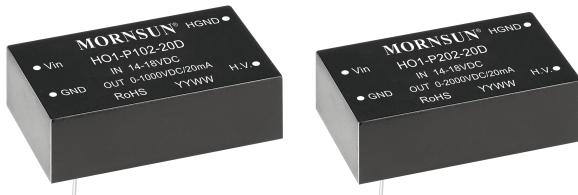


14 - 18VDC input voltage, non-isolated and single output, constant current output: 20 mA



Patent Protection RoHS

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	(14-18)	1000	0-1000	20	82/85
HO1-P202-20D			2000	0-2000	20	84/87

### Input Specifications

Item	Operating Conditions	Min.	Typ.	Max.	Unit
Start-up Voltage		--	13	14	
Input Under-voltage Protection		9	11	--	VDC
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	--	--	$\pm 0.1$	%/°C
Time Coefficient		--	--	$\pm 0.1$	%/hour
Over-voltage Protection	Input voltage range	HO1-P102-20D 1100	1250	--	VDC
		HO1-P202-20D 2000	2150	--	
Short-circuit Protection	Input voltage range			Continuous	

### General Specifications

Item	Operating Conditions	Min.	Typ.	Max.	Unit
Operating Temperature		-20	--	+50	
Storage Temperature		-40	--	+71	°C
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

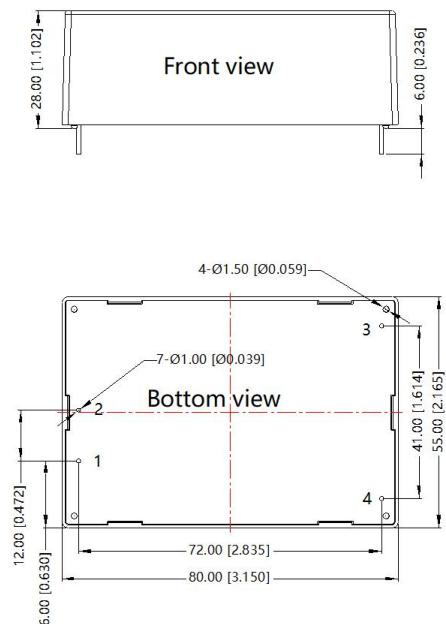
Case Material	Black plastic; flame-retardant and heat-resistant (UL94-V0)
Dimensions	80.00 x 55.00 x 28.00mm
Weight	140.0g(Typ.)

Cooling Method

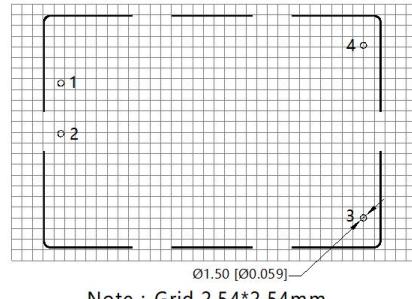
Free air convection

## Horizontal Package Dimensions and Recommended Layout

THIRD ANGLE PROJECTION



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



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

### 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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