

# K3-R series

—  $\pm 1\text{kV}$  to  $\pm 10\text{kV}/3\text{W}$   
Reversible Polarity—

- > Ideal for SEM · MASS
- > Ultra low noise 0.001%p-p
- > High stability 0.001%/5min
- > Output polarity change by external signal
- > Output voltage monitor



APPLICATIONS
* Electron Beam / Ion Beam
* MASS Spectrometry
* Electron Microscope
* Electrophoresis / Bio
* Precise HV inspection

## SUMMARY

The K3-R series is an ultra low noise, highly stable HV power supply in a compact size. The output polarity can be switched using an external signal.

## LINEUP

Output Voltage	Output Current	Model	Ripple(p-p)
0kV to $\pm 1\text{kV}$	3mA	K3-1R	10mV
0kV to $\pm 2\text{kV}$	1.5mA	K3-2R	20mV
0kV to $\pm 5\text{kV}$	600 $\mu\text{A}$	K3-5R	50mV
0kV to $\pm 10\text{kV}$	300 $\mu\text{A}$	K3-10R	100mV

## SPECIFICATIONS

- Input Voltage** +24Vdc  $\pm 1\text{Vdc}$
- Input Current** 0.5A typ.
- Output Voltage Control** External voltage source(Vcon) 0Vdc to 10Vdc
- Reverse Polarity Control** TTL level signal or open / short contact signal (Hi-Positive, Lo-Negative) Reversing time 2 sec typ.
- Line Regulation**  $\pm 0.001\%$  of max for  $\pm 1\text{V}$  input change
- Load Regulation**  $\pm 0.001\%$  of max for 50 to 100% load change
- Stability** 10ppm/5min, 50ppm/Hr
- Temperature Coef.** 25ppm/ $^{\circ}\text{C}$
- Monitor** Voltage : 0Vdc to  $\pm 10\text{Vdc}$
- Input terminal** 8 pin connector  
Mating connector and pins are assorted  
\*Crimp Tooling for Molex crimp terminal 2478, 2578  
(Input wire recommendation for all model :  
wire for pin ①, ② are AWG18  
wire for pin ③ to ⑧ are AWG22 to 18)
- Output** HV shielded cable 50cm(1.6 feet)
- Protection** short circuit
- Temperature range** Operating :  $0^{\circ}\text{C}$  to  $50^{\circ}\text{C}$   
Storage :  $-20^{\circ}\text{C}$  to  $60^{\circ}\text{C}$
- Humidity** 20 to 80%RH(no condensation)

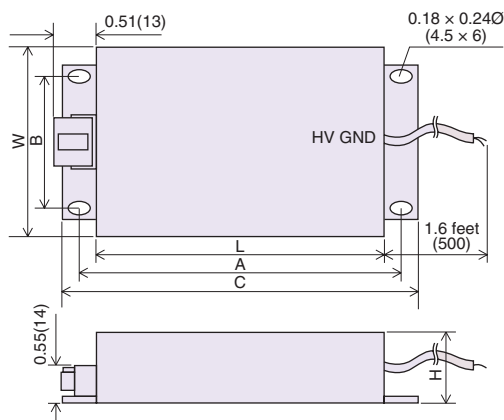
Note : These specifications are at the maximum rated output after a 4H warm-up period.

## OPTION

**CN8R** Assembled input connector(accessory)  
(connector with 25cm flying leads)

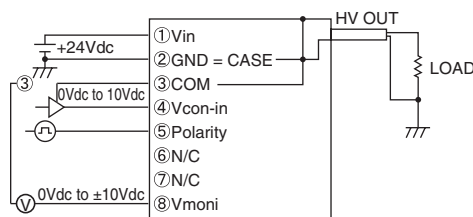
Lower ripple, higher stability, and higher temperature coefficient options are available. Please consult factory.

## DIMENSIONS inch(mm)



Output Voltage	A	B	C	W	L	H
0kV to 5kV	7.68 (195)	3.54 (90)	8.07 (205)	4.72 (120)	7.28 (185)	1.69 (43)
10kV	7.68 (195)	4.8 (122)	8.07 (205)	5.98 (152)	7.28 (185)	1.69 (43)

## CONNECTION DIAGRAM



 **Matsusada Precision Inc.**

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San Jose Office : 2570 N.First Street Suite 200 San Jose, CA 95131  
Tel: +1-408-273-4573 Fax: +1-408-273-4673

Dallas Office : 5430 LBJ Freeway, Suite 1200 Dallas, TX 75240  
Tel: +1-972-663-9336 Fax: +1-972-663-9337

International Office : Osaka-City, Osaka Japan  
Tel: +81-6-6150-5088 Fax: +81-6-6150-5089

New York Office : 80 Orville Drive Suite 100 Bohemia, NY 11716  
Tel: +1-631-244-1407 Fax: +1-631-244-1496

Headquarters : 745 Aoji-cho Kusatsu Shiga 525-0041 Japan  
Tel: +81-77-561-2111 Fax: +81-77-561-2113