

# Specification

## 1. Item

Product	415~460MHz 80W High Power Amplifier
Partnumber	EHM-0415-49-48

## 2. Revision History

Issued / Revision	R&D Approved	Revision Detail



Design	R & D	Approval
		
CYKIM		

Customer:	Date:	Part No.: EHM-0415-49-48
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### General Specification

No.	Parameter	Specification	Unit
1	Operating Frequency Range	415~460MHz	-
2	Output Power(P1dB)	80	-
3	Gain	45dB typ.	-
4	Gain Flatness	±1.5dB typ.	-
5	Max. Input Power	+5dBm	-
6	Input VSWR	1.5	-
7	ACPR@40dBm, 5MHz LTE PAR : 9.8dB@CCDF 0.01%	-45dBc	-
8	Harmonics	-35dBc typ.	-
9	Spurious Signal	-60dBc	-
10	NF	18dB max.	-
11	EVM@40dBm	5%	-
12	Operating Voltage	28V	-
13	Current Draw@49dBm	11A max	-
14	Load VSWR	∞ : 1 VSWR	-
15	Protection	Over current : @ ≥ 2.2A Over temperature : Shutdown @ ≥ +90°C, Auto-restart @ +80°C	-

### Mechanical Specification

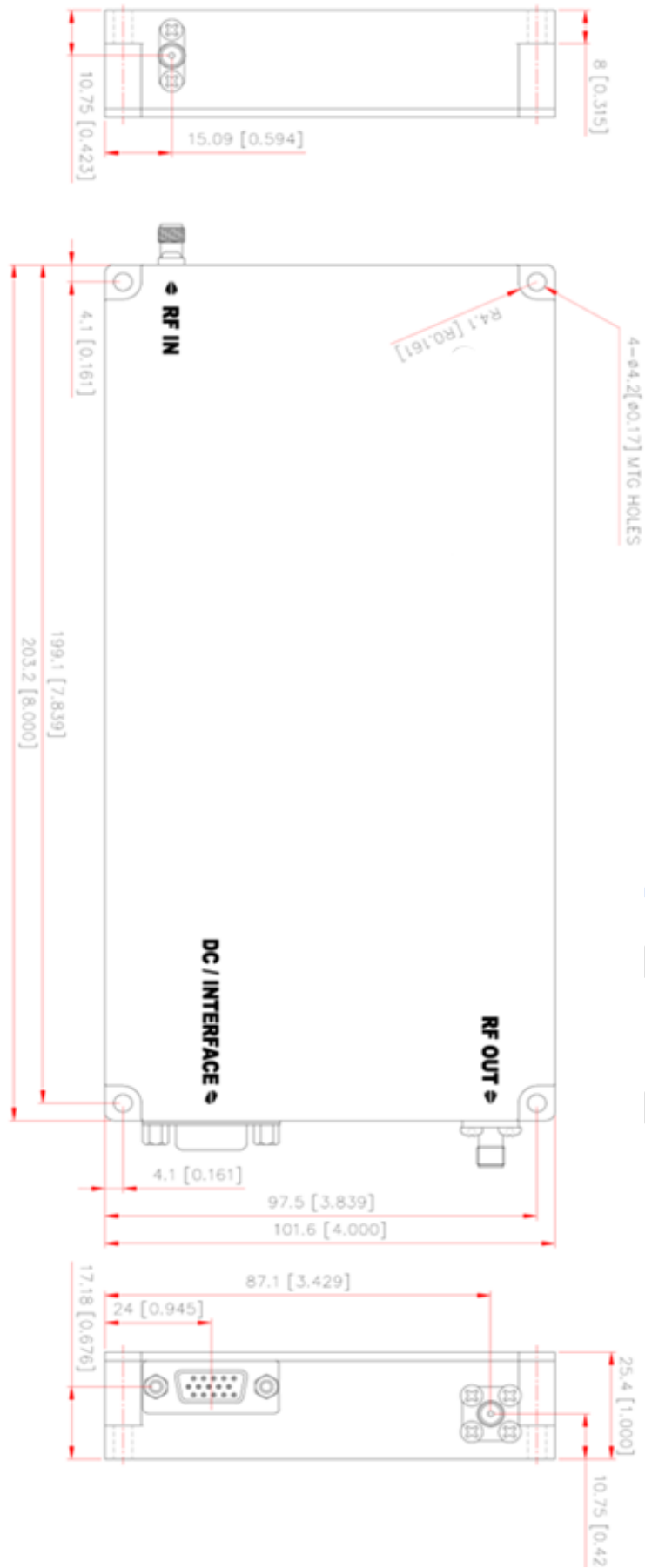
No.	Parameter	Specification	Unit
1	Dimension	203.2*101.6*25.4	-
2	Weight	1.0	kg
3	RF Connector	SMA Female	-
4	DC/Interface Connector	D-SUB 15Pin Male	-
5	Operating Case Temperature	-20 ~ +80°C	-
6	Storage Temperature	-40 ~ +90°C	-
7	Relative Humidity(Non-condensing)	5~95%	-

## Pin Description

Pin No.	Description	Specifications
1	Over Power Alarm	Alarm : TTL "High"@ $\geq +50\text{dBm}$
2	Reverse Power Alarm	Alarm : TTL "High"@ $\geq \text{VSWR } 3:1$
3	High Temp. Alarm	Alarm : TTL "High"@ Temp. : $\geq +95^\circ\text{C}$ Shutdown, Auto-restart @ $+85^\circ\text{C}$
4	DC Fail Alarm	Alarm : TTL "High"@ $\leq +26\text{V}$ or $\geq +30\text{V}$
5	Enable/Disable	Enable: TTL "Low", Disable: TTL "High"
6	Forward Power Monitor	$4.0 \pm 0.1\text{V}$ @ $P_o = +49\text{dBm}$ , Center Frequency $4.0 \pm 0.15\text{V}$ @ $P_o = +49\text{dBm}$ , Over Frequency
7	Reverse Power Monitor	$3.0 \pm 0.1\text{V}$ @ $P_o = +39\text{dBm}$ , Center Frequency $3.0 \pm 0.15\text{V}$ @ $P_o = +39\text{dBm}$ , Over Frequency
8	Temperature Monitor	$V_o = (10\text{mV}/^\circ\text{C} \times \text{Temp}) + 500\text{mV}$
9,10	GND	Ground
11,12,13	VDD	+28VDC
14,15	GND	Ground

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■ Mechanical Dimension [Unit: mm]



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