

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



# Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China







# 20 Watts APA06 **APA04 - Boost**

**Total Power:** 20 Watts **Input Voltages:** 3.3V, 5V No. of Outputs: Single



90% (5/3.3), 83% (1.8V) Efficiency

3.0 to 5.5V (Buck) 3.0 to 4.0V (Boost)

**Electrical Specs** 

Output

Voltage tolerance ± 1.0% Line regulation  $\pm 0.5\%$ Load regulation  $\pm 0.5\%$ 

50mV P-P Noise/ripple Short circuit protection Auto-recovery Transient response 4%Vo, 200us

Temperature Regulation ±0.02 %Vo/°C

Switching frequency 430kHz typ

Temperature coefficient ± 0.03%Vo/° C

Isolation

Non Isolated



### **Special Features**

- Excellent for POL Applications
- High Efficiency Non Isolated
- 3.3V and 5V input,
- Standard SIP package 2.5 X .55 X .31"
- **Enable and Trim Function**
- Overcurrent Protection
- Sense Pins

#### **Environmental**

Operating ambient temperature: 25°C to 55°C (full load, 200LFM)

Storage temperature: -40°C to +125°C

MTBF: =7,000,000 hours (Bellcore TR332,

Ta=25°C)

Weight: = 7.5 grams max

# Safety

UL UL 1950 Recognized **CSA** CAN22.2-950 Recognized

TUV EN60950 Certified

Asia (HK): 852-2437-9662

Carlsbad, CA 92008 Telephone: 760-930-4600 Facsimile: 760-930-0698

Astec House, Waterfront Business Park Merry Hill, Dudley West Midlands, DY5 1LX, UK Telephone: 44 (1384) 842-211 Facsimile: 44 (1384) 843-355

Units 2111-2116, Level 21 Tower1, Metroplaza 223, Hing Fong Road Fwai Fong, New Territories

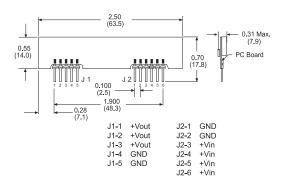
# **Ordering Information**

Input Voltage	Output Voltage	Efficiency	Model Number
Buck			
3.0-5.5 V	1.2V @ 6.0 A	80%	APA06K04
3.0-5.5 V	1.5V @ 6.0 A	81%	APA06M04
3.0-5.5 V	1.8V @ 6.0 A	83%	APA06Y04
3.0-5.5 V	2.1V @ 6.0 A	86%	APA06D04
4.5-5.5 V	2.5V @ 6.0 A	87%	APA06G05
4.5-5.5 V	3.3V @ 6.0 A	90%	APA06F05
Boost			
3.3-4.0 V	5.0V @ 4.0 A	89%	APA04A03

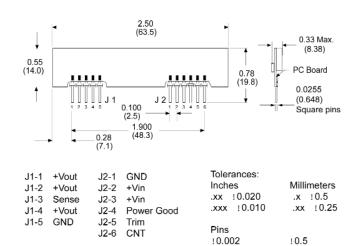
#### Notes:

- 1. Add -E to eliminate Sense and Power Good feature
- 2. Right Angle Pins Available

### APA04 (Boost) Pinout



### APA06 (Buck) Pinout



#### **Notes:**

www.astec.com

- 1. Recommended Input Filter 220uF Electrolytic Cap in parallel with 2.2uF Ceramic Cap Vin+ to GND
- 2. Recommended Output Filter 2.2uF Ceramic Cap in parallel with 1000uF Electrolytic Cap (Vout+ to GND)
- 3. 20 MHz bandwidth. An external 0.1 uf ceramic capacitor is recommended to be placed from  $\,$  +V out to comm.
- 4. All specifications are typical at nominal line, full load, and 25°C unless otherwise noted.
- 5. All specifications subject to change without notice.
- 6. Mechanical drawings are for reference only.

EUROPE