

Temperature Compensation PCB Mountable

High Voltage Power Supplies

TR Series for APD 50V to 500V

1036-02P



FEATURES

- Built-in temperature compensation circuit
- +5 volt operation
- Low ripple noise
- Remote programmable
- Continuous output short circuit protected

SUMMARY

TR Series are temperature compensated DC-DC converters ideally suited for biasing APD and photodetectors.

The bias voltage is compensated with signal from sensing diode which should be thermo-coupled directly to the APD to keep the APD gain constant.

Output voltage (Vdc)	Model		Rated load	Ripple	Input current
	Positive polar	Negative polar			
0 to 50	TR-0.05P	TR-0.05N	50k Ω	Less than 10mVp-p	50mA
0 to 100	TR-0.1P	TR-0.1N	100k Ω		65mA
0 to 200	TR-0.2P	TR-0.2N	200k Ω		90mA
0 to 300	TR-0.3P	TR-0.3N	300k Ω		120mA
0 to 500	TR-0.5P	TR-0.5N	1M Ω	Less than 20mVp-p	150mA

SPECIFICATIONS

Input Voltage	+5Vdc \pm 5%
Output Voltage Control	By an external potentiometer of 5k Ω or by an external voltage control (Vcon-in) 0 to 3V. (Input imped. 10k Ω)
Regulation	Line : 0.01% of max voltage for Vcc \pm 5% Load : 0.01% of max voltage for load change of 100%
Temp. coefficient	0.01%/ $^{\circ}$ C (Without temperature compensation)
Temp. compensation	By an external potentiometer of 1k Ω 0 to 0.5V/ $^{\circ}$ C for 50V, 100V output model 0 to 1V/ $^{\circ}$ C for 200V, 300V output model 0 to 2.5V/ $^{\circ}$ C for 500V output model
Protection	Continuous output short circuit.
Temp. range	-10 to 60 $^{\circ}$ C
Weight	60g

DIMENSIONS mm

35.5W \times 50.8L \times 15.2H