

Broadband High Power Amplifier

Product Name : RCA0722H50E

Doc. Name : General Spec.

<p style="text-align: center;">General Specification for RCA0722H50E</p>
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Created	Printed	Document Number	Revision	Manufacturer
2015/12/2	2017/1/12		E	Rfcore co.,Ltd
File : RCA0722H50E General Spec.docx				

The Specifications is subject to change before finalization

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

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ELECTRICAL SPECIFICATIONS		@ 50 Ohms load, 28 Vdc, Tc = 35 °C
Parameter	Specification	Remark
Frequency Range	700 ~ 2200 MHz	
Saturated Output Power	50 dBm min.	@ CW
Large Signal Gain	50 dB min.	@ Pout = 100W
Gain Flatness	Peak to Peak 4.0 dB	Input Power = 0dBm
Maximum Input Power for no damage	10 dBm max.	
Input VSWR	Less than 2 : 1	
Harmonics(H2, H3)	-12 dBc max.	@ Pout = 100W
IMD	-15 dBc max. -20 dBc typ.	@ 2 tones * 44 dBm/tone, tone spacing 5MHz
Spurious	-70 dBc typ., -60 dBc max.	@ Pout = 100W
DC Input Voltage	28 ± 1.0 Vdc	
Current Consumption	12 A typ., 14 A max	Eff. > 25% @ Pout = 50 dBm CW
Standby Current Consumption	0.08 A max.	Shutdown Status
I/O Interface (7W2 Male)	1. Forward Power Monitor	Vpin1 = 2.4±0.2V@50dBm The coupled flatness of directional coupler is typically ± 1 dB under 50 ohms load condition. Log slope: 0.05/dB
	2. Reflected Power Monitor	Vpin2 = 2.4±0.2V@50dBm The coupled flatness of directional coupler is typically ± 1 dB under 50 ohms load condition. Log slope: 0.05/dB
	3. Temperature Monitor	VT = 10 * Tc + 500 [mV] Tc is Case Temperature in degC ± 5°C
	4. VVA	5V(Maximum attenuation), 0V(Maximum Gain)
	5. Enable (Active Low)	Enable : OPEN or TTL Low Disable : TTL High(+3 ~ +5VDC) Pulled-down with 10 kΩ
	A1. Vcc	
	A2. GND	

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SELF PROTECTION

Parameter	Specification	Remark
Over Temp Protection	Shutdown @ 85 °C ± 5 °C Auto Recovery @ 70 °C ± 5 °C	
RF Input Overdrive	10 dBm	
Load VSWR	Shutdown @ a certain ratio exceeding VSWR 3:1.	The reset latch is operated with triggered Enable (pin5 of 7W2) from TTL low to TTL high.

ENVIRONMENTAL SPECIFICATIONS

Parameter	Specification	Remark
Operating Case Temperature	-20 ~ +75 °C	
Storage Temperature	-40 ~ +85 °C	
Humidity	95% max.	Non-condensing

MECHANICAL SPECIFICATIONS

Parameter	Specification	Remark
Dimension	215.9 x 114.3 x 27 mm	
RF Input / Output Connector	SMA Female / SMA Female	
Control Connector	7W2 Male	
Cooling	Adequate Heat-sink required	

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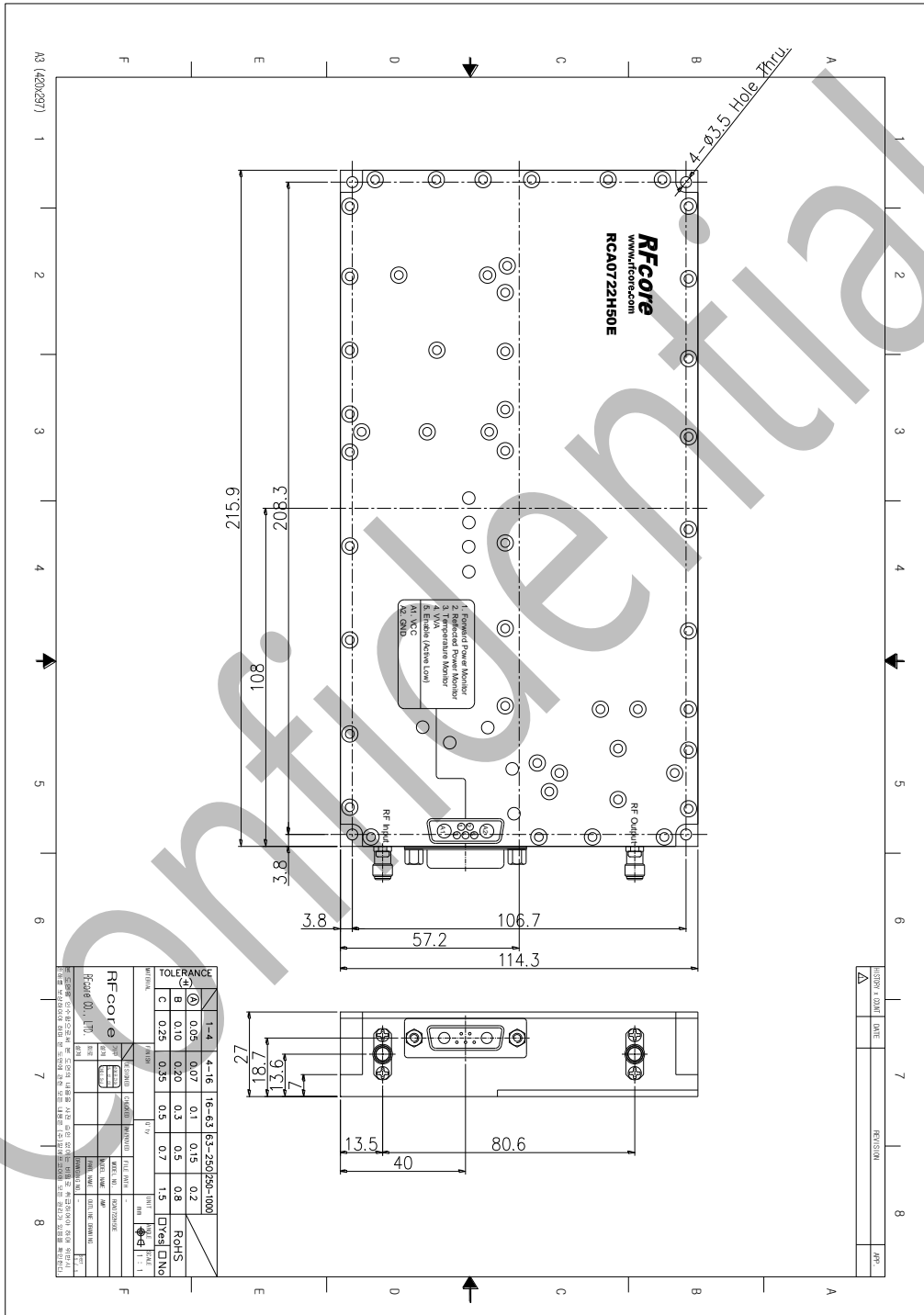
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MECHANICAL DRAWING



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