

HAMAMATSU

HIGH VOLTAGE POWER SUPPLY SOCKET ASSEMBLY (DP-TYPE) C9028-01

The C9028-01 is a high voltage power supply socket assembly for 28 mm (1-1/8") diameter head-on photomultiplier tubes (PMT), incorporating a regulated high voltage power supply and an active voltage divider. It enables simple yet stable PMT operations with extended DC output linearity by only supplying +15 V and connecting to a potentiometer or a 0 V to +5 V for high voltage adjustments.

FEATURES

- Superior DC Output Linearity
- Fast High Voltage Programming Response
- Wide High Voltage Output Range
- Low Ripple Noise
- Compact and Lightweight

SPECIFICATIONS

GENERAL

Parameter	Description / Value	Unit
Applicable PMTs	28 mm (1-1/8 inch) Dia. head-on types (R6094, R374, R5929, R2228 etc.)	—
Input Voltage	+15 ± 1	V
Input Current	Max. 60	mA
Linear DC Output Current of PMT ^(A) at -1000 V	Typ. 100	μA
Anode Ripple Noise (HV=1000 V, RL=1 MΩ +25 pF)	1	mV
Operating Ambient Temperature	0 to +40	°C
Storage Temperature	-15 to +60	°C
Weight	60	g

NOTE: (A) Within: ±2 % linearity

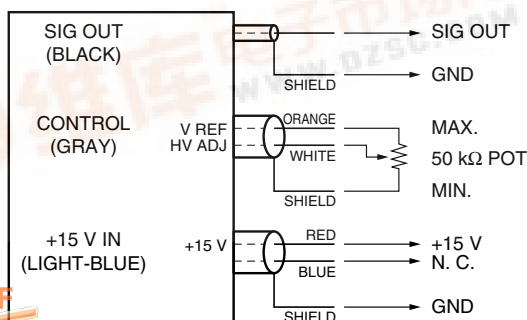
HIGH VOLTAGE POWER SUPPLY

Parameter		Description / Value	Unit
Output Voltage Range		0 to -1250	V
Line Regulation Against ±1 V Input Change	Typ.	±0.01	%
High Voltage Control		0 V to +5 V or external 50 kΩ potentiometer	—
Settling Time [®]	Vcont: 4 V to 2 V	300	ms
	Vcont: 2 V to 4 V	80	ms
Temperature Coefficient of High Voltage Output	Typ.	±0.01	%/°C

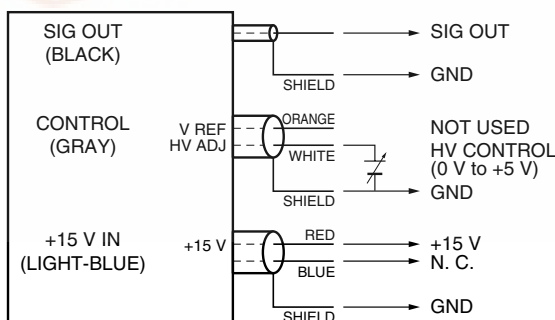
NOTE: (B) To be shown with the time period of setting to stable high voltage from changing control voltage (Vcont).

