

OVERVIEW

The C12929 is a high voltage power supply unit for Hamamatsu R10467U/R11322U/H13223, Hybrid Photo-detector (HPD) series and its family products. The C12929 provides both photocathode high voltage and target avalanche diode reverse bias voltage which are required to operate HPDs. For the photocathode high voltage, the C12929 can supply up to -8500 V and ± 500 V for the avalanche diode reverse bias voltage. Users can control these voltages by using switches on the front panel of C12929, or by using the remote control connector on the backside of the C12929.



FEATURES

- High stability
- Two power lines, high voltage and diode bias
- Output voltage and their ON/OFF can be controlled externally

SPECIFICATIONS

Parameter		Value	Unit
Input voltage		AC100 to AC240 ± 10 % (50 Hz / 60 Hz)	V
Power consumption		25	VA
Output	Diode bias voltage	Variable output voltage range	0 to ± 500
		Output current	Max. 500
		Load regulation	Typ. ± 0.01
		Ripple / Noise (p-p)	Typ. 0.003
		Connector	LEMO (ERN.00.250.CTL)
	High voltage	Variable output voltage range	0 to -8500
		Output current	Max. 16
		Load regulation	Typ. 50
		Ripple / Noise (p-p)	Typ. 50
		Connector	AMP 5-830395-1
Fuse		250 V, 1 A	—
Size (W \times H \times D)		260 \times 55 \times 205	mm
Operating ambient temperature		+5 to +40	$^{\circ}$ C
Operating ambient humidity		Below 80	%
Storage temperature		-20 to +50	$^{\circ}$ C
Storage humidity		Below 80	%
Place to be used (environment)		Indoor	—
Weight		1.73	kg

HIGH VOLTAGE POWER SUPPLY FOR HPD ASSEMBLY C12929

SPECIFICATIONS

INPUT FOR REMOTE CONTROL

Parameter		Value	Unit
LOCAL	Max.	12 (L=REM)	V
BIAS ON/OFF	Max.	12 (L=ON)	V
BIAS POLARITY	Max.	12 (L=NEG)	V
High voltage ON/OFF	Max.	12 (L=ON)	V
BIAS output voltage control		0 to 5 (output voltage 0 to 500 V)	V
BIAS controlling voltage input impedance		1	MΩ
Output voltage control		0 to 4.25 (output voltage 0 to -8500 V)	V
Controlling voltage input impedance		1	MΩ
Connector		D-sub 9 pin receptacle	—

Figure 1: Output voltage controlling characteristics

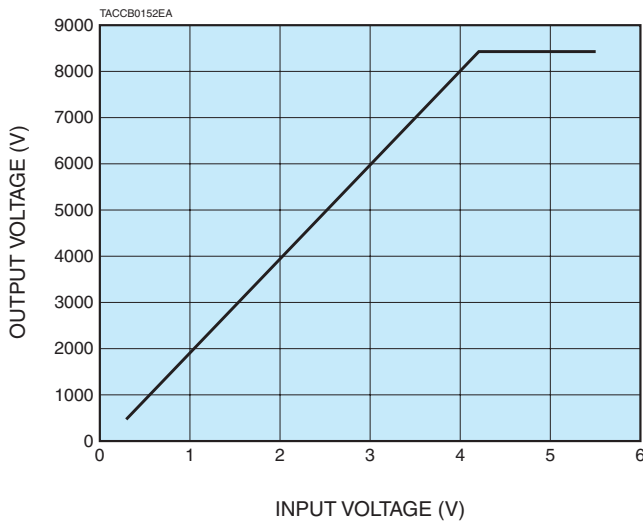
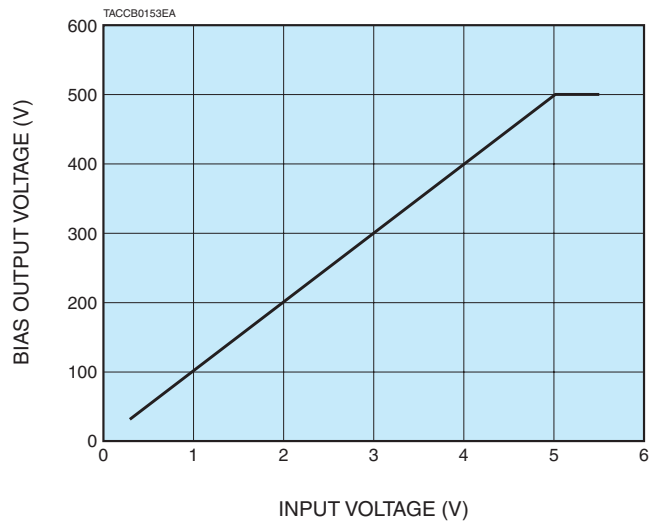
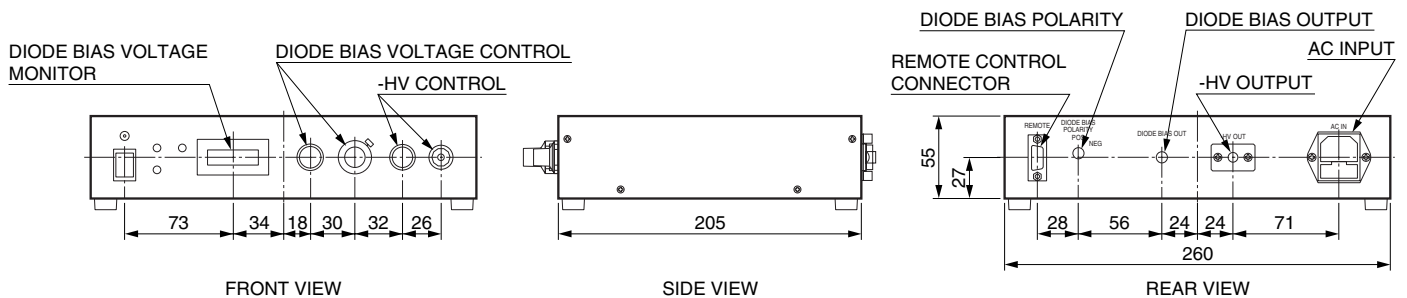


Figure 2: BIAS output voltage controlling characteristics



DIMENSIONAL OUTLINES (Unit: mm)



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