

1kV – 2kV, 1.5W
ULTRA COMPACT, LOW RIPPLE
HIGH VOLTAGE POWER SUPPLIES FOR PMT



FEATURES

- Ultra-compact, PCB mountable
- Low ripple, 5mVp-p(1kV output type)
- Low Noise due to metal shielding
- Well-regulated, high performance
- External potentiometer or external control voltage programming
- Arc and continuous short circuit protection
- NRTL(UL1950), TÜV, CE approved

SUMMARY

TA and TC Series are miniaturized, well regulated high voltage power supplies suitable for photomultiplier. They feature exceptionally low noise, external potentiometer or voltage control and fully protection against arc and continuous output short circuit.

Output voltage (kVdc)	Output current (mA) [☆]	Model(*Specify "12" for 12Vdc, "15" for 15Vdc input.)				Ripple (mVp-p)
		Positive polar output		Negative polar output		
0 to 1	1.5	TA-1P-*	TC-1P-*	TA-1N-*	TC-1N-*	5
0 to 1.5	1	TA-1.5P-*	TC-1.5P-*	TA-1.5N-*	TC-1.5N-*	7
0 to 2	0.7	TA-2P-*	TC-2P-*	TA-2N-*	TC-2N-*	10

☆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

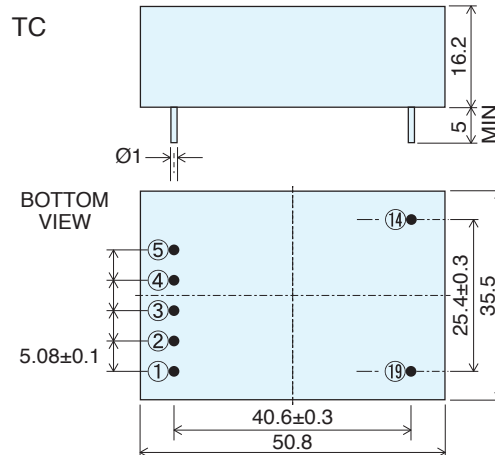
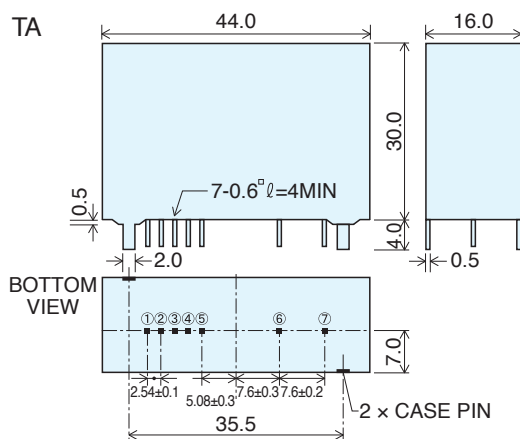
Input voltage/current	+12Vdc ±1Vdc 230mA Typ +15Vdc ±1Vdc 180mA Typ
Output control	By external 5kΩ potentiometer or external control voltage(Vcon-in) 0 to 6Vdc(Input impedance 0 ≥ 30kΩ)
Regulation	Line : ±0.02% of max voltage for Vin ±1V Load : 0.02% of max voltage for full load change
Stability	0.02%/Hr 0.05%/8Hr
Temperature coefficient	0.007%/°C
Protection	Overload, arc and continuous output short circuit
Temperature range	Operating : -10°C to +50°C Storage : -25°C to +85°C
Weight	60g approx

Note : • Specifications are at the maximum rated output after ½Hr warm-up.

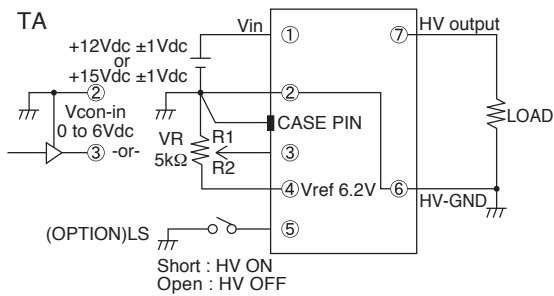
OPTIONS

LS : remote HV ON/OFF
 Enable to HV ON/OFF with contact signal.
 When open collector,
 ON ≤ 0.3V(Low)
 OFF ≥ 2V(High)
 Add LS to the model number.
 i.e. : TA-1P-12LS, TC-1.5N-15LS

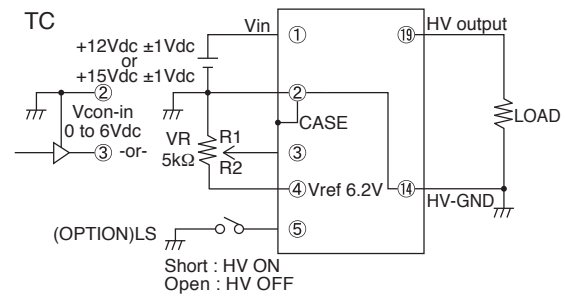
DIMENSIONS mm



CONNECTION DIAGRAM

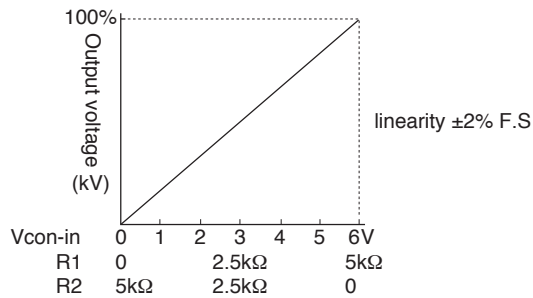


- PIN ②, ⑥ are internally connected (isolated from CASE).
- CASE PIN should be always connected to ground.
- Input impedance of Pin ③ is greater than 30kΩ
- External potentiometer of T.C ≤ 100ppm/°C, PC ≥ ¼W is recommended.

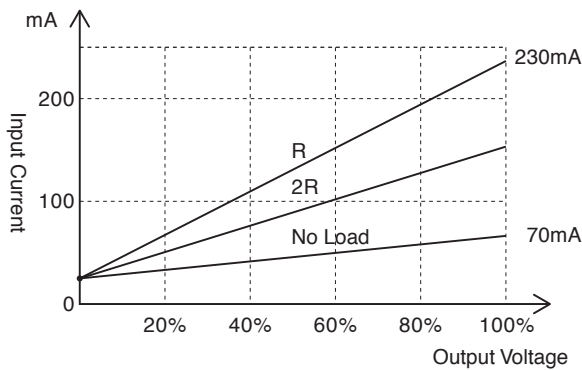


- PIN ②, ⑭ and CASE are internally connected.
- Input impedance of Pin ③ is greater than 30kΩ
- External potentiometer of T.C ≤ 100ppm/°C, PC ≥ ¼W is recommended.

CHARACTERISTICS OF OUTPUT VOLTAGE SETTING



INPUT CURRENT



- It is TYP value in 12V input type.
- The 15V input type makes the current value to be 80%.

$$R = \frac{V_{o \max}}{I_{o \max}}$$