

PMT HV Power Supply



TG Series

01.085.05|44-1



FEATURES

- The smallest ultra compact on-board module
- Low ripple, 5mVp-p(1kV output type)
- Wide output voltage range(Linearly variable from 0V)
- High performance in such a compact case
- External potentiometer or external control voltage programming

SUMMARY

TG series is miniaturized, well regulated high voltage power supply designed for PMT application. Its high reliability and low noise features are ideal for PMT or MCP applications.

LINE UP

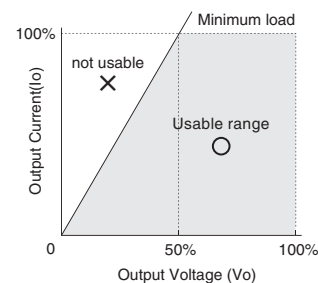
Output Voltage (kVdc)	Output		MODEL		Ripple (mVp-p)
	Output Current(mA)	Minimum load* (Ω)	Positive polar output	Negative polar output	
0 to 0.2	7.5	15k	TG-0.2P- *1	TG-0.2N- *1	10
0 to 0.5	3	90k	TG-0.5P- *1	TG-0.5N- *1	10
0 to 1	1.5	350k	TG-1P- *1	TG-1N- *1	5
0 to 1.25	1.2	550k	TG-1.25P- *1	TG-1.25N- *1	7
0 to 1.5	1	750k	TG-1.5P- *2	TG-1.5N- *2	10
0 to 2	0.7	1.5M	TG-2P- *2	TG-2N- *2	20

* : Rated output current is not to be drawn at low output voltage range. See output range below. [NOTE] For extra safety ground the case and ②terminal when operation.
 *1 Specify input voltage, "5" for 5Vdc, "12" for 12Vdc, "15" for 15Vdc. *2 Specify input voltage, "12" for 12Vdc, "15" for 15Vdc.

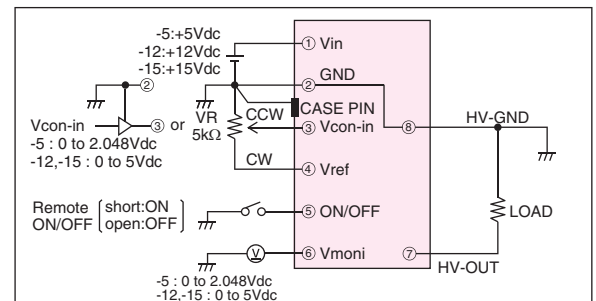
SPECIFICATIONS

Input voltage/current	-5: +5Vdc $\pm 5\%$ 550mA typ. -12: +12Vdc ± 1 Vdc 230mA typ. -15: +15Vdc ± 1 Vdc 180mA typ.
Output control	By external potentiometer or external control voltage(Vcon-in) (-5 : 0 to 2.048Vdc -12,-15 : 0 to 5Vdc Input impedance: 100kΩ)
Regulation	Line : $\pm 0.001\%$ (-5 : for $\pm 5\%$ input voltage change -12,-15 : for ± 1 V input voltage change) Load : -12, -15 : 0.005%, -5 : 0.03% (for 10 to 100% load change)
Stability	0.02%/Hr
Temperature coefficient	25ppm/°C typ.
Setting voltage accuracy	$\pm 2\%$ (at maximum output Vcon-in)
Reference voltage	-5 : 2.048V $\pm 1\%$ -12,-15 : 5V $\pm 1\%$
Voltage monitor	-5 : 0 to 2.048Vdc -12,-15 : 0 to 5Vdc (output impedance: 10kΩ)
Remote ON/OFF	By contact signal(Open: OFF, Short: ON)
Protection	Reversible input connection,(-12,-15) Intermittent output short circuit(-5,-12,-15)
Temperature range	Operation : -10°C to +50°C, Storage : -25°C to +85°C
Weight	40g(approx.)

