

Product Features

- 2400 ~ 2500MHz (ISM band)
- 200W CW Peak Power @ 50V
- 60% Drain Efficiency @ 50V
- PLL included

Applications

- Plasma Lighting
- Industrial Heating and Drying
- Scientific
- Medical



Description

The RIM24200-20 is designed for Plasma Lighting applications and Industrial, Scientific, Medical (ISM) at 2450MHz. This Amplifier is included PLL(Phase Locked Loop). No External RF input required.

This Amplifier is suitable for use in CW, pulse and linear applications. This high efficiency rugged device is targeted to replace Industrial magnetrons and other vacuum tubes currently powering industrial heating, drying, plasma lighting and medical systems.

Electrical Specifications @ V_{DS} =50V, T=25°C, 50Ω System

PARAMETER	UNIT	MIN	TYP	MAX	SYMBOL
Operating Frequency	MHz	2400	-	2500	f_{O}
Operating Bandwidth	MHz	-	100	-	OBW
CW Output Power	dBm	53	4	-	Po
Gain Flatness	dB		-	1.0	G_{F}
Operating Voltage	V	50 ±1%		-	
Current Consumption	A		6.65	-	-
Efficiency	%	-	60	- /	Eff

^{*} Custom design available



Environmental Characteristics

PARAMETER	UNIT	MIN	TYP	MAX	SYMBOL
Operating Case Temperature	°C	0	-	60	-
Storage Temperature	°C	-40	-	100	Tstg
Relative humidity w/o condensation	%	-	-	95	RH

Mechanical Specifications

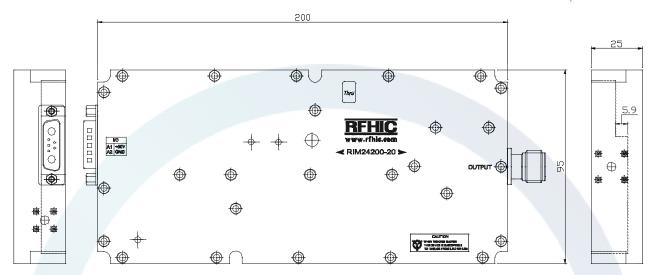
PARAMETER	UNIT	VALUE	
Dimensions (L x W x H)	mm	200 x 95 x 25	
Weight	Kg	1.15	
RF Output Connector	-	- N-type (Female)	
I/O Connector	-	D-sub 7W2 (CONEC)	
Cooling	-	External Heat-sink & Airflow	





Outline Drawing

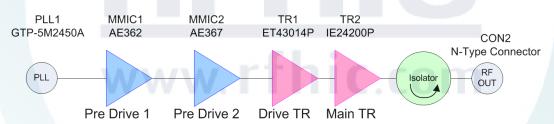
* Unit: mm | Tolerance: ± 0.2



Note

Connector positions and module mount holes may be subjected change.

Budget



Interface Connector

7pin control (7W2)

Pin No	Description
A1	+50V
A2	GND
1 - 5	N.C



Revision History

Part Number	Release Date	Version	Description	Data Sheet Status
RIM24200-20	Sep, 2018	1.0	Initial release of datasheet	-



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