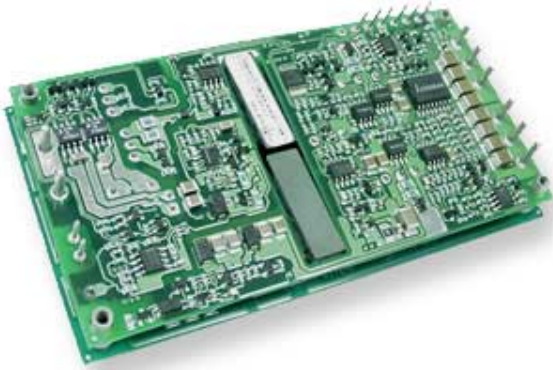


## MAXETA™ iFA SERIES DC/DC POWER MODULES 48V Input, 28V Output, 600W Full Brick



The Maxeta™ series power modules are ideally suited for wireless applications to power various RF amplifiers. With the typical 90.5% full load efficiency, a power density greater than 110W per cubic inch and a total power and current output capability of 600W and 21.4A respectively, the Maxeta™ series offers the highest efficiency, power density and usable power in a standard full brick package currently available. A wide output voltage trim range, -40% to +10%, remote sensing, power good indication, isolated remote on/off control and single wire active current sharing are standard features enhancing versatility. The Maxeta™ series modules are also suited for other telecommunication applications.

### Features

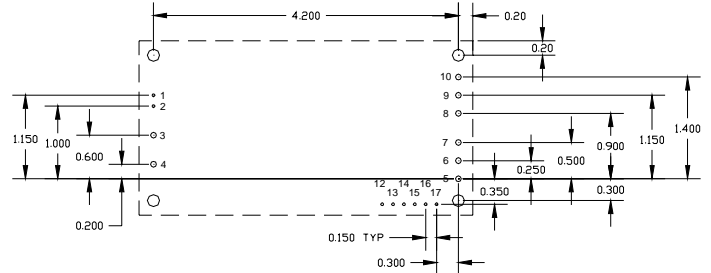
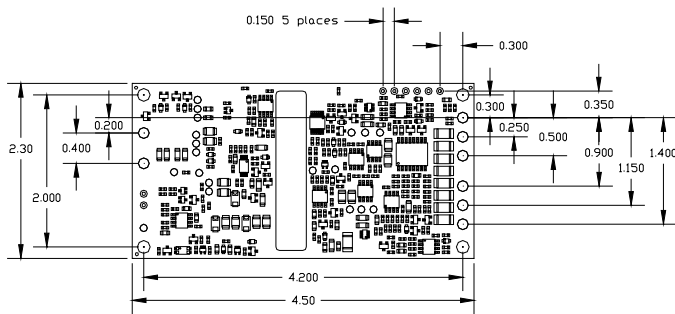
- Industry Standard 600W Full Brick
- Power density: > 110W / inch<sup>3</sup>
- High efficiency: up to 92%
- Typical efficiency: 90.5% at nominal input and 100% load
- Up to 600W of output power in high ambient temperature with air flow
- Meets basic insulation requirements
- Single wire forced current sharing
- Start-up into pre-biased output bus
- User selectable on/off (either positive or negative logic)
- Wide output voltage adjustment range
- Auto-recovery protection:
  - Input under and over voltage
  - Current limit
  - Short circuit
  - Thermal limit
- Latched output over-voltage protection
- High reliability open frame, surface mount construction
- Baseplate for improved thermal management
- Constant switching frequency
- Optional 0.110" pin length
- Safety agency: UL, CSA, EN60950
- EMI: CISPR Class A/B with external filters
- Multiple patents pending

Base Product Code	Input Voltage	Output Voltage	Output Current	Efficiency
iFA48021A280V	36-75V	28V	21.4A	90.5%

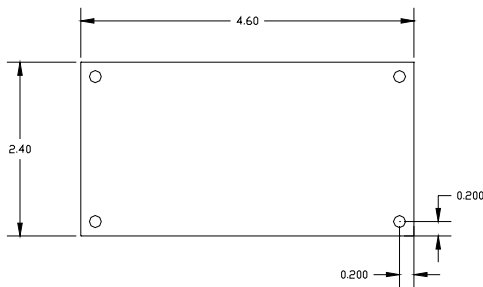
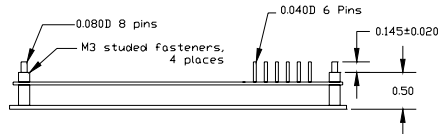
### Typical Performance

Input Characteristics		
Operating input range	36-75 V	
Transient input voltage	100 V	100mS max
Turn-on voltage	34.9 V	
Turn-off voltage	32.3 V	
Start-up time	55 mS	On/Off to 90% Vout
Maximum input current:	18 A	Input 0-75V, Io,max
Output Characteristics		
Output voltage tolerance	+/- 3% max	Over line, load, and temp to end of life
Efficiency:	90%	Nominal input, full load, Tc=25C
Line regulation:	28 mV	Over rated input
Load regulation:	28 mV	Over rated load
Output voltage adjustment	60% - 110%	Po ≤ Po,max
Output ripple:	120 mVp-p	20MHz bandwidth
Dynamic response	Load step 25% of Io,max	
Transient voltage	450 mV	slew rate =0.1A/us
Recovery time	500 uS	
Ripple frequency:	350 kHz	Fixed
Protection		
Current limit inception	110% of Io,rated	Vo=90% of Vo,nom
Short circuit	0.5 A	Auto recovery hiccup
Output over-voltage	122% of Vo,nom	Latching
Environmental		
Operating temperature	-40°C to 110°C	See full datasheet

## Product Brief: Maxeta™ iFA Series –Full Brick Power Modules



Recommended hole pattern  
Top view - Footprint



PIN	FUNCTION	PIN	FUNCTION
1	ON/OFF (+)	10	Vout (+)
2	ON/OFF (-)	11	Not Present
3	Vin (+)	12	AUX Output
4	Vin (-)	13	Power Good
5	Vout (-)	14	Parallel Control
6	Vout (-)	15	Trim
7	Vout (-)	16	Sense (+)
8	Vout (+)	17	Sense (-)
9	Vout (+)	18	

### Ordering Information

Product Identifier	Package Size	Platform	Input Voltage	Output Current/Power	Output Units	Main Output Voltage	# of Outputs	Safety Class	Feature Set
i	F	A	48	021	A	280	V	- 0	00
Innoveta Technologies	Full Brick	Standard Maxeta™	36-75V	021 – 21.4	Amps	280 – 28V	Single		00 – Standard

Feature Set	OVP Out Replaces Power Good	Pin Length
00	No	0.145"
01	No	0.110"
02	Yes	0.145"
03	Yes	0.110"