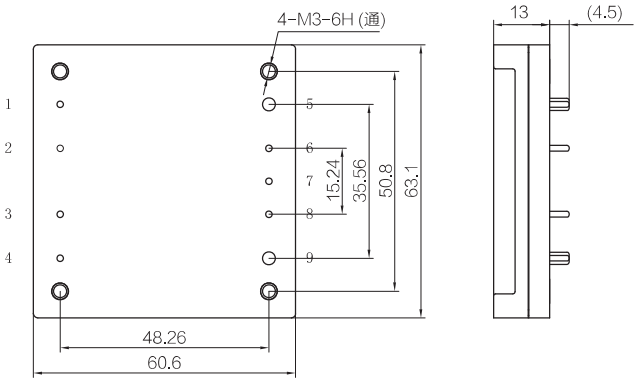
1/2 Brick DC-DC Converter

- High power density up to 169W/inch³
- High efficiency up to 93%
- Trim range:90%–110%
- High voltage type for optional
- Monotonic start–up into pre–bias load
- Input under / over voltage protection
- Output over–current protection
- Output over voltage protection
- Over temperature protection
- Parallel function
- Logic control
- All series encapsulation potted: aluminum plate process with excellent heat dissipation

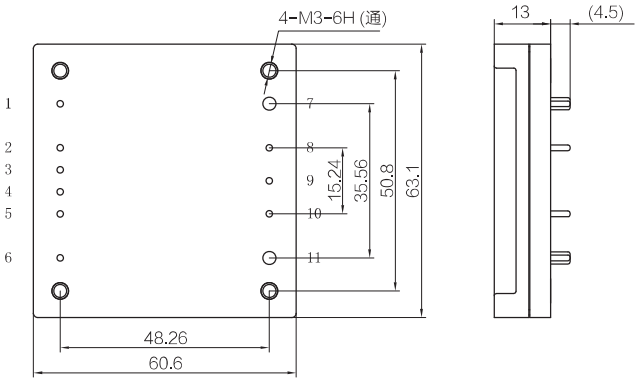
Mechanical Specifications

Metal case 200W / 500W



Pin	Function
1	-VIN
2	PA
3	ON/OFF
4	+VIN
5	-VO
6	-S
7	TRIM
8	+S
9	+VO

Metal case 400W



Pin	Function
1	-VIN
2	Ishare
3	Start sync
4	Clock sync
5	ON/OFF
6	+VIN
7	-VO
8	-S
9	TRIM
10	+S
11	+VO

Unit: mm Deviation: .X=±0.25 .XX=±0.10 Pin: ±0.25

Specif ication Parameter

Parameter		Unit	EHBS500-028S12	EHBS500-028S24	EHBS500-028S28
Input	Input voltage	Vdc		−0.3~45	
	Input voltage (100ms)	Vdc		−0.3~50	
	Operating voltage	Vdc		16~40	
	Remote off input current	mA		12	
	Inrush current transient	A^2s		–	
	Input opening voltage	Vdc		15	
	Input On and Off voltage	Vdc		14	
	Lockout hysteresis voltage	Vdc		1	
	Input turn off voltage	Vdc		43	
	Input current (max.)	A		35	
	Input current (no load)	mA		350	
	Switching frequency	kHz		150	
Output	Output voltage	Vdc	12	24	28
	Output current	A	–	–	–
	Output power (max.)	W		500	
	Typical efficiency	%		93	
	Output voltage trim range	%Vo, set		−20~10	
	Output voltage regulation	%Vo, set		0.25	
	Load regulation	%Vo, set		0.25	
	Regulation over temperature	%Vo, set		1.5	
	Output ripple and noise				
	Full load: PK−PK	%Vo, set		1	
	RMS	mVrms		100	
	Output capacitance	uF		5000	
	Output current limit	%Io, set		120	
	Over voltage protection	%Vo, set		120	
	Transient response				
	Io=50% to 75% full load: PK−PK	%Vo, set		3%, 400μs	
	Over−temperature shutdown	℃		105 (TC)	
	OCP hiccup time	sec		5	
	OVP hiccup time	sec		2.5	
Others	Operating temperature	℃		−50~100	
	Storage temperature	℃		−55~125	
	Input/output isolation voltage	Vdc		2250	
	Size (L*W*H)	mm		63.1*60.6*13	