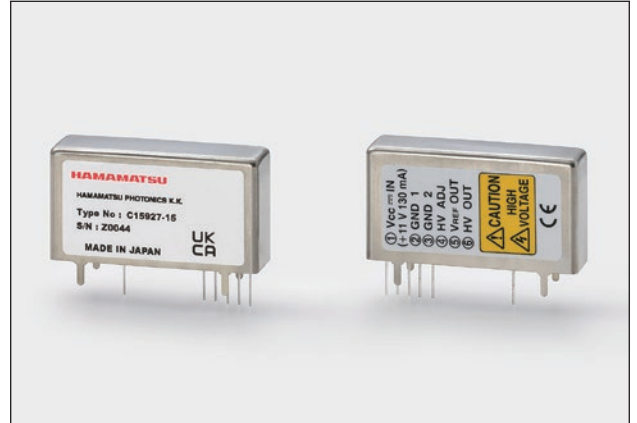


The C15927-15 is a PC-board mountable high voltage power supply, especially designed for photomultiplier tubes. The design offers high speed response.

## FEATURES

- Wide input voltage range
- Low ripple / noise
- Very compact and lightweight
- High stability
- Wide operating ambient temperature
- Low power consumption
- High speed response



Left: Front view, Right: Rear view



## SPECIFICATIONS

Parameter	Description / Value	Unit
Input voltage range	+11 to +16	V
Input current <sup>(A)</sup>	with no load Typ.	35
	with full load <sup>(B)</sup> Typ.	125
Variable output voltage range	0 to -1250	V
Specification guaranteed output voltage range <sup>(C)</sup>	-200 to -1250	V
Output current	Max.	0.5
Line regulation against +11 V to +16 V input change <sup>(A)(D)</sup>	Typ.	±0.01
Load regulation against 0 % to 100 % load change <sup>(A)</sup>	Typ.	±0.01
Ripple / Noise (p-p) <sup>(A)(D)</sup>	Typ.	0.003 (38 mV)
Output voltage control	By external controlling voltage (0 V to +5 V) or external potentiometer (50 kΩ ± 2.5 kΩ)	
Controlling voltage input impedance	Typ.	75
Reference voltage output	Typ.	+5.1 (with 50 kΩ external potentiometer)
Output voltage setting (Absolute value)	Typ.	Controlling voltage × 250
Output voltage rise time (0 % → 99 %) <sup>(A)(D)</sup>	Typ.	50
Output voltage fall time (100 % → 1 %) <sup>(A)(D)</sup>	Typ.	160
Temperature coefficient <sup>(A)(D)</sup>	Typ.	±0.01
Operating ambient temperature <sup>(A)(D)</sup>		-10 to +60
Operating ambient humidity <sup>(E)</sup>		Below 80
Storage temperature		-20 to +70
Storage humidity <sup>(E)</sup>		Below 80
Weight		29
Protective functions	Protected against reversed power input, reversed / excessive controlling voltage input, continuous overloading / short circuit in output	

**NOTE:** <sup>(A)</sup>At maximum output voltage.

<sup>(B)</sup>At input voltage: +11 V.

<sup>(C)</sup>The voltage from 0 V to -200 V can be output but all characteristics are not necessarily satisfied.

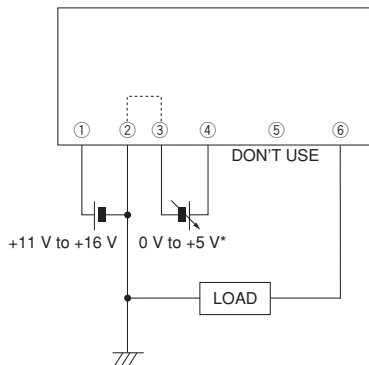
<sup>(D)</sup>At maximum output current.

<sup>(E)</sup>No condensation.

# COMPACT HIGH VOLTAGE POWER SUPPLY C15927-15

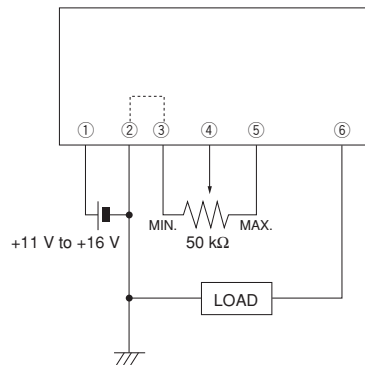
Figure 1: Connection diagrams

## ● OUTPUT VOLTAGE CONTROL BY EXTERNAL VOLTAGE



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

## ● OUTPUT VOLTAGE CONTROL BY EXTERNAL POTENTIOMETER



### PIN ASSIGNMENT

- ① Vcc IN +11 V to +16 V
- ② GND
- ③ Vcont GND
- ④ Vcont IN
- ⑤ Vref OUT +5.1 Typ.
- ⑥ HV OUT

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

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Figure 2: Output voltage controlling characteristic

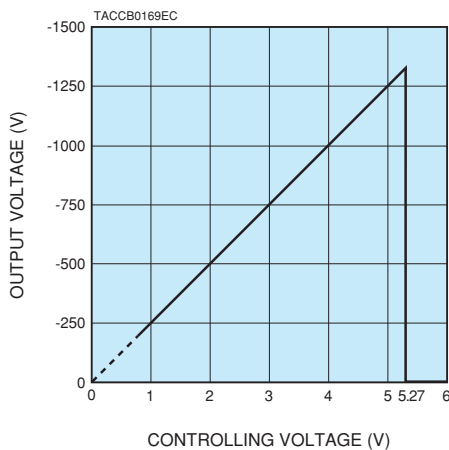
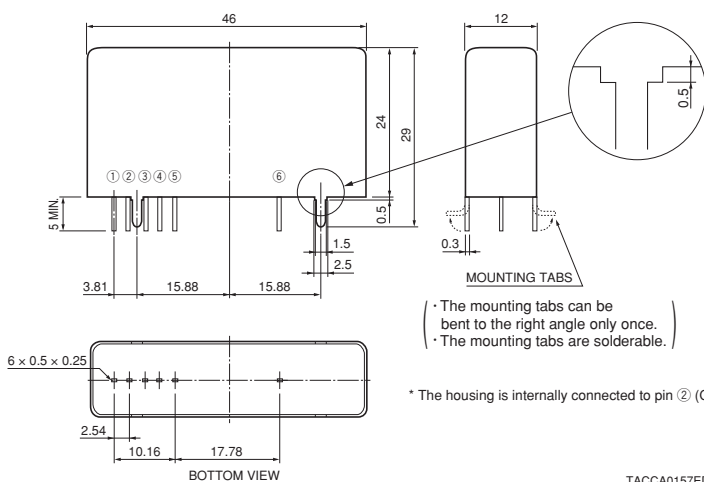
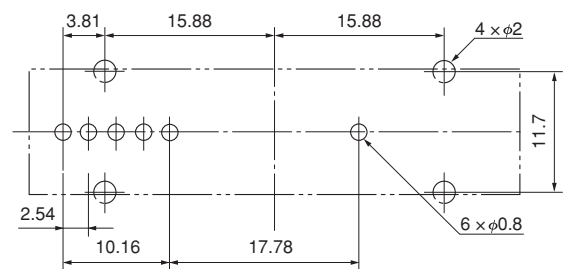


Figure 3: Dimensional outline (Unit: mm)



### Drilling data for PC board (Soldering face)



TACCA0159EC

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