

- **ULTRA COMPACT, HIGH POWER**
- **LOW RIPPLE, HIGH STABILITY**
- **HIGH RELIABILITY**
- **EXTERNAL OR INTERNAL POTENTIOMETER FOR VOLTAGE CONTROL**
- **OUTPUT POWER : 6W~30W**
- **CUSTOMIZATION AVAILABLE**

INTRODUCTION

Wisman's MUA series of printed circuit board mounted high-voltage modules is currently ahead of the market in terms of product appearance and power density. These SMT-based high-voltage power modules have superior performance and high reliability. MUA series is the ideal choice for OEM.

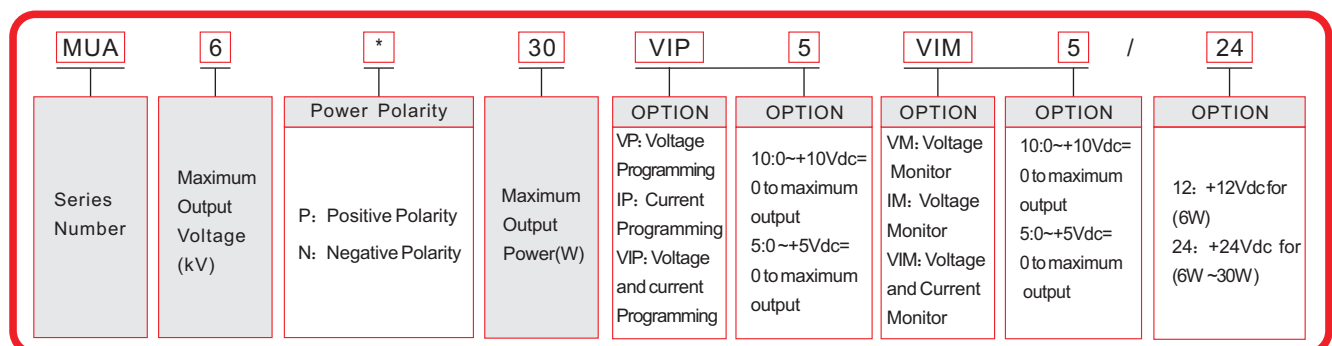
TYPICAL APPLICATIONS

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.

MUA SELECTION TABLE

kV	mA	P(W)	MODEL	Ripple (%p-p)	kV	mA	P(W)	MODEL	Ripple (%p-p)	kV	mA	P(W)	MODEL	Ripple (%p-p)	kV	mA	P(W)	MODEL	Ripple (%p-p)
0.05	120	6	MUA0.05*6	0.04	0.2	30	6	MUA0.2*6	0.04	1	6.0	6	MUA1*6	0.015	4	1.5	6	MUA4*6	0.02
	200	10	MUA0.05*10	0.04		50	10	MUA0.2*10	0.04		10.0	10	MUA1*10	0.045		2.5	10	MUA4*10	0.045
	400	20	MUA0.05*20	0.08		100	20	MUA0.2*20	0.08		20.0	20	MUA1*20	0.045		5.0	20	MUA4*20	0.045
	600	30	MUA0.05*30	0.08		150	30	MUA0.2*30	0.08		30.0	30	MUA1*30	0.07		7.5	30	MUA4*30	0.065
0.1	60	6	MUA0.1*6	0.04	0.25	24	6	MUA0.25*6	0.04	2	3.0	6	MUA2*6	0.015	5	1.2	6	MUA5*6	0.025
	100	10	MUA0.1*10	0.04		40	10	MUA0.25*10	0.04		5.0	10	MUA2*10	0.04		2.0	10	MUA5*10	0.02
	200	20	MUA0.1*20	0.08		80	20	MUA0.25*20	0.08		10.0	20	MUA2*20	0.04		4.0	20	MUA5*20	0.02
	300	30	MUA0.1*30	0.08		120	30	MUA0.25*30	0.08		15.0	30	MUA2*30	0.045		6.0	30	MUA5*30	0.04
0.15	40.0	6	MUA0.15*6	0.04	0.5	12	6	MUA0.5*6	0.04	3	2.0	6	MUA3*6	0.02	6	1.0	6	MUA6*6	0.025
	66.7	10	MUA0.15*10	0.04		20	10	MUA0.5*10	0.04		3.3	10	MUA3*10	0.045		1.67	10	MUA6*10	0.02
	133.3	20	MUA0.15*20	0.08		40	20	MUA0.5*20	0.08		6.7	20	MUA3*20	0.045		3.4	20	MUA6*20	0.02
	200	30	MUA0.15*30	0.08		60	30	MUA0.5*30	0.08		10	30	MUA3*30	0.065		5.0	30	MUA6*30	0.04

