

3134-200P

200W PSM - PLUG AND PLAY

- For S-Band Pulsed Radar Application

200 Watts - 100μs, 10%, 36V S-Band Pulsed Radar 3100 - 3400 MHz

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

GENERAL DESCRIPTION

The 3134-200P is a 50 ohm matched Power Solution Module (PSM), consists of two common base high power transistors, for S-Band pulsed Radar application. This PSM is capable of providing 200 Watts of pulsed RF output power at one hundred microsecond pulse width ten percent duty factor across the band 3100-3400 MHz. This PSM is 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 2.4" x 1.4" x 0.21"

ELECTRICAL CHARACTERISTICS @ 25 °C, Pulse Width=100us, 10%

Symbol	Characteristics	Test Conditions	Min	Тур	Max	Units
PIn	Input Power	Vcc=36V, Pout=200W, Freq=3.1 to 3.4 GHz	25	29.5	32	W
Gp	Power Gain	Vcc=36V, Pout=200W, Freq=3.1 to 3.4 GHz	8.0	8.3	9.0	dB
ης	Collector Efficiency	Vcc=36V, Pout=200W, Freq=3.1 to 3.4 GHz	40	45		%
Droop	Pulse Droop	Vcc=36V, Pout=200W, Freq=3.1 to 3.4 GHz		0.2	0.6	dB
R/L	Input Return Loss	Vcc=36V, Pout=200W, Freq=3.1 to 3.4 GHz	-8			dB
VSWR-T	Load Mismatch Tolerance	Vcc=36V, Pout=200W, Freq=3.1 to 3.4 GHz			2.0:1	
Өјс	Thermal Resistance	Pulse Width=100uS, Duty=10%			0.30	°C/W

Typical Test Data:

Frequency	Pout (W)	Pin (W)	Ic (A)	RL (dB)	Nc (%)	G(dB)
3100 MHz	200	27.6	1.27	-9	44	8.6
3200 MHz	200	24.6	1.24	-13	45	9.1
3300 MHz	200	25.8	1.23	-23	45	8.9
3400 MHz	200	28.0	1.19	-16	47	8.5

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3134-200P PSM Outline Drawing



