Product Name: RCA0727H50D1

Doc. Name: Preliminary Short Spec.

Preliminary Short Specification for RCA0727H50D1

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ELECTRICAL SPECIFICATIONS	@ 50 Ohms load, 28 Vdc, Tc ≒ 35 °C		
Parameter	Specification	Remark	
Frequency Range	700 ~ 2700 MHz		
Saturated Output Power @ 28 VDC	80W min.	@ CW, 50 ohms load	
Saturated Output Power @ 36 VDC	100W min.	@ CW, 50 ohms load	
Small Signal Gain	50 dB min	Input = -15 dBm	
Large Signal Gain	47 dB min	Input = 0 dBm	
Gain Flatness	Peak to Peak 6 dB	Input = 0 dBm	
Maximum Input Power for no	10 dp		
damage	10 dBm		
Input VSWR	Less than 2:1		
Maximum load VSWR for amplifier	3.5 : 1	Works with degraded	
working		performance.	
On/Off Switching Time	1 usec typ.		
	5 usec max.		
DC Input Voltage	28 to 36 Vdc		
Current Consumption @ 30 VDC	11 A max.	@ Pout = 80W CW, 50 ohms	
Current Consumption @ 28 VDC	9 A typ.	load	
Current Consumption @ 26 VDC	11 A max.	@ Pout = 100W CW, 50 ohms	
Current Consumption @ 36 VDC	9 A typ.	load	
RF Input Signal Format	CW		

Interface Pin Description		
Connector	Description	Specification
I/O Interface(7W2)	1 Enable (Active law)	(Enable = 0V, Disable = 5V)
	1. Enable (Active low)	pull-up @ 5V with 10k ohm
	2. Forward Power Monitor	Logarithmic Detector(0.05V/dB)
		TTL HIGH(5V) @ high VSWR
		VSWR alarm will be activated at
	3. VSWR Fail Alarm	a certain ratio between 4 and
		infinite VSWR. The alarm is not
		latched signal.
	4. Reflected Power Monitor	Logarithmic Detector(0.05V/dB)
	F. Tamanayatuwa Manitay	VT= 10(mV) * Tc(°C) + 500(mV),
	5. Temperature Monitor	
	A1. VCC	
	A2. GND	

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ENVIRONMENTAL SPECIFICATIONS

Parameter	Specification	Remark	
Operating Case Temperature	-20 ~ +70 °C	At a hottest point of the mechanical case of amplifier	
Storage Temperature	-40 ~ +85 °C		

MECHANICAL SPECIFICATIONS

Parameter	Specification	Remark
Dimension	235 * 87 * 27 mm	w/o connectors
Weight	Less than 1100 g	
RF Input Connector	SMA Female	
RF Output Connector	SMA Female	
DC & I/O Interface Connector	7W2P	
Cooling	Adequate Heat-sink required	

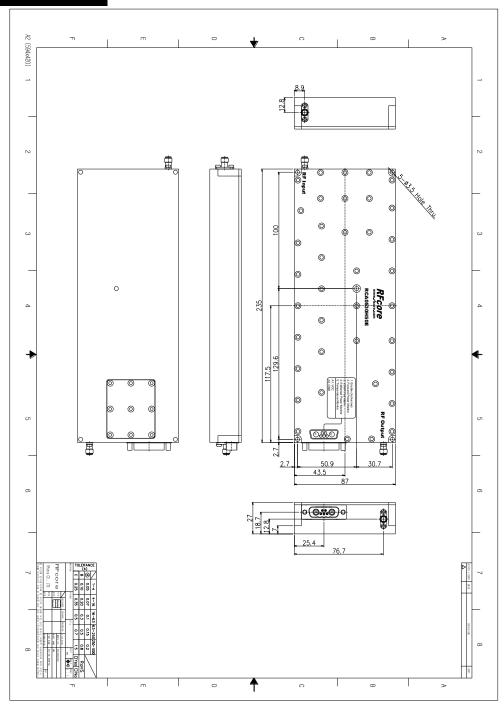
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MECHANICAL DRAWING



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