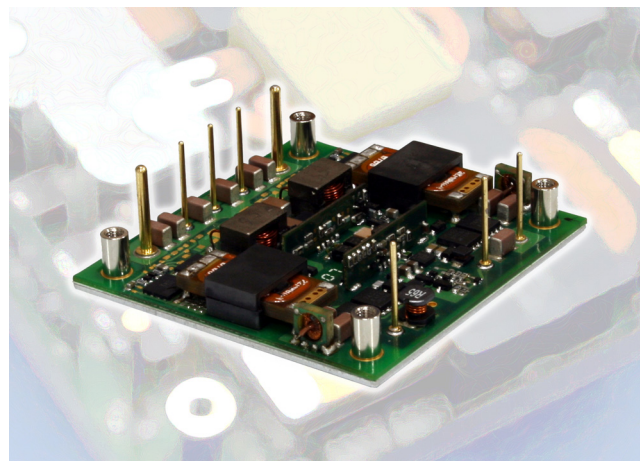
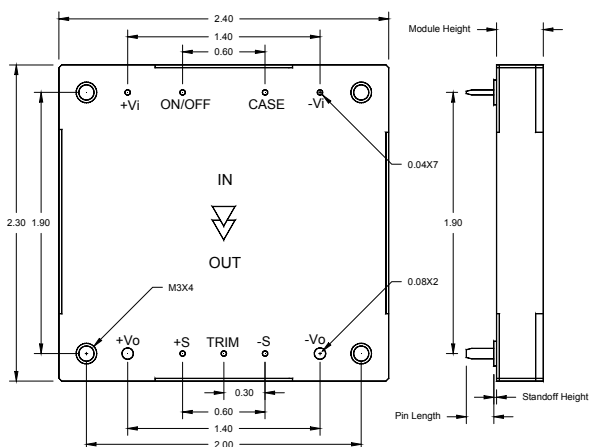




The UPH24500P22E-06CEA module provides 50V/6A output with 92% efficiency for industry standard half brick with Six-side Metal Enclosed package. The efficient SR stage combining with patented "Buck Reset" topology reduce power loss to achieve high efficiency, the single component side circuit board design with Sink-Plate technology eliminate the hot spot to have better thermal performance. Modules are designed for Telecom, Servers, Networking equipments and other applications. The module is special adjust for 深圳市中電華星電子技術有限公司 requested that use a 24V (18~36V) input bus.

- High efficiency 91%@50V/4A
- High useable current (with 1.0mm Metal Plate) 50V/4A at 70°C 400LFM
..... 50V/4A at 50°C 200LFM
- High power density 107W/in³
- Low profile 0.36"(9.2mm)
- Open frame with Sink-plate options

PRELIMINARY DATA SHEET

Part Number *	Maximum Input	Maximum Output	Efficiency

Part Number *	Input	Output	Efficiency
UPH24500P22E-06CEA	18V~36V	328W 50V/6A 300W	91.5%

* Options for UPH24500ABCD-EF are as follows:

- A** (Enable Logic): **P**: Positive **N**: Negative
B (Pin Dimension): **0**: 0.12" **1**: 0.16" **2**: 0.20" **3**: 0.24"
C (Standoff Height): **0**: 0.02" **1**: 0.08" **2**: 0.16"
D (Base-Plate/Module Thickness): **E**: Six-side Metal Enclosed with 1.0mm Metal Plate/0.36"
EF (Output): **00** to **C0** for output current rating

Example: UPH24500P22E-06 is an "Ultra" series half brick size 18~36Vin to 50V/6A dc/dc converter with options of positive control logic and 0.20" pin length, 0.16" standoff with Six-side Metal Enclosed. The total height is 0.16"+0.36"=0.52".

