

# Specification

## 1. Item

Product	450~470MHz LPA
Partnumber	ELM-0450-38-45

## 2. Revision History

Issued / Revision	R&D Approved	Revision Detail



Design	R & D	Approval
		
CYKIM		

Customer:	Date:	Part No.: ELM-0450-38-45
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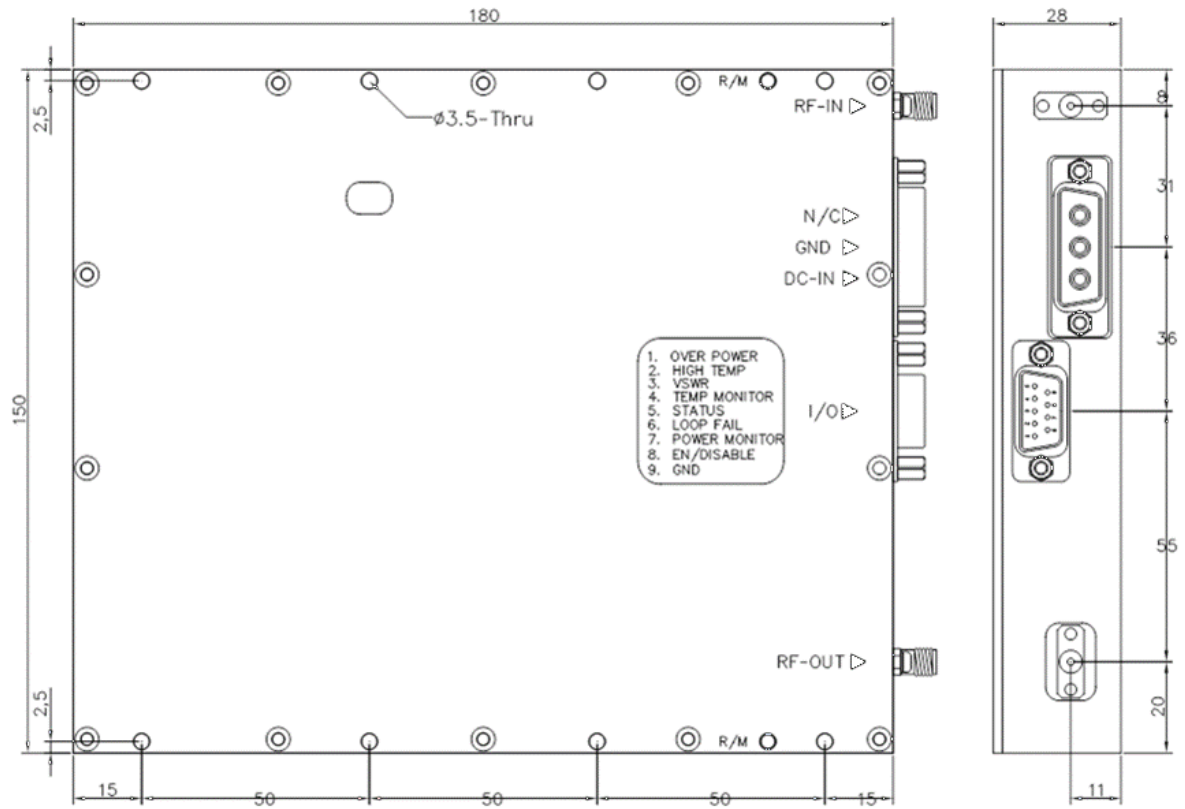
## General Specification

No.	Parameter	Specification	Unit
1	Operating Frequency Range	450~470MHz	-
2	Output Power Level	38dBm	-
3	Gain	45±1dB	dB
4	Gain Flatness	±0.5	dB
5	Gain Variation Over Temp.	±1 max	dB
6	IMD	< -74 @ Normal Temp.( 25°C) < -71 @ -20°C~+60°C	CW 2 tone, Ch Sp. : 100kHz
7	Harmonic	-40 max	-
8	Input VSWR	1.5:1 max.	-
9	Output VSWR	1.5:1 max. (1.4:1 typ.)	Isolator Applied
10	Normal Operating Voltage	+27	-
11	DC Current Consumption	1.6A typ. 2.0A max.	@38dBm
12	Output protection	Isolator	-
13	Shut-down Temp Level	90±5	70±5°C Auto Enable
14	Working Temperature	+25°C (with IMD < -74 dBc) -20 to +60°C (with IMD < -71dBc )	-
15	Storage Temperature	40°C~+85	-
16	Relative Humidity	0%~90%	Non-condensing

## Pin Assignment

Pin No	Description	Remark
I/O Interface (D-Sub 9Pin Male)	1. Over Power Alarm	Po=+42dBm±1dB Shutdown High
	2. High Temp. Alarm	High (shut-down) Low (Normal) Alarm & Shutdown +90°C↑ Auto Recovery +70°C↓
	3. VSWR Alarm	High (Alarm) Low (Normal) 30dBm(Output Open)
	4. Temp. Monitor	Vo=(T / 100)+500mV
	5. LPA Status	High (Inactive), Low (Active)
	6. Loop Fail Alarm	High (shut-down) Low (Normal)
	7. FWD Power Monitor	4.0V@Po=+40dBm, 50mV/dB
	8. Enable/Disable	High (Disable) Open & Low (Enable)
	9. GND	
	* DC Fail Alarm (DC Fail Alarm function is integrated. But as we use D-Sub 9 Pin, pin for DC Fail Alarm doesn't exist)	≤19V ~ 31V≤ : Shut down 21V ~ 29V : Auto Recovery
I/O Interface (3W3P Male)	A1. VCC	+27V
	A2. GND	-
	A3. N.C	-

■ Mechanical Dimension [Unit: mm]



SOLUTION