



MicroTechnology

Microwave Ku Band PA Module

The 14630 is one of a family of solid-state Power Amplifier Modules available from C-MAC MicroTechnology, ideal for Satellite Communications, Point to Point, Radiolocation and Test applications.

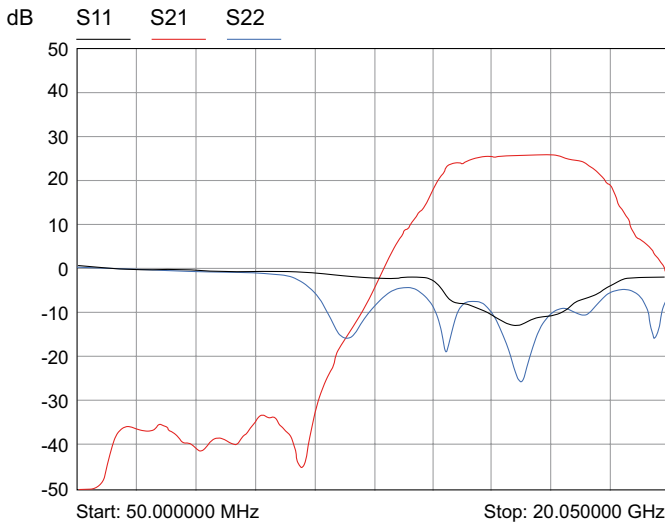
Key Features:

- Ku Band (12GHz to 18GHz) operation
- Better than 20dB midband gain
- P1dB - better than 30dBm*
- Output harmonic rejection filter
- Internal power supply regulation
- Automatic voltage rail sequencing
- Power On/Off control
- RoHS compliant
- 3.3V / 5V operation (control)
- Operating temperature range: -25°C to +70°C

* 13GHz to 17GHz at +25°C



14630-000



Typical small-signal response

The 14630 is available with Male or Female SMA connectors in any combination. Other connector types are available on request.

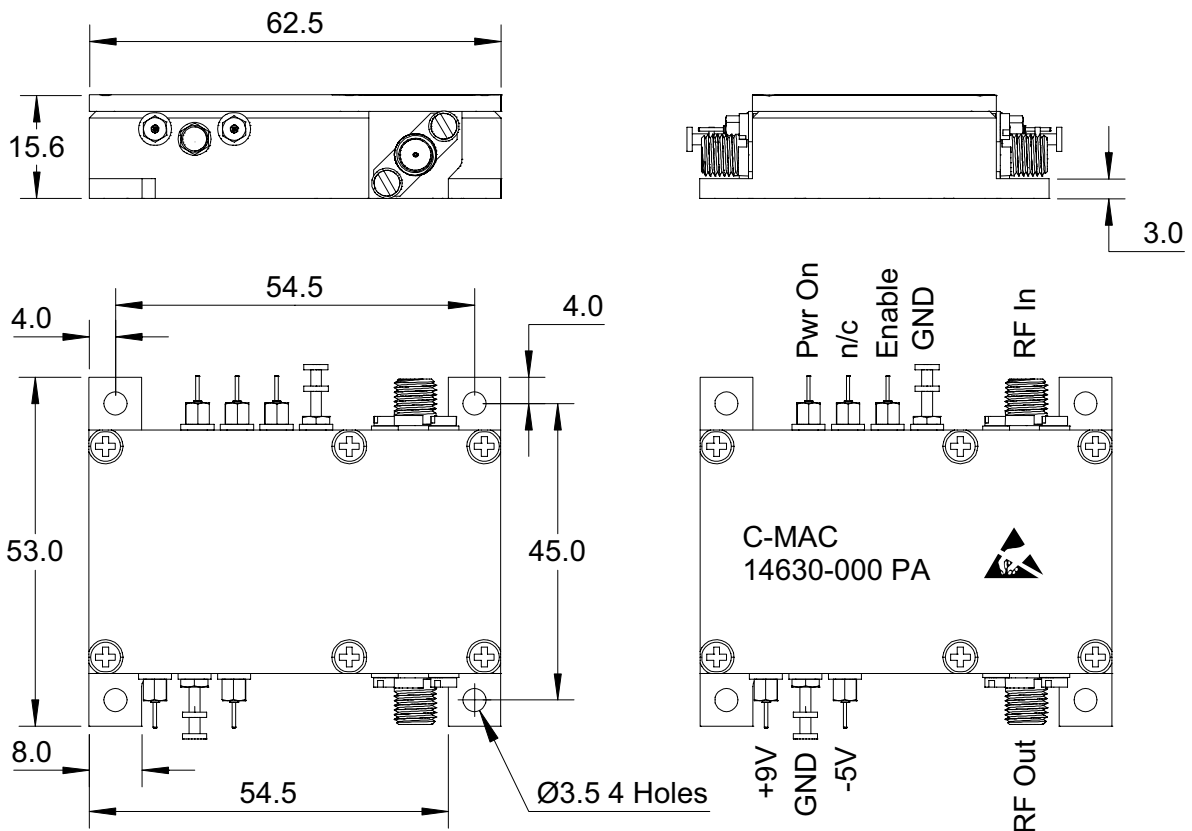
Order Code:

14630 - 0 0 0

↑	RF In	RF Out
0	FSMA	FSMA
1	FSMA	MSMA
2	MSMA	FSMA
3	MSMA	MSMA

Symbol	Function	Conditions	Minimum	Typical	Maximum
+9V	Positive Power Supply		8.5 V		10.0 V
GND	Ground Return				
-5V	Negative Power Supply		-6.0 V		-4.0 V
Pwr On	Control - Amplifier Power On				
Enable	Control - RF Output Enable				
IpD	Positive Supply Current, Disabled	Pwr On = VLow Enable = VLow		45 mA	
IpQ	Positive Supply Current, Quiescent (No RF In)	Pwr On = VHigh Enable = VHigh		650 mA	
Ip1dB	Positive Supply Current @ P1dB	Pwr On = VHigh Enable = VHigh		1.1 A	
InD	Negative Supply Current, Disabled	Pwr On = VLow Enable = VLow		20mA	
In	Negative Supply Current, Enabled	Pwr On = VHigh Enable = VHigh		60 mA	
VHigh	Control Logic High Voltage		2.0		
VLow	Control Logic Low Voltage				0.8

Note: A heatsink, with a thermal impedance of <math><1^{\circ}\text{C}/\text{W}</math>, is required for use over the full operating temperature range.



Notes:

1. Package: Aluminium with hexavalent-free passivation.
2. Maximum recommended soldering temperature 260°C.
3. Specification subject to change without prior notice.

All dimensions in mm.

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