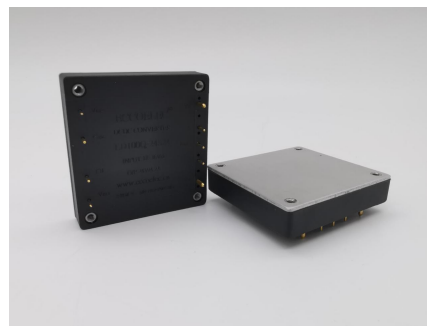


FEATURES:

- Wide input range
- Continuous short-circuit protection, self recover
- I/O isolation voltage 2250V
- Working temperature: $-40^{\circ}\text{C} \sim +105^{\circ}\text{C}$
- No additional components required
- Stable performance and high reliability (MTBF ≥ 2 million hours)
- Industry standard pin-out
- Industry standard 1/2 brick package



Selection Guide

Part No.	INPUT		OUTPUT				CapacitiveLoad(μF)
	Normal (Vdc)	Range (Vdc)	Voltage (V1dc)	current (A)	Voltage (V2dc)	current (A)	
	24	18-36			CTRL		
LD500Q-24S12N			12	42	Negative Logic		
LD500Q-24S15N			15	34	Negative Logic		
LD500Q-24S24N			24	21	Negative Logic		
LD500Q-24S28N			28	18	Negative Logic		

customized accepted, pls contact sales for details

Input Specifications

Input Voltage Range	Input Voltage Range (Vdc)	Nom(Vdc)	Max (Vdc)
	18-36	24	36
Input Filter	Capacitive Filter		
Ctrl	NONE		
	NONE		
Hot Plug	Unavailable		

Output Specifications

Item	Min	Typ	Max	Test Conditions
Voltage Accuracy		$\pm 1\%$	$\pm 3\%$	
Line Regulation		$\pm 0.2\%$	$\pm 1\%$	
Load Regulation		$\pm 0.5\%$	$\pm 1\%$	
TRIM Range			$\pm 10\%$	
Temperature Regulation		$\pm 0.02\%/^{\circ}\text{C}$		
Over Current Protect	110%		160%	
Over Voltage Protect	110%		140%	
Over Temperature Protect	110%	115%	125%	
Short Circuit Protect	Continuous, self-recovery			
Dynamic Response	4%Vo Pk deviation 100 μs settling time		50~75% load 50~25% load	

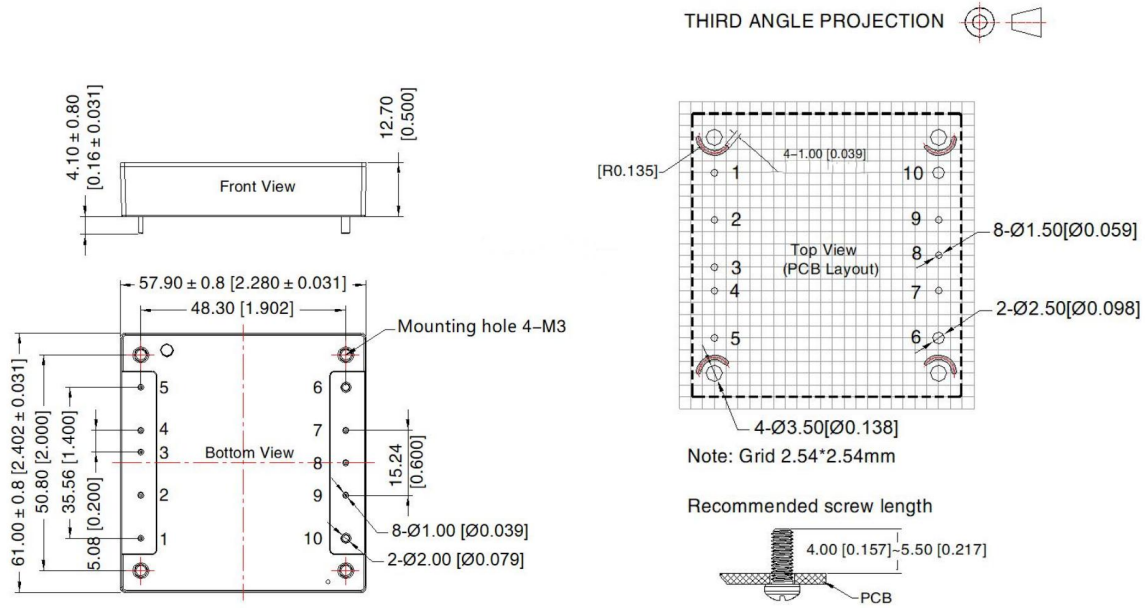
General Specifications

Isolation Resistor	20M Ω	Input-Output
Isolation Voltage	2250VDC	Input-Output

	1000VDC	Input-Case
	500VDC	Output-Case
Switching Frequency	300KHz	Mil HDBK 217F Tc=25℃
MTBF	1×106Hrs	
Case Temperature	-40~+100℃	
Storage Temperature	-55~+125℃	
Relative Humidity	10%-90%	
Pin Solder Temperature	250℃	Soldering spot is 1.5mm away from case for 10 seconds
Hand Soldering Time	5s	Iron Temperature 425℃
Vibration		Sine, 10Hz-55Hz, amplitude 0.35mm, X, Y, Z three directions 30min each
Shock		Half-sine, peak acceleration is 300m/s², standard pulse duration is 6ms, X, Y, Z three 6 consecutive shocks in each direction;
Weight	100g (Typ)	

**Unless specified, otherwise all other parameters are tested under the following conditions: nominal input voltage, pure resistive load, 25℃ room temperature environment.

Dimensions and Recommended Layout



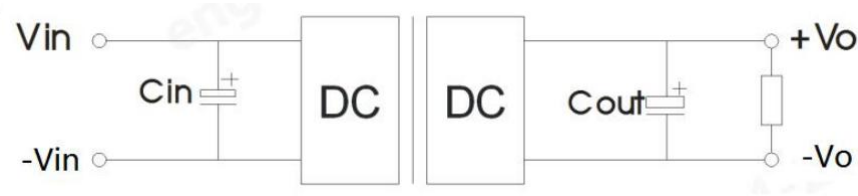
Note:
Unit: mm[inch]
Pin1, 2, 3, 4, 5, 7, 8, 9diameter: 1.00[0.039]
Pin6, 10diameter: 2.00[0.079]
Pin diameter tolerances: ± 0.10[± 0.004]
General tolerances: ± 0.50[± 0.020]
Mounting hole screwing torque: Max 0.4 N · m

Pins

Pin-Out	Mark		
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1	+Vin	6	-Vo
2	ON/OFF	7	Sense-
3	Share(+)	8	Trim
4	Share(-)	9	Sense+
5	-Vin	10	+Vo

Recommended Circuit



Capacitance value	Cout(min.)	Cin
Output voltage		
12V/15V/24V/28V	470μF/35V	220 μF/63V

Noted

1. Input current: Ensure that the output current of the power supply meets the instantaneous starting current of the power module (that is, twice the average input current of the power module).
2. Output load requirements: Avoid no-load use. When the actual power consumption of the load is less than 10% of the rated output power of the module or no load occurs, connect an external resistance to the output end (the sum of the external resistance and the load power is greater than or equal to 10% of the rated load) or select a module with a smaller rated power.
3. The external capacitance of the output end should not be too large; otherwise, the module may be overcurrent or poorly started. For details, see the external capacitance recommendation table.
4. External LC filter circuit can be connected for occasions with high ripple noise requirements.