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

60X40X17

INTRODUCTION

Wisman's MDC series of high voltage 1~5W micro-modules that provide output voltages ranging from 0.3kV to 3kV. MDC 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.

MDC SELECTION TABLE

kV	mA	P(W)	MODEL	kV	mA	P(W)	MODEL	kV	mA	P(W)	MODEL	kV	mA	P(W)	MODEL
0.5	2	1	MDC0.5*1	1	1	1	MDC1*1	2	0.5	1	MDC2*1	3	0.33	1	MDC3*1
	4	2	MDC0.5*2		2	2	MDC1*2		1	2	MDC2*2		0.67	2	MDC3*2
	6	3	MDC0.5*3		3	3	MDC1*3		1.5	3	MDC2*3		1	3	MDC3*3
	8	4	MDC0.5*4		4	4	MDC1*4		2	4	MDC2*4		1.33	4	MDC3*4
	10	5	MDC0.5*5		5	5	MDC1*5		2.5	5	MDC2*5		1.67	5	MDC3*5

MDC SELECTION EXAMPLE

MDC	3	*	5	VP	5	VM	5	LS	/	24
Series Number	Maximum Output Voltage (kV)	Output Polarity: P:positive N:negative	Maximum Output Power (W)	Option Programming: Voltage given	Option Programming Proportion: 10:0~+10Vdc=0 to max. output 5:0~+5Vdc=0 to max. output	Option Monitor: Voltage display	Option Monitor Proportion: 10:0~+10Vdc=0 to max. output 5:0~+5Vdc=0 to max. output	Option Start Way: Low level start		Option Input Voltage: 24:+24Vdc input 15:+15Vdc input 12:+12Vdc input

A MICRO-MODULES

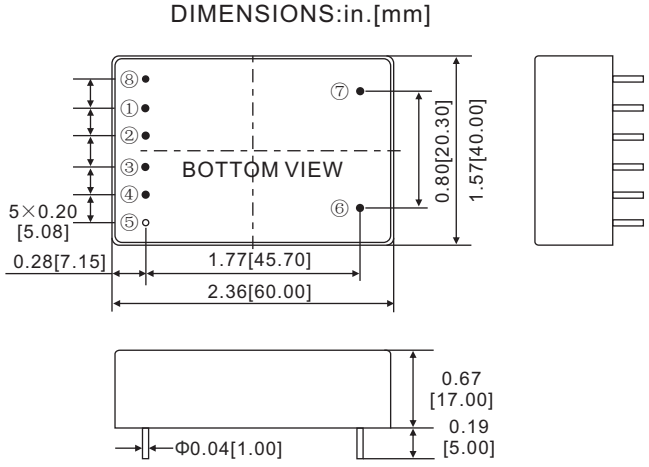
MDC SPECIFICATIONS

PARAMETER	DESCRIBE
Input Voltage	+24Vdc± 2%, input current≤500mA. +15Vdc± 2%,+12Vdc± 2% available.
Output	0.5kV, 1kV, 2kV, 3kV available
Stability	0.001%/hr after a 30 minute warm-up period.
Temperature Coefficient	≤10ppm/℃.
Ripple	0.001% p-p of maximum output voltage.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% （No load to rated load）
Operating Temperature	0℃~+50 ℃.
Storage Temperature	-40℃~+85℃.
Humidity	0%~90% RH, non-condensing.
Cooling	Convection cooled.
Dimensions	0.67” H x 1.97” W x 2.36” D (17mm x 40mm x 60mm).
Weight	65g.

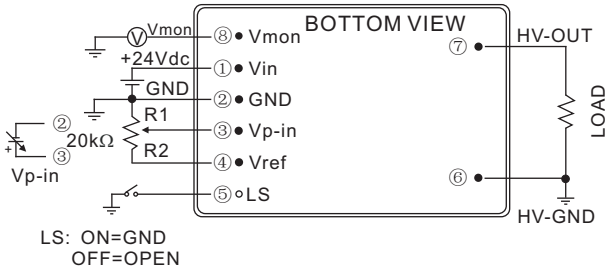
MDC PIN INFORMATION

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

MDC DIMENSIONS

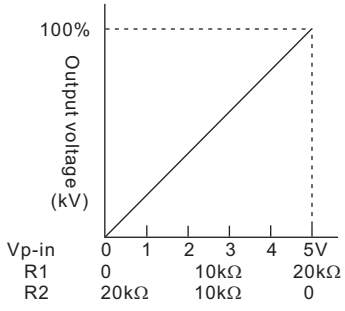


MDC CONNECTION DIAGRAM



1. PIN ②, ⑥ and case are internally connected,andshould be always grounded.
2. External potentiometer of T.C ≦ 100ppm/° C,PC ≧1/4W is recommended.
3. ⑤are for option.

CHARACTERISTICS OF OUTPUT VOLTAGE SETTING



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