



ISO9001:2015

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- HIGH STABILITY:10PPM/HR
- ULTRA LOW NOISE 10PPM
- ULTRA LOW TEMPERATURE COEFFICIENT 10PPM/°C
- SIX-SIDED SHIELDED
- EXTERNAL POTENTIOMETER OR AN EXTERNAL VOLTAGE REFERENCE
- CUSTOMIZATION AVAILABLE



CE

60X40X17

INTRODUCTION

Wiseman's MDA series of high voltage 1~5W micro-modules that provide output voltages ranging from 0.3kV to 30kV. MDA modules are compact six-sided shielded modules with ultra-low noise, high stability and ultra-low temperature coefficient. All models are provided with external potentiometer or an external voltage monitoring panel. This series modules have protection functions including over current protection, arc fault protection and short circuit protection.

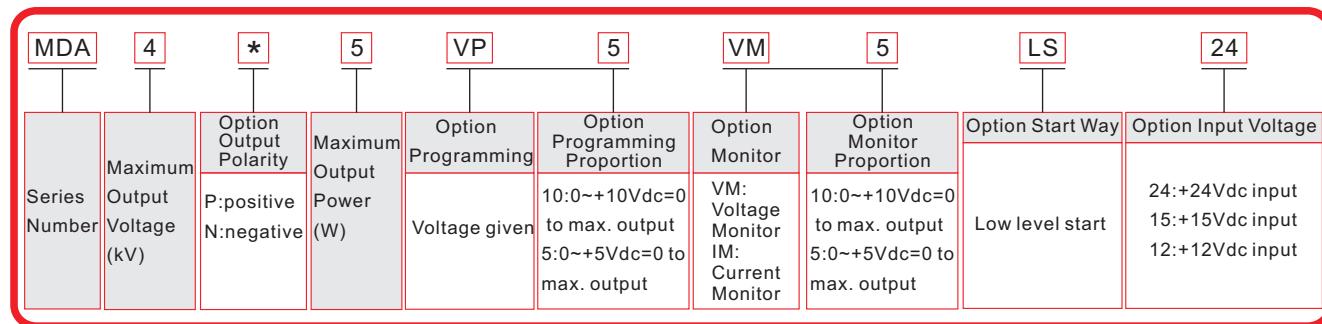
TYPICAL APPLICATIONS

Mass spectrometry photomultiplier tubes (PMT), solid state detectors, Piezo crystal devices, ultrasonic transducers, microchannel plates (MCP), spectroscopy, scintillation counters, electron multiplier detectors, nuclear Instruments, electrophoresis, semiconductor testing, DNA sequencing, radiation counter, electron and ion beams, electrostatic chuck, high voltage, bias hipot testing, precision lenses, image intensifiers, semiconductor testing, chemical applications, laboratory applications, industrial application supplies.

MDA SELECTION TABLE

kV	mA	P(W)	MODEL	kV	mA	P(W)	MODEL	kV	mA	P(W)	MODEL	kV	mA	P(W)	MODEL
0.3	3.3	1	MDA 0.3*1	1	1	1	MDA 1*1	1.5	0.67	1	MDA 1.5*1	2.5	0.4	1	MDA 2.5*1
	6.7	2	MDA 0.3*2		2	2	MDA 1*2		1.33	2	MDA 1.5*2		0.8	2	MDA 2.5*2
	10	3	MDA 0.3*3		3	3	MDA 1*3		2	3	MDA 1.5*3		1.2	3	MDA 2.5*3
	13	4	MDA 0.3*4		4	4	MDA 1*4		2.67	4	MDA 1.5*4		1.6	4	MDA 2.5*4
	16.7	5	MDA 0.3*5		5	5	MDA 1*5		3.33	5	MDA 1.5*5		2	5	MDA 2.5*5
0.5	2	1	MDA 0.5*1	1.25	0.8	1	MDA 1.25*1	2	0.5	1	MDA 2*1	3	0.33	1	MDA 3*1
	4	2	MDA 0.5*2		1.6	2	MDA 1.25*2		1.1	2	MDA 2*2		0.67	2	MDA 3*2
	6	3	MDA 0.5*3		2.4	3	MDA 1.25*3		1.5	3	MDA 2*3		1	3	MDA 3*3
	8	4	MDA 0.5*4		3.2	4	MDA 1.25*4		2	4	MDA 2*4		1.25	4	MDA 3*4
	10	5	MDA 0.5*5		4	5	MDA 1.25*5		2.5	5	MDA 2*5		1.67	5	MDA 3*5