Figure 1: Wire Connection

MODE A: HV CONTROL WITH POTENTIOMETER



MODE B: HV CONTROL WITH EXTERNAL VOLTAGE



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Figure 2: Schematic Diagram

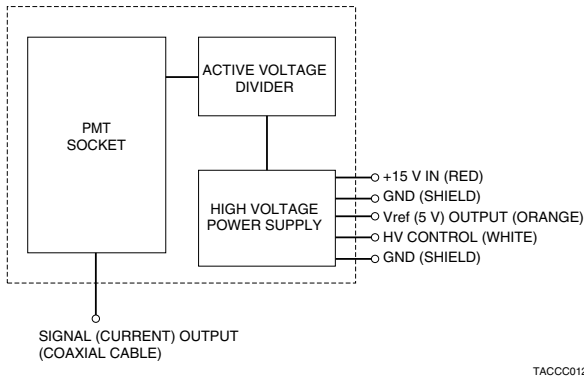


Figure 3: High Voltage Controlling Characteristic

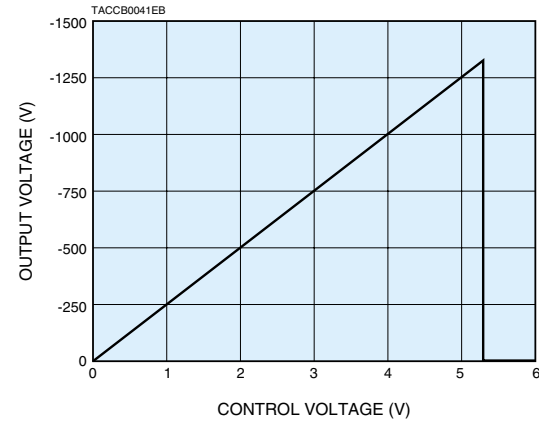


Figure 4: Linearity Characteristics

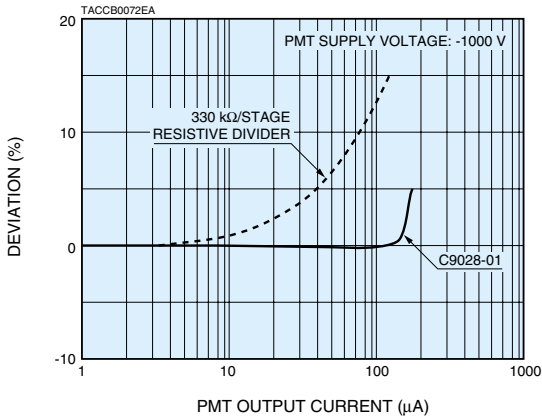


Figure 5: Practical PMT Output Limits

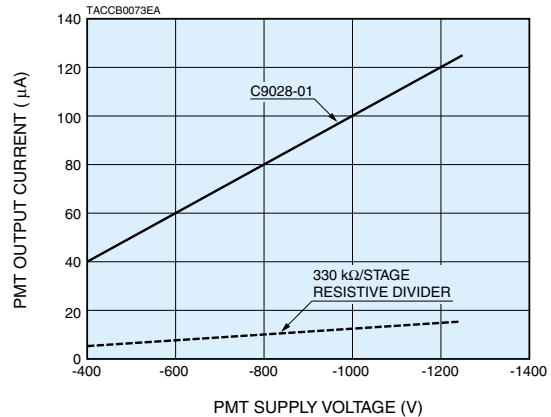
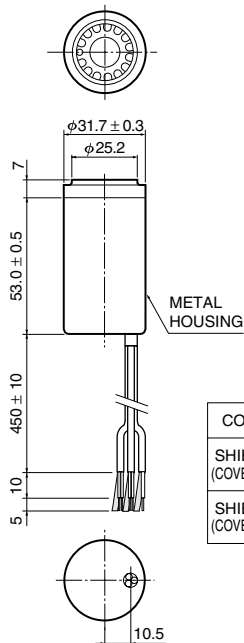
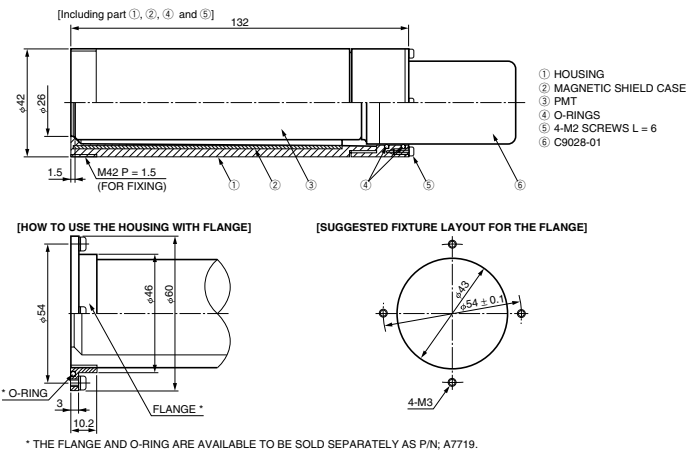


Figure 6: Dimensional Outline (Unit: mm)



HOUSING E7718 (SOLD SEPARATELY)



HAMAMATSU

WEB SITE www.hamamatsu.com

HAMAMATSU PHOTONICS K.K., 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, 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 Hersching 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 Trappu, 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