SPECIFICATIONS

Parameter		C4900				Unit
		- 00	- 01	- 50	- 51	
Input Voltage Range		+15 ± 1	+12 ± 0.5	+15 ± 1	+12 ± 0.5	V
Input Current ^(a)	with no load	14	15	14	15	mA (Typ.)
	with full load	90	95	90	95	
Variable Output Range		0 to -1250		0 to +1250		V
Specification Guaranteed Output Voltage Range		-200 to -1250		+200 to +1250		V
Output Current		0.6	0.5	0.6	0.5	mA (Max.)
Line Regulation against ±1 V or 0.5 V Change ^(b)		± 0.01				% (Typ.)
Load Regulation against 0 % to 100 % Load Change ^(a)		± 0.01				% (Typ.)
Ripple / Noise (p-p) ^(b)		0.007				% (Typ.)
Output Voltage Controlling Modes		By external controlling voltage (0 V to +5 V) or external potentiometer (50 kΩ ± 2.5 kΩ)				—
Controlling Voltage Input Impedance		80				kΩ (Typ.)
Reference Voltage Output		+5.13 (with 50 kΩ external potetiometer)				V (Typ.)
Output Voltage Setting (Absolute value)		(Controlling voltage × 250) ± 0.5 %				V (Typ.)
Output Voltage Rise Time (0 % → 99 %) ^(b)		50				ms (Typ.)
Temperature Coefficient ^(b)		± 0.01				%/°C (Typ.)
Operating Temperature Range ^(b)		0 to +50				°C
Storage Temperature Range		-20 to +70				°C
Dimensions (W × H × D)		46 × 24 × 12				mm
Weight		31				g
Protective Functions		Units protected against reversed power input, reversed/excessive controlling voltage input, continuous overloading/short circuit in output				—

^(a) At Maximum Output Voltage.

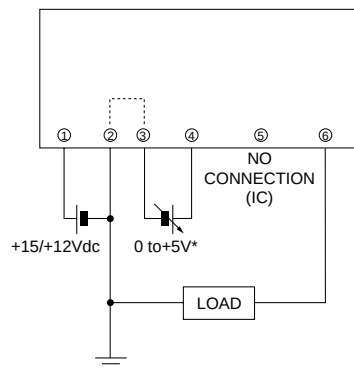
^(b) At Maximum Output Voltage and Current.

Subject to local technical requirements and regulations, availability of products included in this promotional material may vary. Please consult with our sales office.
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HIGH VOLTAGE POWER SUPPLY UNIT C4900 SERIES

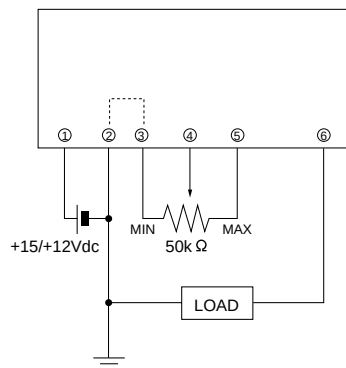
Figure 1: Output Voltage Controlling

BY EXTERNAL VOLTAGE



*The instability in the external controlling voltage should be minimized as it directly affects the output voltage quality.

● BY EXTERNAL POTENTIOMETER



PIN ASSIGNMENT

- ① +15/+12 V IN
- ② GND 1 (Input/Output GND)
- ③ GND 2 (Controlling Voltage GND)
- ④ HV ADJ (Controlling Voltage Input)
- ⑤ Vref OUT (Reference Voltage Output : 5.13V Typ.)

⑥ HV OUT

- The housing is internally connected to pin ⑥.
- Pins ② and ③ are internally connected.

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Figure 2: Output Voltage Controlling Characteristic

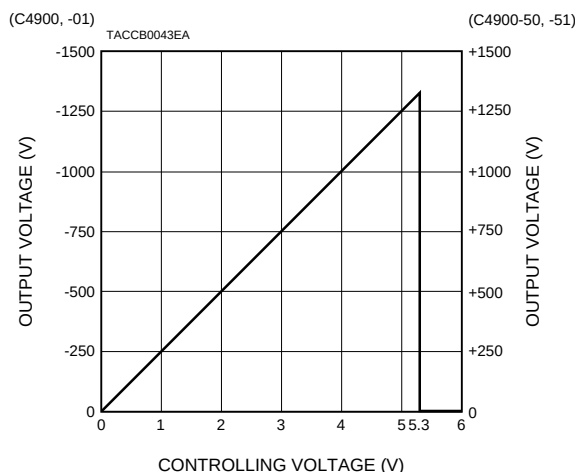
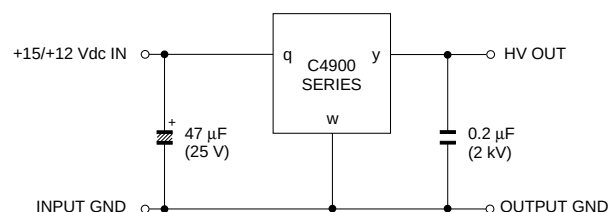


