

FEATURES

- Compact and light weight
- High reliability
- High conversion efficiency
- Digital control RS-485, Daisy-chain (Max. 32 ch, -R2 type only)

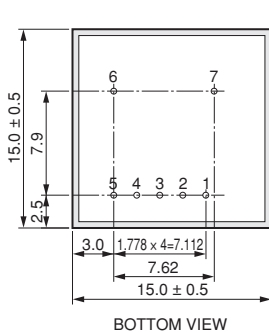


SPECIFICATIONS

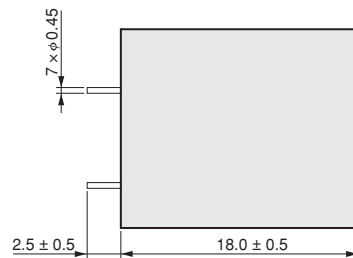
Parameter	C10940-03	C10940-03-R2 [Ⓓ]	C10940-53	C10940-53-R2 [Ⓓ]	Unit
Input voltage range	+5 ± 0.5				V
Input current [Ⓐ]	Typ. 60 (no load), 230 (full load)				mA
Variable output voltage range	-10 to -1200		+10 to +1200		V
Specification guaranteed output voltage range	-200 to -1200		+200 to +1200		V
Output current	Max. 0.6				mA
Line regulation against ±0.5 V input change ^{ⒶⒷ}	Typ. ±0.02				%
Load regulation against 0 % to 100 % load change [Ⓐ]	Typ. ±0.01				%
Ripple / Noise (p-p) ^{ⒶⒷ}	Typ. 50				mV
Output voltage control	Please see connection diagrams at the rear page				
Reference voltage output	Typ. +1.2		—		V
Output voltage setting (Absolute value)	Typ. Controlling voltage x 1000		—		V
Output voltage rise time (0 % → 99 %) ^{ⒶⒷ}	Typ. 120		300		ms
Temperature coefficient ^{ⒶⒷ}	Typ. ±0.01				%/°C
Operating ambient temperature ^{ⒶⒷ}	0 to +50				°C
Operating ambient humidity [Ⓒ]	Below 80				%
Storage temperature	-20 to +60				°C
Storage humidity [Ⓒ]	Below 80				%
Weight	Typ. 7.7				g
Protective functions	Units protected against reversed power input, reversed/excessive controlling voltage input, continuous overloading/short circuit output				

Ⓐ At maximum output voltage Ⓑ At maximum output current Ⓒ No condensation Ⓓ -R2 type: RS-485 control

DIMENSIONAL OUTLINE (Unit: mm)



BOTTOM VIEW



SIDE VIEW

PIN ASSIGNMENT (-03/-53 Type)

- ① Vcc +5 V
- ② Vcont GND
- ③ Vcont
- ④ Vref 1.2 V Typ.
- ⑤ Vcc GND
- ⑥ HV GND
- ⑦ HV OUT

PIN ASSIGNMENT (-03-R2/-53-R2 Type)

- ① Vcc +5 V
- ② RS-485 A
- ③ RS-485 B
- ④ NC
- ⑤ Vcc GND
- ⑥ HV GND
- ⑦ HV OUT

PLASTIC CASE*

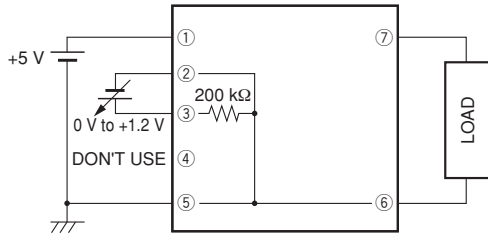
* This power supply is shielded internally.
An external shield case, A12912 is available for intensifying the shield effect.

HIGH VOLTAGE POWER SUPPLY C10940 SERIES

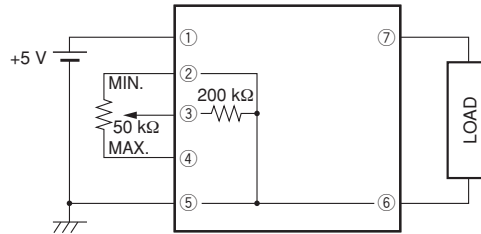
CONNECTION DIAGRAMS

OUTPUT VOLTAGE CONTROL (C10940-03, C10940-53)

● BY EXTERNAL VOLTAGE



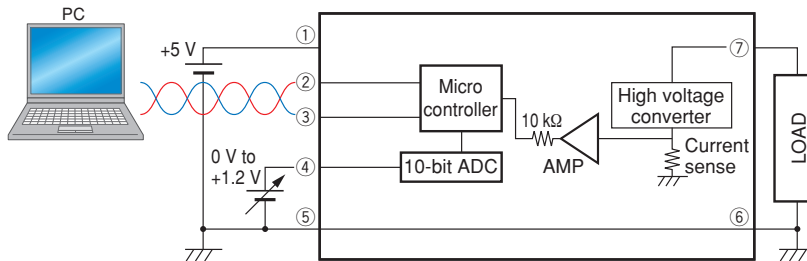
● BY EXTERNAL POTENTIOMETER



- ① Vcc +5 V
- ② Vcont GND
- ③ Vcont
- ④ Vref +1.2 V Typ.
- ⑤ Vcc GND
- ⑥ HV GND
- ⑦ HV OUT

