

K12-R series ■■■

— $\pm 10\text{kV}$ to $\pm 30\text{kV}/12\text{W}$
Reversible Polarity—

- > Ideal for SEM · MASS
- > High stability 0.001%/5min
- > Ultra low noise
- > Output polarity change by external signal
- > Output voltage monitor
- > Constant current control is available(option)

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



SUMMARY

The K12-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

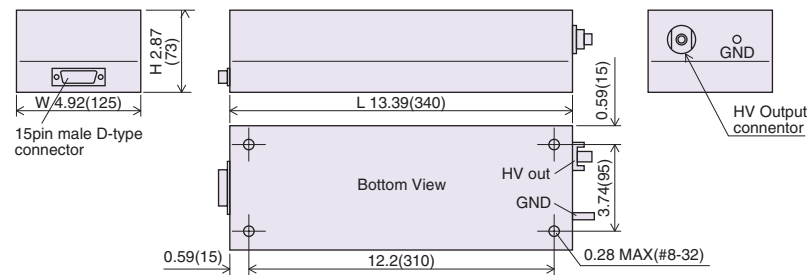
Output Voltage	Output Current	Model	Ripple(p-p)
0 to $\pm 10\text{kV}$	1.2mA	K12-10R	70mV
0 to $\pm 15\text{kV}$	800 μA	K12-15R	70mV
0 to $\pm 20\text{kV}$	600 μA	K12-20R	70mV
0 to $\pm 30\text{kV}$	400 μA	K12-30R	70mV

SPECIFICATIONS

Input Voltage	+24Vdc $\pm 1\text{V}$
Input Current	1.3A typ.
Output Voltage Control	0 to 10Vdc
Reverse Polarity Control	TTL (Reversing time 1.2sec 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 (after 3Hr warm-up) 100ppm/Hr (after 1/2Hr warm-up)
Temperature Coef.	25ppm/ $^{\circ}\text{C}$
Monitors	Voltage : 0 to 10Vdc Current : 0 to 10Vdc
Protection	Overvoltage and short circuit
Temperature range	Operating : 0 to 40 $^{\circ}\text{C}$ Storage : -20 to 60 $^{\circ}\text{C}$
Accessory	HV flying lead with HV-PLUG(3.3feet : 1m length) Mating signal connector(15pin female D-type)
Humidity	20 to 80%RH(no condensation)

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

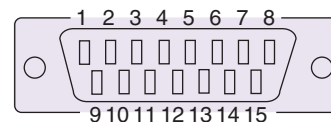
DIMENSIONS inch(mm)



OPTION

- LCs · CV/CC Control(automatic crossover)
- Control mode(CV/CC) status output
- With reference voltage external potentiometer can be used.
- Local potentiometer for CV/CC.

D-Sub CONNECTOR ASSIGNMENT



- 1 Int. pott cv *
 - 2 Output Voltage Control 0 to 10V
 - 3 Int. pott cc *
 - 4 Output Current Control 0 to 10V *
 - 5 Output Voltage Monitor 0 to 10V
 - 6 Reverse Polarity
TTL "Hi" is Positive
TTL "Lo" is Negative
 - 7 COM(for PIN 2, 4, 5, 6, 11, 12, 13, 14)
 - 8 +24V DC Input Return
 - 9 +24V DC Input
 - 10 +24V DC Input Return
 - 11 CV/CC Status *
 - 12 HV ON/OFF(GND = ON, OPEN = OFF)
 - 13 Output Current Monitor 0 to 10V
 - 14 Ref.+10V out *
 - 15 +24V DC Input
- * : Only for unit with -LCs option.



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