

**50V – 300V
MINIATURE SIZE, PCB MOUNTABLE
HIGH VOLTAGE POWER SUPPLIES FOR APD**

 Matsusada Precision



■ FEATURES

- Miniature size, PCB mountable
- Low ripple, < 10mVp-p
- Output voltage controlled by remote control voltage
- EMI/RFI shielded
- Continuous output short circuit protected
- UL60950 CSA60950(C-UL), CE certified

■ SUMMARY

TS Series is a high voltage DC-DC converter ideally suited for biasing Avalanche Photodiodes(APDs) and Photodetectors.

This series features exceptionally low ripple and noise, remote voltage control and continuous output short circuit protection.

Output voltage	Model		Rated load	Ripple	Input current
	Positive polarity	Negative polarity			
0 to 50Vdc	TS-0.05P	TS-0.05N	50kΩ	Less than 10mVp-p	40mA
0 to 100Vdc	TS-0.1P	TS-0.1N			50mA
0 to 200Vdc	TS-0.2P	TS-0.2N			50mA
0 to 250Vdc	TS-0.25P	TS-0.25N			70mA
0 to 300Vdc	TS-0.3P	TS-0.3N			70mA

■ SPECIFICATIONS

Input Voltage 12V ± 1Vdc

Output Control Remote control voltage(Vcon-in)
0 to 10Vdc(Input impedance : 10kΩ)

Regulation Line : 0.3% of max voltage for $V_{cc} \pm 1V$
Load : 2% TYP of max voltage for load change of 10%

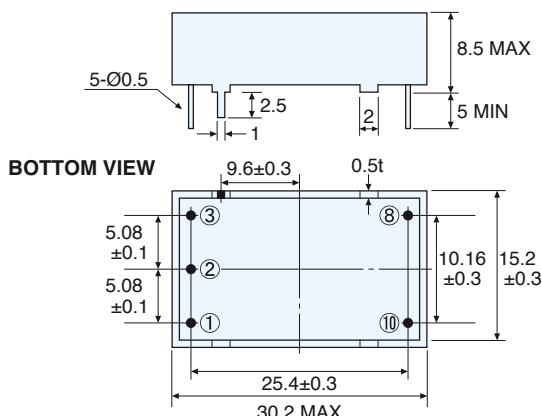
Temp Coef 0.05%/°C TYP(0°C to 50°C)

Protection Continuous output short circuit

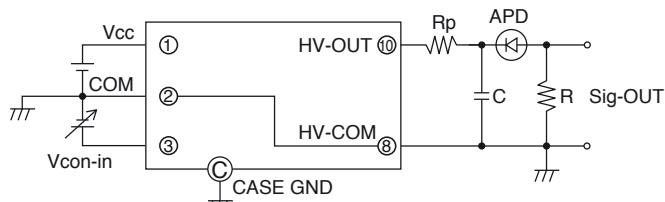
Temp Range Operating : -10 to 60°C
Storage : -20 to 70°C

Weight 20g Approx

■ DIMENSIONS (mm)



■ CONNECTION DIAGRAM



*PIN② and ⑧ are internally connected, while isolated from case GND.

*Recommend to use R_p for protection, and C for high speed application.

$R_p = 100k\Omega$, $C = 1nF$ is typical

■ INPUT/OUTPUT PROPORTIONAL CHARACTERISTIC