OUTPUT RANGE

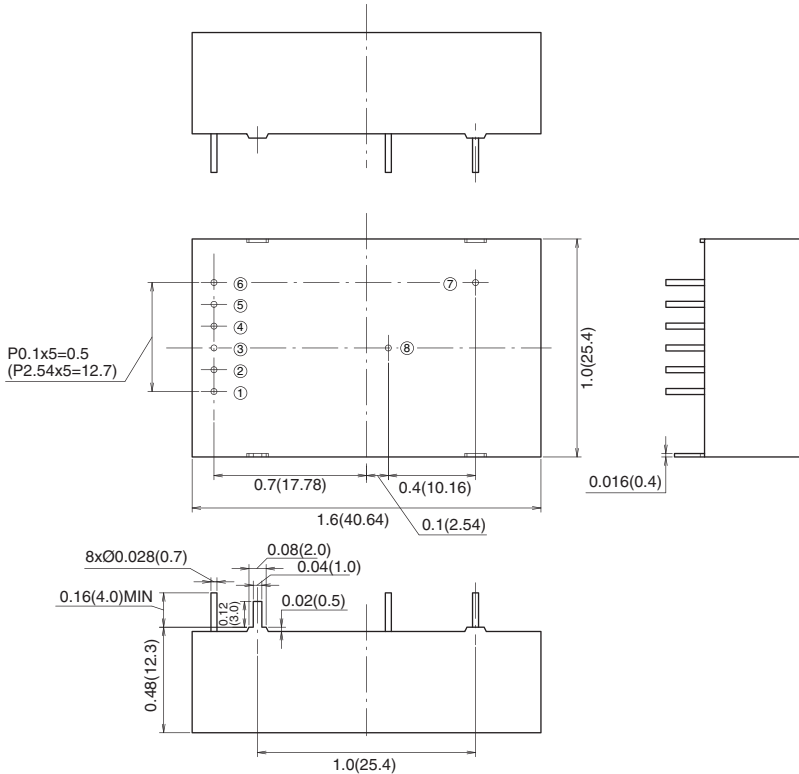


CONNECTION DIAGRAM



- 1.Pin ② and ⑧ are internally connected(isolated from CASE)
- 2.CASE PIN should be always connected to ground.
- 3.Use potentiometer of low Temp.Coefficient or metal film resistor for external VR.

DIMENSIONS inch (mm)



Warranty

We warrant that products contained in this catalog (hereinafter, the "Products") are free from defects in material and workmanship under normal use for a period of one (1) year from the date of shipment thereof. However, the warranty period for X-ray detectors and X-ray source shall be either one (1) year from the date of shipment or 1,000 hours, whichever shorter. The above warranty shall not apply to any Product which, at our sole judgment, has been: i) Repaired or altered by persons unauthorized by us; or ii) Connected, installed, adjusted or used otherwise than in accordance with the instructions furnished by us (including being used in an inappropriate installation environment, such as in corrosive gas, high temperature and humidity). We are not liable for any loss, damage or failure of the Products after the shipment thereof caused by external factors such as disasters. If any Product is shown to be defective as satisfactory to us, we, at our sole discretion, repair or replace such defective Products at no cost to the purchaser. We assume no liability to the purchaser or any third party for special, incidental, consequential, or other damages resulting from a breach of the foregoing warranty. This warranty excludes any and all other warranties not set forth herein, express or implied, including without limitation the implied warranties of merchantability or fitness for a particular purpose. The Products are not designed and produced for such applications as requiring extremely high reliability and safety, or involving human lives (such as nuclear power, aerospace, social infrastructure facility, medical equipment, etc.). The use under such environment is not covered by this warranty and may require additional design and manufacturing processes. Regarding RoHS compliance, Matsusada Precision Inc. does not intentionally use objectionable substances in the products listed within this catalog. Matsusada Precision Inc. manufactures products using components which, according to our suppliers, are "RoHS compliant parts". However, Matsusada Precision does not analyze each and every unit to confirm. Therefore, there may be some customized products which do not comply to RoHS. Please contact your nearby sales office for confirmation.



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