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

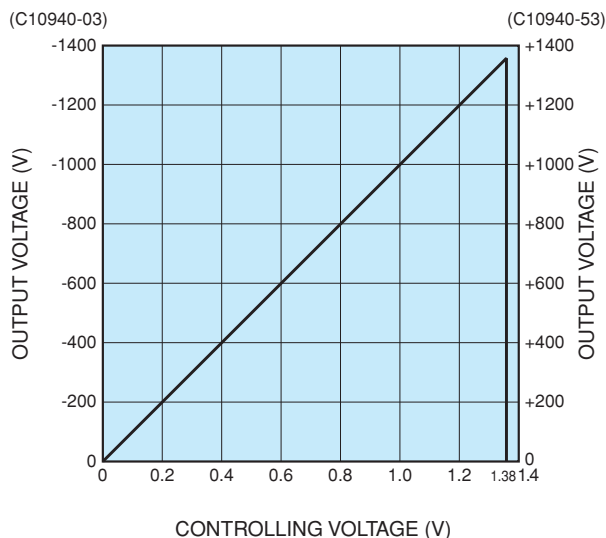
DIGITAL CONTROL (C10940-03-R2, C10940-53-R2)



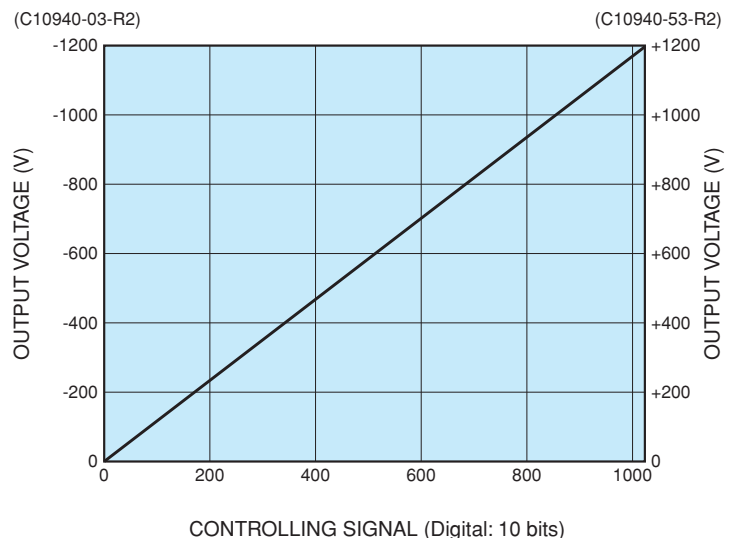
- ① Vcc +5 V
- ② RS-485 A
- ③ RS-485 B
- ④ NC
- ⑤ Vcc GND
- ⑥ HV GND
- ⑦ HV OUT

OUTPUT VOLTAGE CONTROLLING CHARACTERISTICS

● BY EXTERNAL CONTROL



● BY DIGITAL CONTROL



HAMAMATSU PHOTONICS K.K. www.hamamatsu.com

Electron Tube Division

314-5, Shimokanzo, Iwata City, Shizuoka Pref., 438-0193, Japan, Telephone: (81)539/62-5248, Fax: (81)539/62-2205

U.S.A.: HAMAMATSU CORPORATION: 360 Foothill Road, Bridgewater, NJ 08807, 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, 92211 Herrsching am Ammersee, Germany, Telephone: (49)8152-375-0, Fax: (49)8152-265-8 E-mail: info@hamamatsu.de

France: HAMAMATSU PHOTONICS FRANCE S.A.R.L.: 19, 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: info@hamamatsu.fr

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

North Europe: HAMAMATSU PHOTONICS NORDEN AB: Torshamnsgatan 35 16440 Kista, 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 int. 6, 20044 Arese (Milano), Italy, Telephone: (39)02-93 58 17 33, Fax: (39)02-93 58 17 41 E-mail: info@hamamatsu.it

China: HAMAMATSU PHOTONICS (CHINA) CO., LTD.: 1201 Tower B, Jaming Center, 27 Dongsanhuan Bellu, Chaoyang District, 100020 Beijing, P.R. China, Telephone: (86)10-6586-6006, Fax: (86)10-6586-2866 E-mail: hpc@hamamatsu.com.cn

Taiwan: HAMAMATSU PHOTONICS TAIWAN CO., LTD.: 8F-3, No.158, Section 2, Gongdao 5th Road, East District, Hsinchu, 300, Taiwan R.O.C. Telephone: (886)3-659-0080, Fax: (886)3-659-0081 E-mail: info@hamamatsu.com.tw

TACC1069E02
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