

# Specification for 2100-2700MHz 100W Amplifier

Model Name : RCA21-27H50A

Parameter	Specification	Remark
Frequency Range	2110 to 2700 MHz	
Power Output Psat	50 dBm: 2.11~2.5 GHz 45 dBm: 2.5~2.7 GHz	CW operation See Note (*)
Gain @ Fcenter	50 ± 1 dB	
Flatness (@100 W at Fcenter)	6 dB peak to peak	
Maximum input power	15 dBm	
DC Input(3W3S)	28 VDC	
DC Current @ rated output power	14 A Typical 16 A Max.	50dBm: 2.11~2.5 GHz 45 dBm: 2.5~2.7 GHz
SIZE	180 * 210 * 25 mm	
Operation Temperature	-20℃ ~ +70℃	Case temperature
RF I/O	1. RF OUT –N type Female 2. RF IN – SMA Female	
I/O Map (D-Sub 9 PIN F)	1. GND 2. NC 3. NC 4. Temperature monitor $V_T = 3.6 - 0.022 * (T - 30)$ 5. Over temp alarm ( High at over 85℃ ±5℃) 6. Enable ( High : Disable, Low : Enable ) 7. Do not connect 8. Forward power monitor ( 4V ±0.1V @ 50dBm) at fcenter * Detector is AD8362 ( real power detector) 9. Reverse power Detector It is Log slope. Detail will be supplied. Tentatively $V_{out} = 2 - 0.05 ( 50 - \text{Reverse Power in dBm} ) V @ 2.4 \text{ GHz}$ .	

# Mechanical Drawing

Model Name : RCA21-27H50A

Dimension (W x D x H) : 180(W) x 210(D) x 25(H)mm

