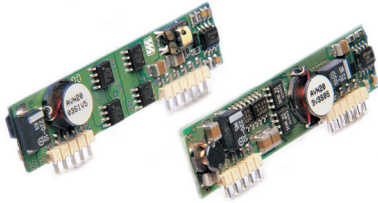


# 20 Watts

## APA06

## APA04 - Boost

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



### Electrical Specs

#### Input

Input range	3.0 to 5.5V (Buck) 3.0 to 4.0V (Boost)
Efficiency	90% (5/3.3) , 83% (1.8V)

#### Output

Voltage tolerance	± 1.0%
Line regulation	± 0.5%
Load regulation	± 0.5%
Noise/ripple	50mV P-P
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

END OF LIFE  
 See website for  
 alternate parts

AMERICAS

5810 Van Allen Way  
 Carlsbad, CA 92008  
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ASIA

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 223, Hing Fong Road  
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 Hong Kong  
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APA06/04

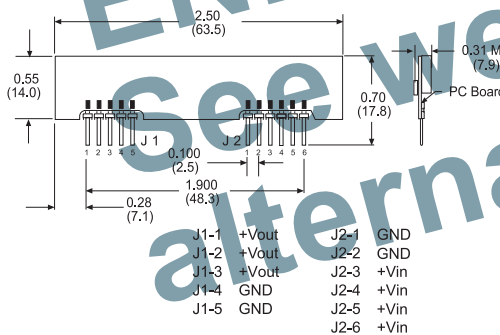
Ordering Information

Input Voltage	Output Voltage	Efficiency	Model Number
<b>Buck</b>			
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
<b>Boost</b>			
4.5-5.5 V	2.5V @ 6.0 A	87%	APA06G05
4.5-5.5 V	3.3V @ 6.0 A	90%	APA06F05
<b>Boost</b>			
3.3-4.0 V	5.0V @ 4.0 A	89%	APA04A03

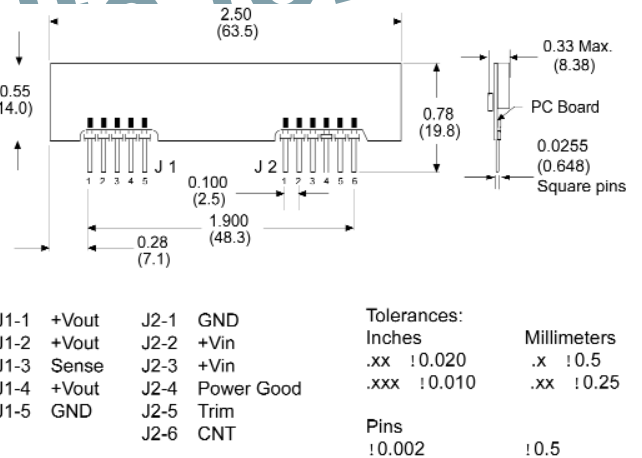
Notes:

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

APA04 ( Boost ) Pinout



APA06 ( Buck ) Pinout



Notes:

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.