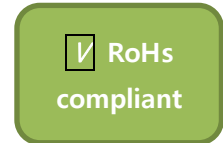


Broadband High Power Amplifier

Product Name : RCA5759H46D1, Code Name :

Doc. Name : General Spec.

General Specification for RCA5159H46D1



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Created	Printed	Document Number	Revision	Manufacturer
2018/4/26	2018/4/26		C	RFcore co.,Ltd
File : RCA5759H46D1 General Spec.docx				

The Specifications is subject to change before finalization

Customer Service: Tel. 82-31-708-7575

Email: sales@rfcore.com

<http://www.rfcore.com>

Broadband High Power Amplifier

Product Name : RCA5759H46D1, Code Name :

Doc. Name : General Spec.

ELECTRICAL SPECIFICATIONS		@ 50 Ohms load, 28 Vdc, Tc = 35 °C
Parameter	Specification	Remark
Frequency Range	5100 ~ 5900 MHz	
Saturated Output Power	40 W typ. 30 W min.	@ CW, 50 ohms load
Small Signal Gain	46 dB min.	Input Level = - 15 dBm
Large Signal Gain	43 dB min.	Input Level = 0 dBm
Small Signal Gain Flatness	Peak to Peak 4 dB	Input Level = - 15 dBm
Large Signal Gain Flatness	Peak to Peak 3 dB	Input Level = 0 dBm
Maximum Input Power for no damage on DC ON	5 dBm max	@ CW, 50 ohms load
Input VSWR	Less than 1.5 : 1	
Output VSWR	Less than 2 : 1	Built in Isolator
Maximum load VSWR for amplifier survival	Infinite, all phase	@ Pout = 30 W CW, Tc = +70 °C
Enable/Disable Switching Time	10us max.	
DC Input Voltage	28 ± 1 Vdc	
Current Consumption	5 A max 4 A Typ..	@ Pout = 15 W CW
Current Consumption	7 A max 5.5 A Typ..	@ Pout = 30 W CW
RF Input Signal Format	CW	

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Broadband High Power Amplifier

Product Name : RCA5759H46D1, Code Name :

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Interface Pin Description		
Connector	Description	Specification
I/O Interface(Filter D-Sub 9Pin Male)	1. Enable(Active Low)	(Enable = 0V, Disable = 5V) pull-up @ 5V with 10k ohm
	2. Forward Power Monitor	2.3 ± 0.3 V @ Pout=44 dBm CW Logarithmic Detector(±0.05V/dB) Vpin2 = 2.3-(44-Pout)x0.05±0.3 V
	3. N.C	
	4. Reflected Power Monitor	Logarithmic Detector(±0.05V/dB)
	5. Temperature Monitor	VT= 10(mV) * Tc(°C) + 500(mV), Tc = Case Temperature± 5°C
	6. Vcc	
	7. Vcc	
	8. GND	
	9. GND	

ENVIRONMENTAL SPECIFICATIONS

Parameter	Specification	Remark
Operating Case Temperature	-20 ~ +75 °C	At a hottest point of the mechanical case of amplifier module The amp MUST operate at baseplate of 75°C with maximum 1dB degradation in output power
Storage Temperature	-40 ~ +85 °C	

MECHANICAL SPECIFICATIONS

Parameter	Specification	Remark
Dimension (Amplifier only)	145 * 95 * 25 mm	w/o connectors
Weight (Amplifier only)	Less than 650 g	
RF Input Connector	SMA Female	
RF Output Connector	SMA Female	
I/O Interface Connector	Filter D-Sub 9Pin Male	Capacitor Value : 1000pF
Cooling	Adequate Heat-sink required	

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