

# HAMAMATSU

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## COMPACT HIGH VOLTAGE POWER SUPPLY

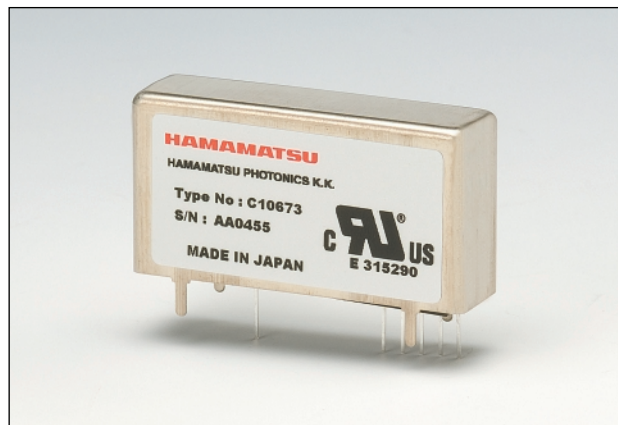
# C10673 SERIES

UL recognized (File No. E315290)

The C10673 series is an on-board type high voltage power supply unit, especially designed for photomultiplier tubes.

## FEATURES

- UL recognized
- Compact and lightweight
- High stability
- Low power consumption
- Quick response
- Ample protective functions



CE

## SPECIFICATIONS

Parameter		C10673	C10673-01	Unit
Input Voltage		+15 ± 1	+12 ± 0.5	V
Input Current <sup>(A)</sup>	with no load	Typ. 15	20	mA
	with full load	Typ. 95	100	
Variable Output Range		0 to -1250		V
Specification Guaranteed Output Voltage Range		-200 to -1250		V
Output Current	Max.	0.6	0.5	mA
Line Regulation Against ±1 V or ±0.5 V Input Change <sup>(A)(B)</sup>	Typ.	±0.01		%
Load Regulation Against 0 % to 100 % Load Change <sup>(A)</sup>	Typ.	±0.01		%
Ripple / Noise (p-p) <sup>(A)(B)</sup>	Typ.	0.01 % (125 mV)		—
Output Voltage Control		By external controlling voltage (0 V to +5 V) or external potentiometer (50 kΩ)		—
Controlling Voltage Input Impedance	Typ.	80		kΩ
Reference Voltage Output	Typ.	+5.13 V		—
Output Voltage Setting (Absolute Value)	Typ.	Controlling voltage × 250		V
Output Voltage Rise Time (0 % → 99 %) <sup>(A)(B)</sup>	Typ.	150		ms
Temperature Coefficient <sup>(A)(B)</sup>	Typ.	±0.015		% / °C
Operating Ambient Temperature <sup>(A)(B)</sup>		0 to +40		°C
Operating Ambient Humidity <sup>(C)</sup>		Below 80 %		—
Storage Temperature		-20 to +60		°C
Storage Humidity <sup>(C)</sup>		Below 80 %		—
Weight	Typ.	31		g
Protective Functions		Units protected against reversed power input, reversed / excessive controlling voltage input, continuous overloading / short circuit in output		—

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

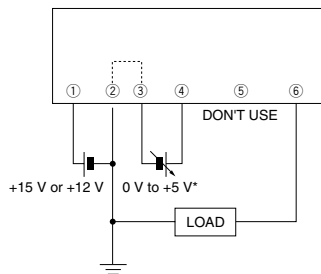
<sup>(B)</sup>At maximum output current.

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

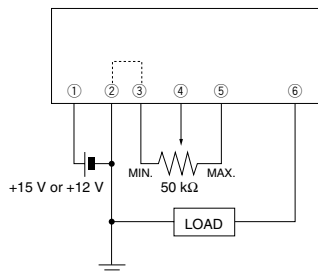
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Figure 1: Connection Diagrams

## ● Output Voltage Control By External Voltage



## ● Output Voltage Control By External Potentiometer



### PIN ASSIGNMENT

- ① Vcc +15 V or +12 V
- ② GND
- ③ Vcont GND
- ④ Vcont
- ⑤ Vref +5.13 V Typ.
- ⑥ HV OUT

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

TACCC0049ED

Figure 2: Output Voltage Controlling Characteristic

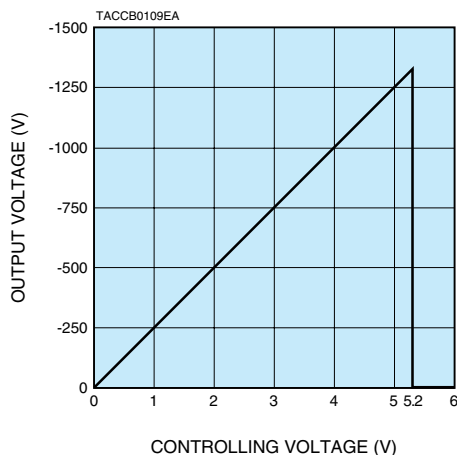
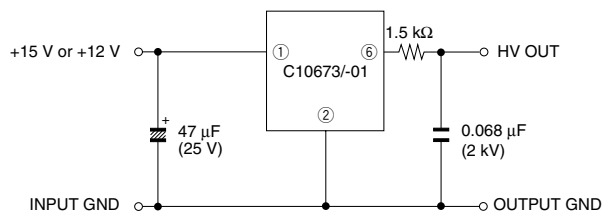


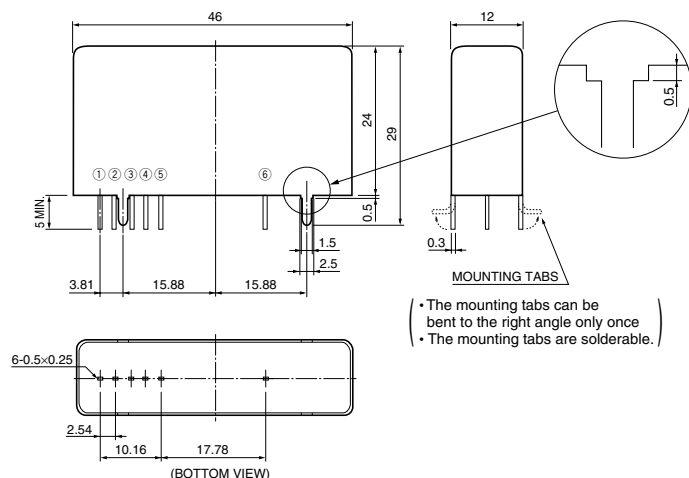
Figure 3: Example of Ripple / Noise Reduction Circuit



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

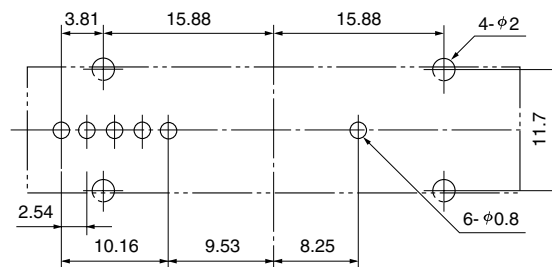
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Figure 4: Dimensional Outline (Unit: mm)



TACCA0157EC

### Drilling Data for PC Board (Soldering Face)



TACCA0159EB

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