Temperature	Operation	-40°C to +120°C
	Storage	-55°C to +125°C
Input Voltage Range	Operation:	
	24V Models	-0.5V to +40Vdc
	Transient (100ms):	
	24V Models	50V Maximum
Isolation Voltage	Input to Output	2.0KV Minimum
	Input to Case	1.0KV Minimum
	Output to Case	1.0KV Minimum
Remote Control Voltage		-0.5V to +12Vdc

GENERAL SPECIFICATIONS

Conversion Efficiency	Typical	See table
Switching Frequency	Typical	300KHz
MTBF	Bellcore	3.05×10 ⁶ hrs @GB/25°C.
OTP	Internal	110°C
Weight		92g
Size		2.30"×2.40"×0.36"

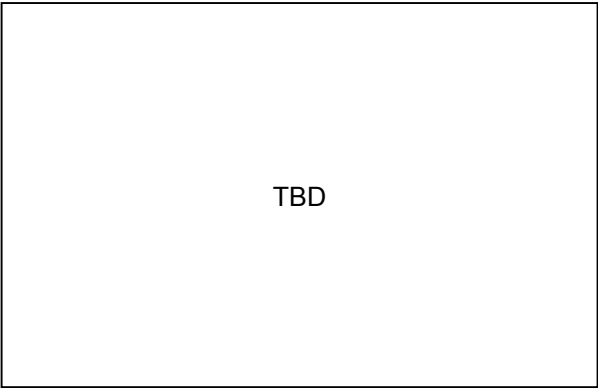
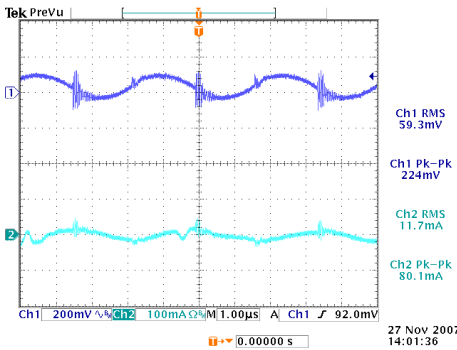
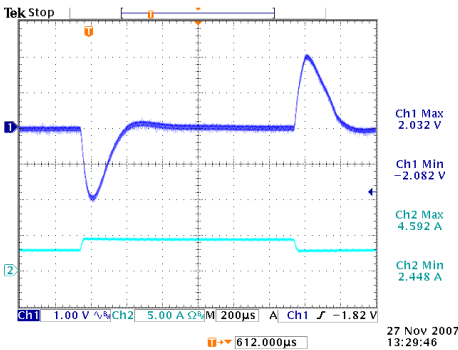
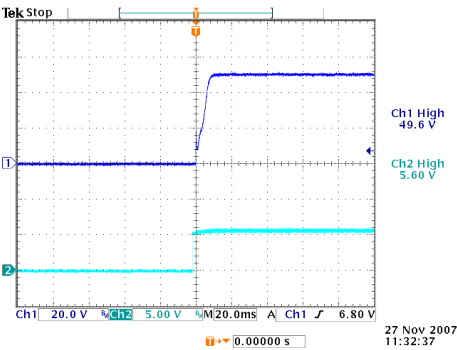
CONTROL FUNCTIONS

Remote Control	Logic High	+3.0V to +6.5V
	Logic Low	0V to +1.0V
Input Current of Remote Control Pin		-0.5mA ~ +1.5mA

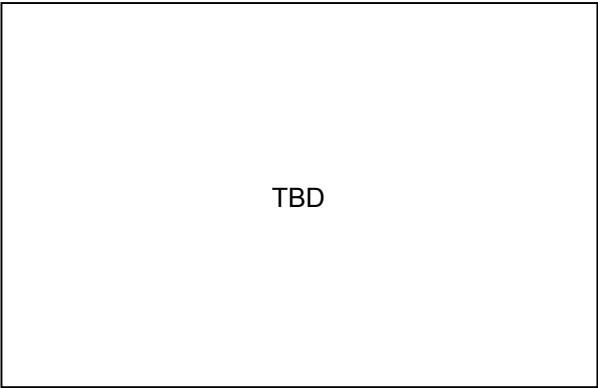
Operation Voltage Range	24V Models	+18V to +36Vdc
Reflected Ripple Current	L _{EXT} = 10uH	20mA Max
Power ON Voltage Ranges	24V Models	+17.0V to +17.9Vdc
Power OFF Voltage Ranges	24V Models	+16.0V to +17.0Vdc
Off State Input Current	V _{NOM}	6mA Max
Latch-State Input Current	V _{NOM}	8mA Max
Input Capacitance	24V Models	33.0uF Max