MDA SELECTION EXAMPLE



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MICRO-MODULES

MDA SPECIFICATIONS

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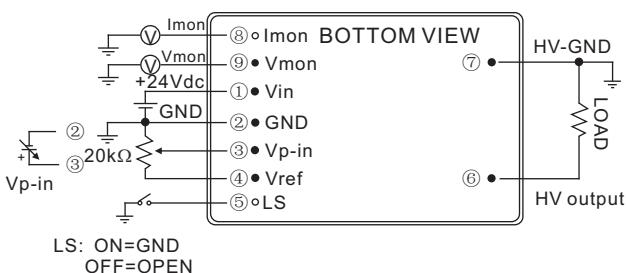
MICRO-MODULES

PARAMETER	DESCRIBE
Input Voltage	+24Vdc± 2%, input current≤500mA. +15Vdc± 2% ,+12Vdc± 2% Input voltage.
Output	0.3kV, 0.5kV, 1kV, 1.25kV, 1.5kV, 2kV, 2.5kV, 3kVMultiple high voltage output options.
Stability	0.001%/hr after a 30 minute warm-up period.
Temperature Coefficient	≤10ppm/°C.
Ripple	0.001% p-p of maximum output voltage. 0.001% p-p of maximum output voltage.
Voltage Programming	By external 20kΩ potentiometer or external voltage control(Vp-in) 0 ~+5 Vdc. Zin = 100kΩ
Voltage Monitor	0 ~+5Vdc=0 to 100% output. Zout = 20kΩ. Accuracy=± 1% .
Voltage Line Regulation	±0.001% for ±2% change in input voltage.
Voltage Load Regulation	±0.01% of MAX output voltage, no load to full load.
Operating Temperature	0°C~+50°C. (-55°C~+125°C can be customized)
Storage Temperature	-40°C~+85°C.
Humidity	0%~90% RH, non-condensing.
Cooling	Convection cooled.
Dimensions	2.36" Dx 1.57" W x 0.67" H (17mm x 40mm x 60mm).
Weight	65g.

MDA PIN INFORMATION

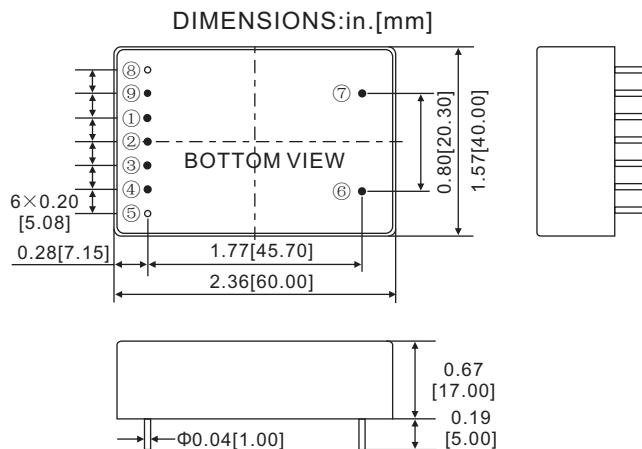
PIN	DESCRIPTION
1	Power Input+15Vdc ± 2%,Option+24Vdc ± 2%, +12Vdc ± 2%.
2	Power/Signal GND
3	Control Voltage Input,0 to 5Vdc=0 to max,Zin=100kΩ.
4	+5Vdc Reference
5	LS:ON=GND,OFF=OPEN(OPTION)
6	High Voltage Output
7	High Voltage GND
8	Output Current Monitor(OPTION)
9	Output Voltage Monitor(OPTION)

MDA CONNECTION DIAGRAM



1. PIN ②, ⑦ and case are internally connected, and should be always grounded.
 2. External potentiometer of T.C \leq 100ppm/ $^{\circ}$ C, PC \geq 1/4W is recommended.
 3. ⑤, ⑧, are for option.

MDA DIMENSIONS



CHARACTERISTICS OF OUTPUT VOLTAGE SETTING

