

Miniature HV Power Supplies

TH Series 1kV to 2kV 5W

1096-03A-1



FEATURES

- Ultra-compact, PCB mountable
- Low ripple, 7mVp-p(1kV output type)
- Low Noise with metal shielded case
- High power 5W for PMT array
- Well-regulated, high performance
- Arc and continuous short circuit protection

SUMMARY

TH Series is miniaturized, well regulated high voltage power supply suitable for photomultiplier.

TH series features high power output of 5W in such a compact size, and ideal when connecting multiple PMTS. The ripple noise on output is kept very low, and has full protection for short circuit.

Output voltage (kVdc)	Output current (mA) [☆]	Model		Ripple (mVp-p)
		Positive polar output	Negative polar output	
0 to 1	5	TH-1P	TH-1N	7
0 to 1.5	3.3	TH-1.5P	TH-1.5N	10
0 to 2	2.5	TH-2P	TH-2N	15

☆ Output voltage range for this output current is 50% to 100% of maximum output voltage.

☆ Output current must be derated linearly when operating at levels below 50% of the output voltage capability.

SPECIFICATIONS

Input voltage/current	+12Vdc ±1Vdc 650mA Typ
Output control	By external 5kΩ potentiometer or external control voltage(Vcon-in) 0 to 5Vdc(Input impedance ≥ 30kΩ)
Regulation	Line : ±0.02% of max voltage for +12V±1V or +24V±5% Load : 0.02% of max voltage for full load change
Stability	0.02%/Hr 0.05%/8Hr
Temperature coefficient	0.007%/°C
Output voltage monitor	0 to +5Vdc, accuracy ±2% (output impedance 10kΩ typ)
Remote HV ON/OFF	GND=HV ON, OPEN=HV OFF
Protection	Overload, arc and continuous output short circuit
Temperature range	Operating : -10°C to +50°C Storage : -25°C to +85°C
Weight	150g approx

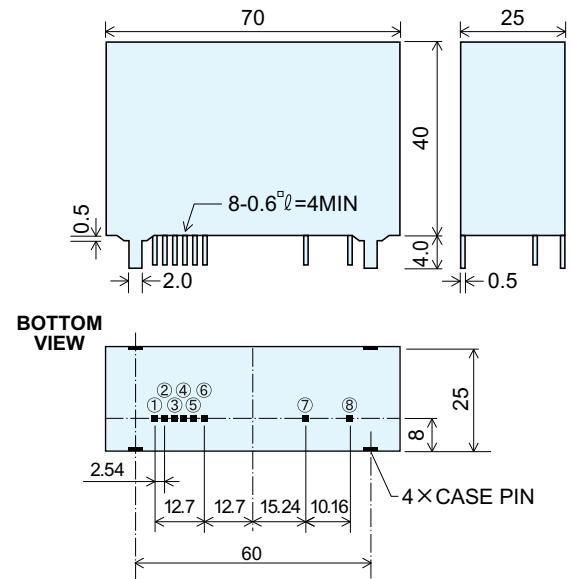
Note : • Specifications are at the maximum rated output after ½Hr warm-up.
• Specifications are subject to change without notice.

OPTION

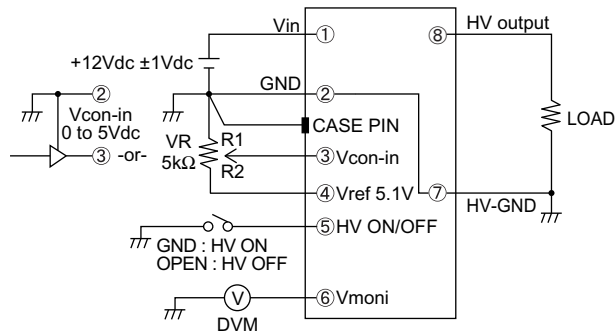
-24 Input voltage/current +24Vdc±5% 380mA Typ

*Add "-24" to the Model number at time of order.
(i.e. TH-1P-24)

DIMENSIONS mm



CONNECTION DIAGRAM



- PIN ②, ⑦ are internally connected (isolated from CASE).
- CASE PIN should be always connected to ground.
- Input impedance of Pin ③ is greater than 30kΩ.
- External potentiometer of T.C $\leq 100\text{ppm}/^\circ\text{C}$, PC $\geq 1/4\text{W}$ is recommended.
- Input voltage Vin is +24Vdc $\pm 5\%$ for model with -24 option.

CHARACTERISTICS OF OUTPUT VOLTAGE SETTING

