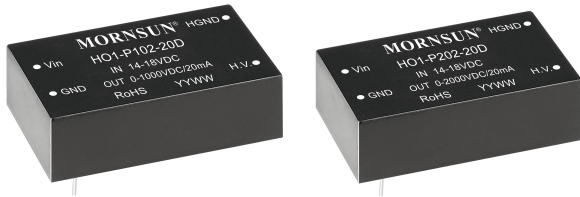


14 - 18VDC input voltage, non-isolated and single output, constant current output: 20 mA



Patent Protection RoHS



## FEATURES

- Low output current ripple
- Input under-voltage protection
- Output short-circuit, over-voltage protection
- Operating ambient temperature range: -20°C to +50°C

HO1-P102-20D & HO1-P202-20D are DC-DC products feature with non-isolated, constant current output at 20 mA, maximum output voltage up to 1000/2000VDC, operating ambient temperature range of -20°C to +50°C, input under-voltage protection, output short-circuit protection, over-voltage protection. They are widely used in high voltage storage pulse capacitor and high voltage constant-current source fields.

## Selection Guide

Part No.	Input Voltage (VDC)	Output Voltage (VDC)		Output Current (mA)	Full Load Efficiency(%) Min./Typ.
	Nominal (Range)	Nominal	Range		
HO1-P102-20D	16	1000	0-1000	20	82/85
HO1-P202-20D	(14-18)	2000	0-2000	20	84/87

## Input Specifications

Item	Operating Conditions	Min.	Typ.	Max.	Unit
Start-up Voltage		--	13	14	VDC
Input Under-voltage Protection		9	11	--	
Input Filter		PI filter			
Hot Plug		Unavailable			

## Output Specifications

Item	Operating Conditions	Min.	Typ.	Max.	Unit	
Output current		18	20	22	mA	
Temperature Coefficient	Nominal output voltage & Full load, works after preheating for 30 minutes	--	--	±0.1	%/°C	
Time Coefficient		--	--	±0.1	%/hour	
Over-voltage Protection	Input voltage range	HO1-P102-20D	1100	1250	--	VDC
		HO1-P202-20D	2000	2150	--	
Over-current Protection		--	20	--	10%	
Short-circuit Protection	Input voltage range	Continuous				

## General Specifications

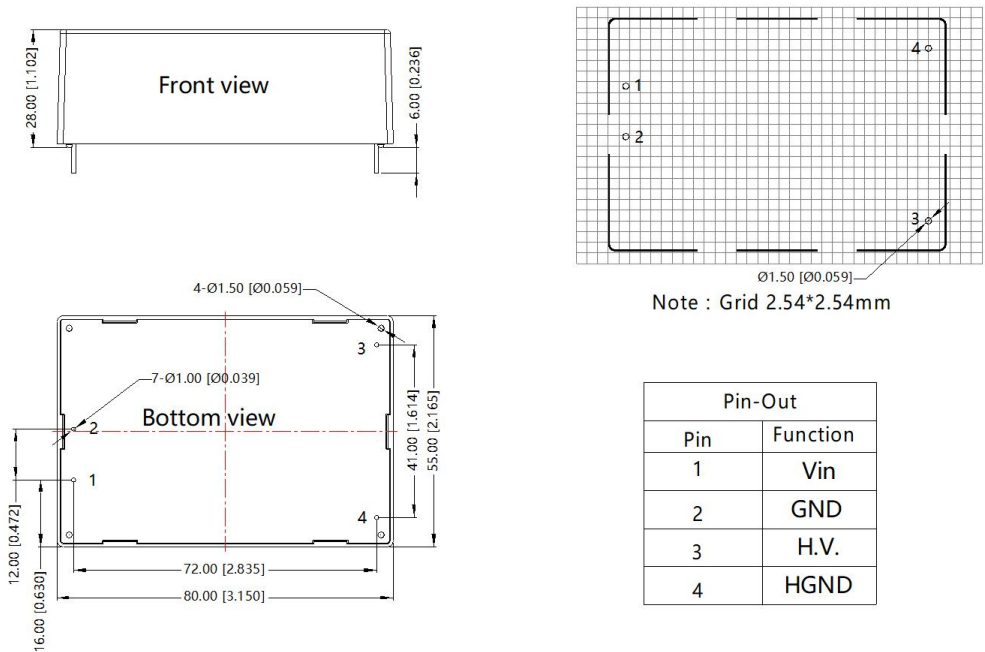
Item	Operating Conditions	Min.	Typ.	Max.	Unit	
Operating Temperature		-20	--	+50	°C	
Storage Temperature		-40	--	+71		
Pin Soldering Resistance Temperature	Soldering spot is 1.5mm away from case for 10 seconds	--	--	+300		
Storage Humidity	Non-condensing	5	--	95	%RH	
Switching Frequency	PWM mode	HO1-P102-20D	--	100	--	KHz
		HO1-P202-20D	--	70	--	
MTBF	MIL-HDBK-217F@25°C	1000	--	--	K hours	

Mechanical Specifications

Case Material	Black plastic; flame-retardant and heat-resistant (UL94-V0)
Dimensions	80.00 x 55.00 x 28.00mm
Weight	140.0g(Typ.)
Cooling Method	Free air convection

Horizontal Package Dimensions and Recommended Layout

THIRD ANGLE PROJECTION 



Note : Grid 2.54\*2.54mm

Pin-Out	
Pin	Function
1	Vin
2	GND
3	H.V.
4	HGND

Note:  
Unit: mm[inch]  
Pin diameter tolerances:  $\pm 0.10[\pm 0.004]$   
General tolerances:  $\pm 0.50[\pm 0.020]$

Notes:

- For additional information on Product Packaging please refer to [www.mornsun-power.com](http://www.mornsun-power.com). Packaging bag number 58220019;
- Unless otherwise specified, parameters in this datasheet were measured under the conditions of  $T_a=25^\circ\text{C}$ , humidity<75%RH with nominal input /output voltage and rated output load;
- All index testing methods in this datasheet are based on company corporate standards;
- We can provide product customization service, please contact our technicians directly for specific information;
- Products are related to laws and regulations: see "Features";
- Our products shall be classified according to ISO14001 and related environmental laws and regulations, and shall be handled by qualified units.

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