

Micro APD Series (μAPD Series) 100Vdc & 125Vdc
PCB mount, ultra compact, regulated high voltage DC/DC converter
100Vdc & 125Vdc 0.1W

	➤ Pout: 100mWatt ➤ Output voltage: -from 0 to 100Vdc -from 0 to 120Vdc ➤ Input voltage 5Vdc ➤ Short circuit protection ➤ Low ripple ➤ No minimum load ➤ 11 x 11 x 11mm	
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Features		
The smallest regulated DC-DC power supply for APDs which require a bias voltage up to 100V		
Low ripple	Low noise due to metal shielding	Tightline/load regulation
Miniature and lightweight	PCB mount, through holes	Dimension: 11x11x11mm
Excellent TC: 15ppm/°C	Excellent Load stability: 20% no load/full load	Output short-circuit protected
RoHS compliant product	Potted in an UL resin	
Parameters		Specifications
Input voltage Vin (pins 1 & 2)		5Vdc ±0.5Vdc or 12Vdc (reverse: -0.2V)
Input current		For 0Vdc output voltage: <1.6mA For 100Vdc, no load: < 3mA At full output voltage, full load: <50mA
HV output Vout (pin 4)		0 to 100Vdc programmable
Polarity		Fixed positive or negative
HV setting (pin 3)		Via external voltage source 0/2.5Vdc ±0.1% accuracy at full scale full scall (do not exceed 2.5Vdc).
Max. output current Iout		1mA nominal
Load voltage regulation		±0,01 % of full output voltage for no load to full load.
Line voltage regulation		±0,01 % of full output voltage over specified input voltage range
Residual ripple		100V models: <25mV peak-to-peak - ripple can be reduced to less than 5mVp-p by adding an external 100nF/100V X7R 0805 SMD ceramic capacitor, or to less than 2mVp-p by adding an external 100nF/200V polyester capacitor. 125V model: <50mV peak-to-peak
Temperature coefficient		<15ppm/°C
Output HV monitoring		Not available on this product
Output reference voltage		Not available on this product
Operating temperature		Not available on this product
Operating temperature		-10°C to + 50°C
Storage temperature		-10°C to + 70°C
Safeguards		Output current internally limited Soft start feature: the start is guaranteed without overshoot.
Shielding		The case must be grounded to the customer's circuit board.

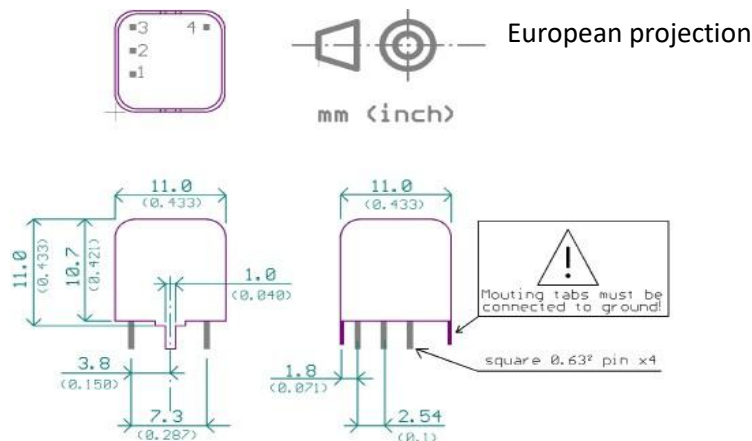
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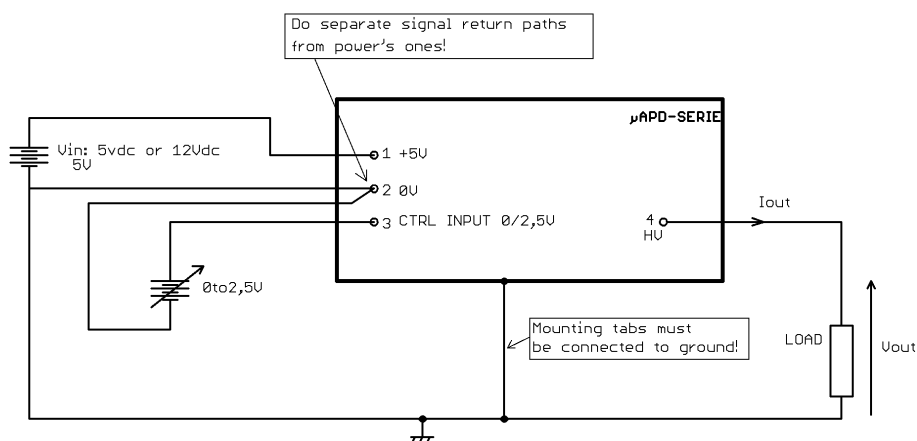
Pin function

Input	#1: Supply Vin #2: 0V supply GND
HV setting	#3: Control input 0V to 2.5Vdc
HV output	#4: Vout

Mechanical details (not to scale) - All dimensions in inch



Functional diagram



How to order

Former part name system	Current part name system	Output polarity	Input voltage	Output voltage
μ5P101102	μ5P0.1-0.1	Positive	5Vdc	0 to +100Vdc
μ5N101102	μ5N0.1-0.1	Negative	5Vdc	0 to -100Vdc
x	μ5P0.12-0.1	Positive	5Vdc	0 to +125Vdc



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