OUTPUT SPECIFICATIONS

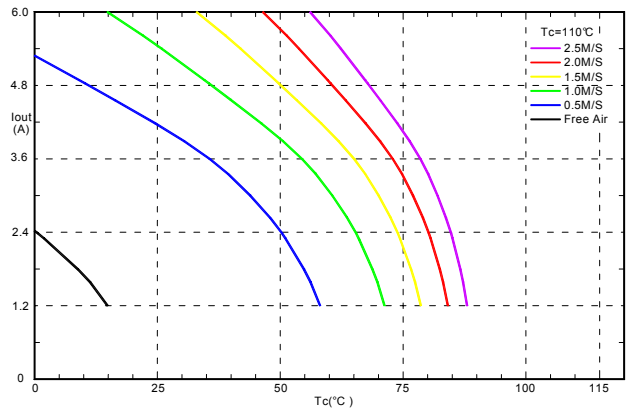
Voltage Accuracy	Typical	±1%
Line Regulation	Full Input Range	±0.2%
Load Regulation	1%~100%	±0.2%
Temperature Drift	-40°C ~100°C	±0.03%/°C
Output Tolerance Band	All Conditions	±4%
Ripple & Noise (20MHz)	Peak-Peak (RMS)	3% (1%) V _o
Over Voltage Protection	V _{NOM} , 10% Load	115~130 %Vo
Output Current Limits	V _{NOM}	105%~125%
Voltage Trim	V _{NOM} , 10% Load	±10%
Input Ripple Rejection (<1KHz)	V _{NOM} , Full Load	-50dB
Step Load (2.5A/uS)	50%~75% Load	±6%V _o /500uS
Start-Up Delay Time	V _{NOM} , Full Load	20mS/250mS



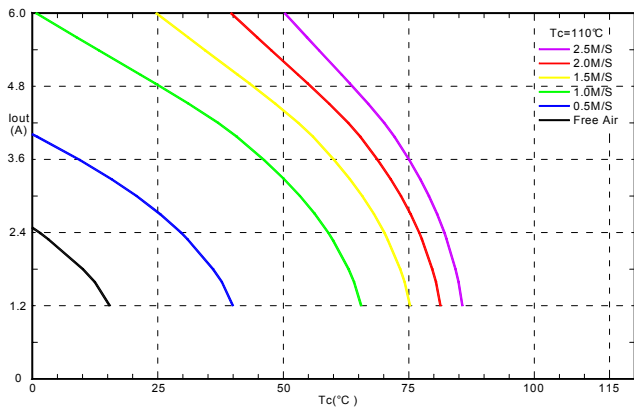
Thermal Plot with 55°C-200LFM Airflow (Direction: N to S)



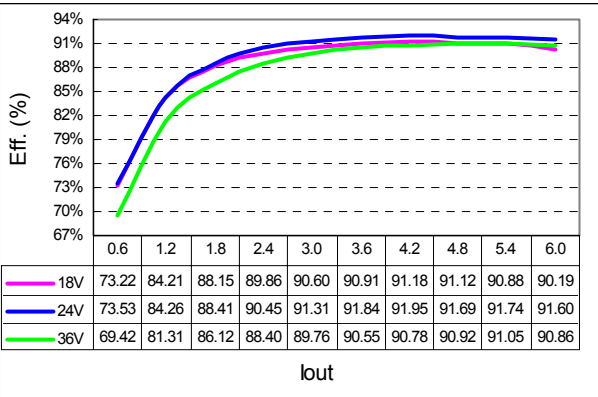
Thermal Plot with 55°C-200LFM Airflow (Direction: E to W)



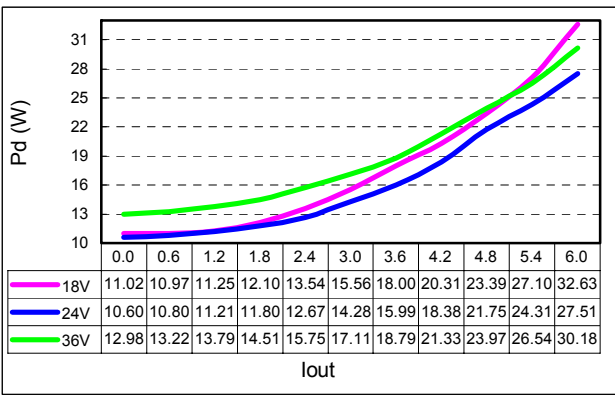
Derating Plot With Open Frame



Derating Plot With 3.0mm Sink-Plate



Efficiency Plot



Power Loss Plot