

## RPAM7785A

# 7.7 ~ 8.5 GHz Low Noise Power Amplifier



### **Key Features:**

Broad Frequency Range: 7.7 ~ 8.5 GHz

48 dB High Gain: High P1dB: 31 dBm (typ.) High OIP3: 40 dBm (typ.) +10V @ 700mA Single DC Supply:

I/O port: Pins

Package: Drop-in module

## Electrical Specifications<sup>1</sup>: (at +25°C)

Parameter	Symbol	Test Condition	Min	Nom	Max	Unit
Frequency Range	BW		7.7		8.5	GHz
Gain	S <sub>21</sub>	7.7 ~ 8.5 GHz	46	48		dB
Gain Flatness	ΔG	7.7 ~ 8.5 GHz		+/-1.0		dB
VSWR (Input/Output)		7.7 ~ 8.5 GHz		1.5:1	1.6:1	
Reverse Isolation	S <sub>12</sub>	7.7 ~ 8.5 GHz		50		
Noise Figure	NF	7.7 ~ 8.5 GHz		2.5	3.0	dB
Power at 1dB Gain Compression		7.7 ~ 8.5 GHz	30	31		dBm
Output Third Order Intercept Point	OIP3	7.7 ~ 8.5 GHz	35	40		dBm
DC Voltage	Vd		+9.7	+10	+10.5	V
DC Current	ld	@Vd+10V		700		mA
Operating Temperature			-40		+85	°C
Impedance				50		Ohm

### **Absolute Maximum Ratings**

Parameters	Ratings	Units
DC Power Supply Voltage	+12	V
Drain Current	1.0	Α
Total Power Dissipation	13	W
RF Input Power	10	dBm
Channel Temperature	150	°C
Storage Temperature	-55 ~ 125	°C
Operating Temperature	-40 ~ 85	°C
Thermal Resistance	13	°C/W

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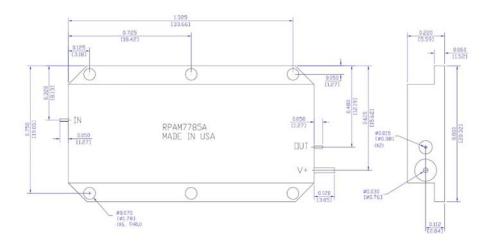
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<sup>&</sup>lt;sup>1</sup> Specifications are subject to change without notice.



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### Outline Drawing (not scaled)



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