MUA SELECTION EXAMPLE





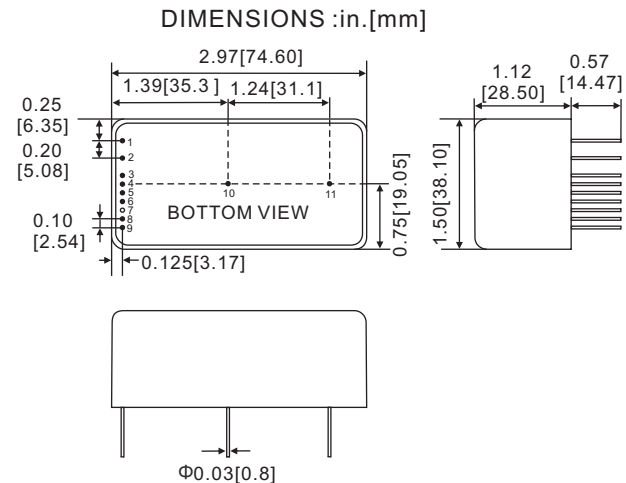
MUA SPECIFICATIONS

PARAMETER	DESCRIBE
Input Voltage/current	+24dc $\pm 2\%$ Vdc, input current $\leq 1.7A$. +12Vdc $\pm 2\%$ 0~6W optional
Output Voltage	50V~6kV, output power available.
Temperature Coefficient	≤ 15 ppm/ $^{\circ}C$.
Stability	$< 0.01/8hr$ after a 30 minute warm-up period.
Accuracy	$\pm 1\%$.
Ripple	See MUA selection tabale.
Voltage/Current Monitor	0~+5Vdc = 0 to 100% output voltage, Zout = 1k Ω .
Voltage/Current Programming	0~+5 Vdc = 0 to 100% output voltage, voltage: Zin = 100k Ω , current: Zin = 100k Ω .
Voltage/current Load Regulation	$\pm 0.01\%$ (no load to full load change).
Voltage/current line Regulation	$\pm 0.01\%$ (input Voltage line change $\pm 2\%$).
Operating Temperature	0 $^{\circ}C$ ~+50 $^{\circ}C$. (-55 $^{\circ}C$ ~+85 $^{\circ}C$ can be customized)
Storage Temperature	-40 $^{\circ}C$ ~+85 $^{\circ}C$.
Voltage Referene	+5Vdc
Protection	Short circuit protection.
Humidity	0%~90% RH, non-condensing.
Cooling	30W units operating at full power might require additional cooling.
Dimensions	1.12" H x 1.5" W x 2.96" D (28.5mm x 38.1mm x 74.6mm). Weight 150g

MUA PIN INFORMATION

PIN	SIGNAL	PARAMETER
1	GND	Power Ground
2	+24Vdc	Power Input, +24V $\pm 2\%$, option +12Vdc $\pm 2\%$ for 0~6W
3	Imon	0~5Vdc Output Current Monitor, Zout=1k Ω
4	HS	High start
5	Vmon	0~5Vdc Output Current Monitor, Zout=1k Ω
6	GND	Signal Ground
7	IP-in	0~5 Vdc=0 to 100% rated output, Zin > 47k Ω
8	VP-in	0~5 Vdc=0 to 100% rated output, Zin = 100k Ω
9	+5Vdc	+5Vdc REF
10	GND	HV GND
11	HV	HV OUT

MUA DIMENSIONS



MUA CONNECTION DIAGRAM

