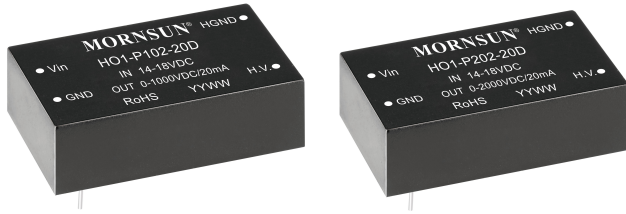


DC/DC Converter

HO1-P102-20D & HO1-P202-20D

MORNSUN®

14 - 18VDC input voltage, non-isolated and regulate 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 ~ +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 temperature of -20°C ~ +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

Certification	Part No.	Input Voltage (VDC)	Output Voltage(VDC)		Output Current (mA)	Full Load Efficiency ² (%) 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	--	
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 Welding 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	80.00×55.00×28.00 mm
Weight	140.0g(Typ.)
Cooling Method	Free air convection

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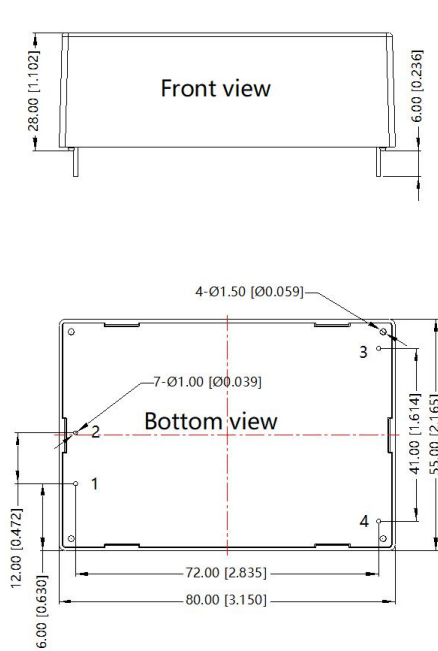
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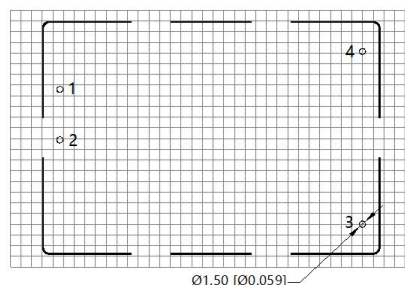
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Horizontal Package Dimensions and Recommended Layout

THIRD ANGLE PROJECTION



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



Note : Grid 2.54*2.54mm

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

Notes:

1. For additional information on Product Packaging please refer to www.mornsun-power.com. The Packaging bag number: 58220019;
2. 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;
3. All index testing methods in this datasheet are based on company corporate standards;
4. We can provide product customization service, please contact our technicians directly for specific information;
5. Products are related to laws and regulations: see "Features";
6. 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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