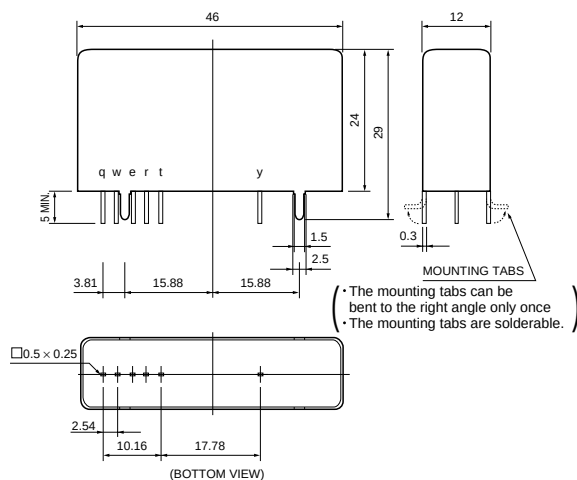
Figure 3: Example of Ripple/Noise Reduction Circuit



*The ripple/noise can be halved by adding capacitors as illustrated above.

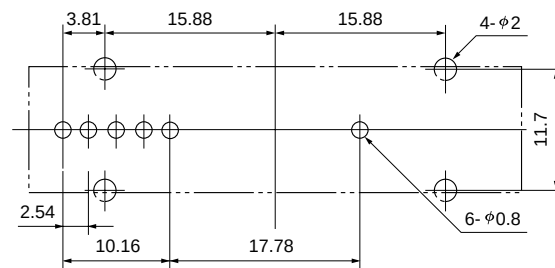
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Figure 4: Dimensional Outline (Unit: mm)



TACCA0157EA

Drilling Data for PC Board (Soldering Face)



TACCA0159EA

★PATENT: USA No.5548502, 5568343 JAPAN: No.2758552, 2784136 EUROPE: No.641066, 649222

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HAMAMATSU PHOTONICS K.K., Electron Tube Center

314-5, Shimokanzo, Toyooka-village, Iwata-gun, Shizuoka-ken, 438-0193, Japan, Telephone: (81)539/62-5248, Fax: (81)539/62-2205

U.S.A.: Hamamatsu Corporation: 360 Foothill Road, P. O. Box 6910, Bridgewater, N.J. 08807-0910, U.S.A., Telephone: (1)908-231-0960, Fax: (1)908-231-1218 E-mail: usa@hamamatsu.com

Germany: Hamamatsu Photonics Deutschland GmbH: Arzbergerstr. 10, D-82211 Herrsching am Ammersee, Germany, Telephone: (49)8152-375-0, Fax: (49)8152-2658 E-mail: info@hamamatsu.de

France: Hamamatsu Photonics France S.A.R.L.: 8, Rue du Saule Trapu, Parc du Moulin de Massy, 91882 Massy Cedex, France, Telephone: (33)1 69 53 71 00, Fax: (33)1 69 53 71 10 E-mail: infos@hamamatsu.fr

United Kingdom: Hamamatsu Photonics UK Limited: 2 Howard Court, 10 Tewin Road Welwyn Garden City Hertfordshire AL7 1BW, United Kingdom, Telephone: 44-(0)1707-294888, Fax: 44-(0)1707-325777 E-mail: info@hamamatsu.co.uk

North Europe: Hamamatsu Photonics Norden AB: Smidesvägen 12, SE-171-41 SOLNA, Sweden, Telephone: (46)8-509-031-00, Fax: (46)8-509-031-01 E-mail: info@hamamatsu.se

Italy: Hamamatsu Photonics Italia: S.R.L.: Strada della Moia, 1/E, 20020 Arese, (Milano), Italy, Telephone: (39)02-935 81 733, Fax: (39)02-935 81 741 E-mail: info@hamamatsu.it

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