



DC-DC Converters

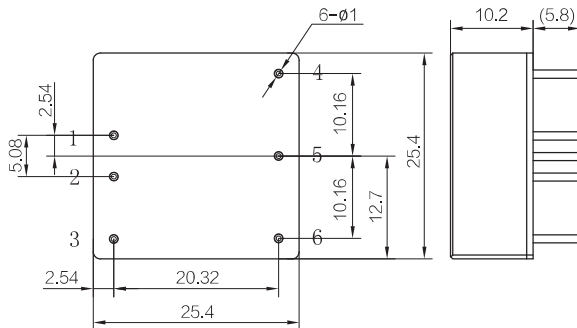
1×1 Brick DC-DC Converter

- High power density up to 110W/inch³
- High efficiency up to 90%
- 3:1 input ratio
- Trim range: 80%~110%
- Monotonic start-up into pre-bias load
- Input under-voltage protection
- Output over-current protection
- Output over-voltage protection
- Over-temperature protection
- Logic control
- Open frame or encapsulated

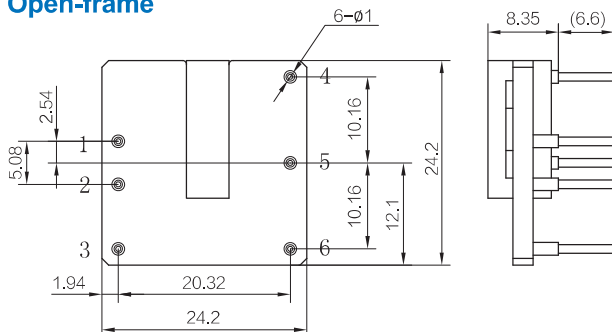


Mechanical Specifications

Metal case



Open-frame



Pin	Function
1	+VIN
2	-VIN
3	ON/OFF
4	-VO
5	TRIM
6	+VO

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

Specification Parameter

Parameter	Unit	E0BS030-028S3V3	E0BS030-028S05	E0BS030-028S08	E0BS030-028S12	
Input	Input voltage	Vdc		-0.3~52		
	Input voltage (100ms)	Vdc		-0.3~55		
	Operating voltage	Vdc		16~50		
	Remote off input current	mA		6		
	Inrush current transient	A ² s		0.05		
	Input opening voltage	Vdc		15		
	Input On and Off voltage	Vdc		14		
	Lockout hysteresis voltage	Vdc		1		
	Input turn off voltage	Vdc		-		
	Input current (max.)	A		2.2		
	Input current (no load)	mA		55		
	Switching frequency	kHz		350		
	Output	Output voltage	Vdc	3.3	5	8
Output current		A	9.1	6	4	2.5
Output power (max.)		W		30		
Typical efficiency		%	89	90	89	89
Output voltage trim range		%Vo, set		-10%~10%		
Output voltage regulation		%Vo, set		±0.25% max		
Load regulation		%Vo, set		±0.25% max		
Regulation over temperature		%Vo, set		±0.25% max		
Output ripple and noise						
Full load: PK-PK		%Vo, set		3		
RMS		mVrms		50		
Output capacitance		uF	5000	5000	2200	2200
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%, 350 μs		
Over-temperature shutdown		°C		105 (TC)		
OCP hiccup time		sec		0.5		
OVP hiccup time		sec		2		
Others		Operating temperature	°C		-55~100	
	Storage temperature	°C		-55~125		
	Input/output isolation voltage	Vdc		1500		
	Size (L*W*H)	mm		25.4*25.4*10.2		