#### **Band-specific High Power Amplifier**

Product Name: RCA900H48A, Code Name:

Doc. Name: Preliminary Short Spec.

# Preliminary Short Specification for RCA900H48A

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ELECTRICAL SPECIFICATIONS	@ 50 Ohms load, 28 Vdc, Tc ≒ 35 °C		
Parameter	Specification	Remark	
Frequency Range	925 ~ 960 MHz		
Saturated Output Power	70W min.		
Gain @ Center Frequency	47 ± 1.0 dB	Input = -15 dBm	
Gain Flatness	Peak to Peak 2 dB	Input = -15 dBm	
Maximum Input Power for no damage	7 dBm max.		
Input / Output VSWR	Less than 1.5 : 1		
RF Input Signal Format	CW		
Current Consumption	6.5 A max.	@ Pout 70W	
DC Input Voltage	+28 ± 1.0 Vdc		

Interface Pin Description			
Connector		Description	Specification
D-Sub 9Pin Male	1.	Temperature Monitor	$VT = 0.02(V) * Tc(°C) + 1.0(V),$ $Tc = Case Temperature \pm 5°C$
	2.	Forward Power Monitor	4 ± 0.1V @ CW 48.5dBm, slope : 0.1V/dB Vpin2 = 4-(48.5-Pout)x0.1±0.1V
	3.	GND	
	4.	Reflected Power Monitor	Vpin4 is Diode type Detector. Diode has non-linear log slope characteristic.  Note: Alarm Status is not latched. Alarm is cleared once Vpin4 go down 1.4 ± 0.1Vdc
	5.	VSWR Fail Alarm	Alarm : High(5V) @ Reflected power = 15~ 30W @ Fcenter
	6.	Vcc	
	7.	Vcc	
	8.	GND	
	9.	Enable (Active low)	pulled-up@5V with 10KΩ

ENVIRONMENTAL SPECIFICATIONS		
Parameter	Specification	Remark
Operating Case Temperature	-20 ~ 60 °C	
Storage Temperature	-40 ~ 85 ℃	

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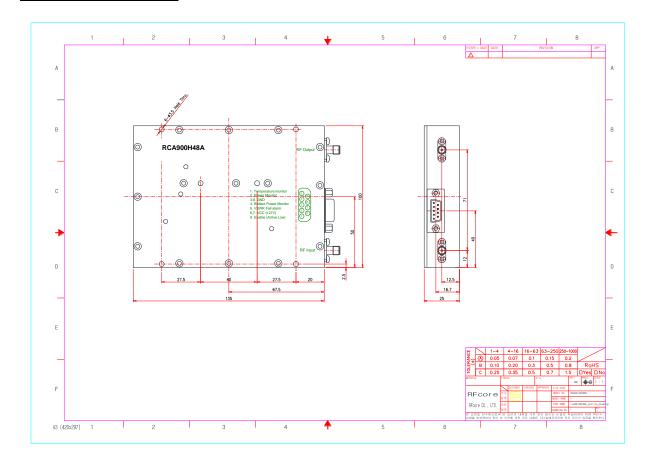
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MECHANICAL SPECIFICATIONS		
Parameter	Specification	Remark
Dimension	135 * 100 *25 mm	
RF Input Connector	SMA Female	
RF Output Connector	SMA Female	
DC Power & Control Connector	D – SUB 9Pin Male	
Cooling	Adequate Heat-sink required	

### MECHANICAL DRAWING



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