



1214-700P

700W PSM - PLUG AND PLAY

- For L-Band Pulsed Radar Application

700 Watts - 300 μ s, 10%, +50V
L-Band Pulsed Radar 1200 - 1400 MHz

- Easy To Use – 50 Ω Plug-and-Play
- Reduce Design Cycle Time
- Improve System Performance
- Reduce System Size and Components

GENERAL DESCRIPTION

The 1214-700P is a 50 ohm matched high Power Solution Module (PSM) for L-Band pulsed Radar systems capable of providing 700 Watts of pulsed RF output power at three hundreds microsecond pulse width ten percent duty factor across the band 1200-1400 MHz. This PSM designed with plug-and-play concept which is extremely user friendly and requires no additional tuning and impedance matching from the customer. Mechanical Size is 3.2" x 2" x 0.25"

ELECTRICAL CHARACTERISTICS @ 25 °C

Symbol	Characteristics	Test Conditions	Min	Typ	Max	Units
Pin	Input Power	Vcc=50V, Pout=700W, Freq=1.2 to 1.4 GHz	70	100	110	W
Gp	Power Gain	Vcc=50V, Pout=700W, Freq=1.2 to 1.4 GHz	8.0	8.5	10.0	dB
η_c	Collector Efficiency	Vcc=50V, Pout=700W, Freq=1.2 to 1.4 GHz	45	52		%
Droop	Pulse Droop	Vcc=50V, Pout=700W, Freq=1.2 to 1.4 GHz		0.1	0.5	dB
R/L	Input Return Loss	Vcc=50V, Pout=700W, Freq=1.2 to 1.4 GHz	9			dB
VSWR-T	Load Mismatch Tolerance	Vcc=50V, Pout=700W, Freq=1.2 to 1.4 GHz			2.0:1	
Θ_{jc}	Thermal Resistance	Pulse Width=300uS, Duty=10%			0.15	°C/W

Typical Test Data:

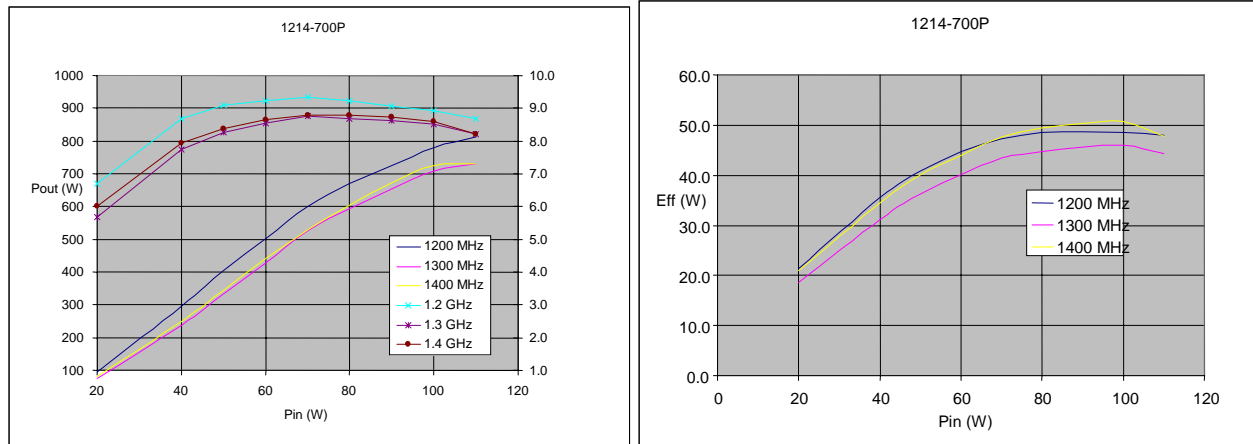
Frequency	Pin (W)	Pout (W)	Ic (I)	RL (dB)	Nc (%)	G (dB)
1200 MHz	100	824	3.1	-13	52	9.1
1300 MHz	100	760	3.1	-10	48	8.7
1400 MHz	100	770	2.9	-12	53	8.8

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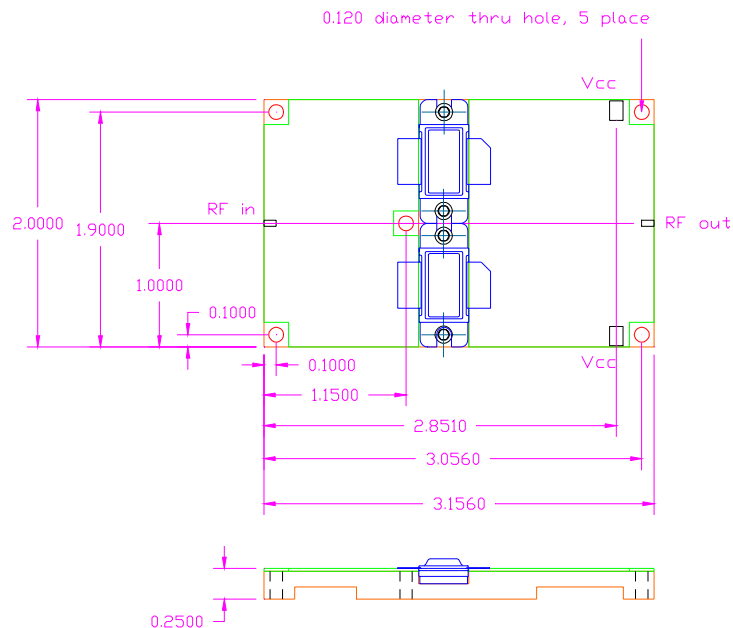


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Typical Performance Curves



Pallet Outline Drawing



ALL UNITS ARE IN INCHES

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