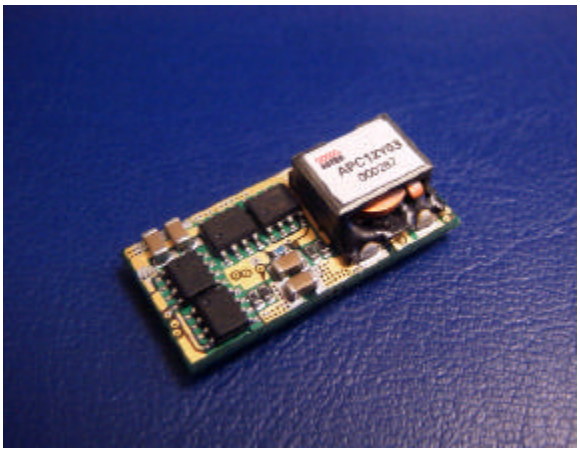
40 Watts

APC12 (12 Amps)

Preliminary

Total Power:	40 Watts
Input Voltages:	1.8 to 13 V
No. of Outputs:	Single



Special Features

- Point of load (POL) applications
- High efficiency, 3.3V @ 92% (Typ)
- -40°C to +85°C Ambient operating temperature
- Open Frame SMT
- Positive enable function
- Low output ripple and noise
- Regulation to zero load
- Programmable Output from 0.9V to 3.6V (External Trim Resistor or Voltage Source)
- Fixed frequency switching (200 kHz)

Environmental

Operating temperature

-40°C to +85°C

Storage temperature: -40°C to +125°C

MTBF: >1 million hours

Safety

UL, cUL 609500 Recognized

TUV EN60950 Licensed

Electrical Specs

Input

Input range	1.8-6.0VDC and 5.6-13.0VDC
Input Surge	7V for 03 version 14V for 08 version
Efficiency	3V3 @ 92% (Typ)

Control

Enable	TTL compatible (positive enable)

Output

Regulation (Line, Load, Temp)	<3%
Ripple and noise[1]	75mV - (2.5V to 3.6V Output) 50mV - (0.9V to 2.4V Output)
Output voltage adjust range	0.9V to 3.6V
Transient Response	typical 5% deviation with 50% to 75% full load 650 µS recovery
Isolation	Non-Isolated module

Specifications subject to change without notice.

AMERICAS
5810 Van Allen Way
Carlsbad, CA 92008
Telephone: 760-930-4600
Facsimile: 760-930-0698

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

ASIA
Units 2111-2116, Level 21
Tower1, Metroplaza
223, Hing Fong Road
Fwai Fong, New Territories
Hong Kong
Telephone: 852-2437-9662
Facsimile: 852-2402-4426

Ordering Information

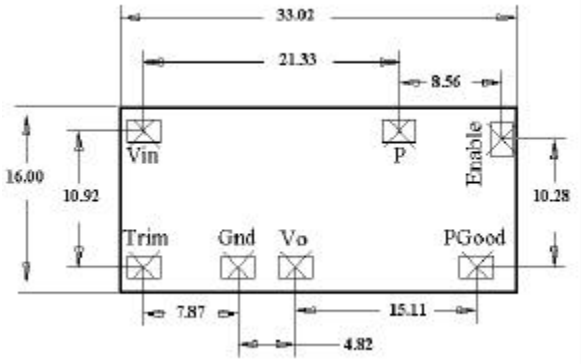
Input Voltage	Output Voltage	Efficiency Full Load	Model Number
1.8V-6.0V	0.9V @ 12A	76% (Typ)[1]	APC12J03
1.8V-6.0V	1.2V @ 12A	81% (Typ	APC12K03
1.8V-6.0V	1.5V @ 12A	86% (Typ)	APC12M03
1.8V-6.0V	1.8V @ 12A	87% (Typ)	APC12Y03
1.8V-6.0V	2.5V @ 12A	90% (Typ)	APC12G03
1-8V-6.0V	3.3V @ 12A	92% (Typ)	APC12F03
1-8V-6.0V	0.9V @ 12A	76% (Typ)	APC12J03-9[3]
5.0V-13.0V	0.9V @ 12A	73% (Typ)	APC12J08
5.0V-13.0V	1.2V @ 12A	77% (Typ)	APC12K08
5.0V-13.0V	1.5V @ 12A	81% (Typ)	APC12M08
5.0V-13.0V	1.8V @ 12A	82% (Typ)	APC12Y08
5.0V-13.0V	2.5V @ 12A	87% (Typ)	APC12G08
5.0V-13.0V	3.3V @ 12A	90% (Typ)	APC12F08
5.0V-13.0V	0.9V @ 12A	74% (Typ)	APC12J08-9[3]

Note:
1. Typical Efficiency is measured at full load, mid range input, and Tc=25 Deg C
2. "-9MA" (suffix) - Output Trim, PGood and Parallel Options available on all modules
3. "-9" (suffix) - Output Trim option available on 0.9V version.

Notes:

1. 20 MHz bandwidth. External 56 uF (ESR < 75mohm) for 03 device and 100uF (ESR < 40mohm) for 08 device across Vout and Gnd.
2. Meet FCC class A and ETS300-386-1 requirements for conducted noise. Consult Factory for filtering information to meet FCC class B, VDE or EIC specifications.
3. All specifications are typical at nominal line, full load, and 25°C unless otherwise noted.
4. All specifications subject to change without notice. Mechanical drawings are for reference only
5. Technical Reference Notes should be consulted for detailed information
6. Warranty: 1yr

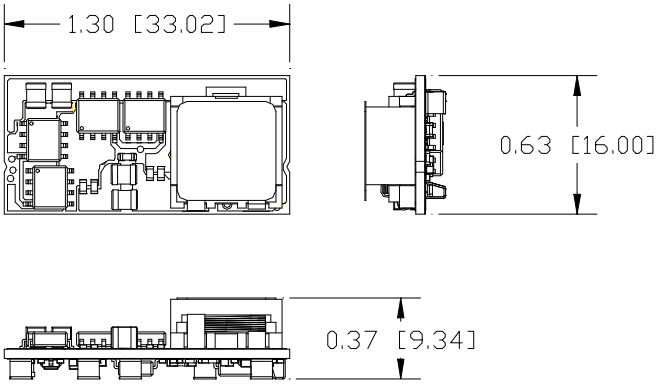
Pad Layout



Top View of Board

Optional Pins:
PGood - Power Good Logic Signal
P - Active Current Share Pin
Trim - Trim Pin (0.9 to 3.6V)

Mechanical Dimensions



REVC: JANUARY 03