

BPA1MT30MW30-H 1 ~ 30 MHz, 30 Watt



ELECTRICAL SPECIFICATIONS @ 220VAC, 25°C, 50Ω

Parameter	Symbol	Min	Typ	Max	Unit
Operating Frequency	BW	1		30	MHz
Output Power @ P _{SAT} , CW	P _{SAT}	30	60		Watt
Power Gain @ Psat	G _S	45	48		dB
Input Power for Rated P _{SAT}	P _{IN}		0		dBm
Gain Flatness @ Rated P _{SAT}	ΔG		±1.0		dB
Input Return Loss	S11		-10		dB
In/Out Impedance	Z		50		ohm
Spurious Signals	Spur		-70	-60	dBc
Power consumption @ P _{SAT}	VAC		200	350	Watt

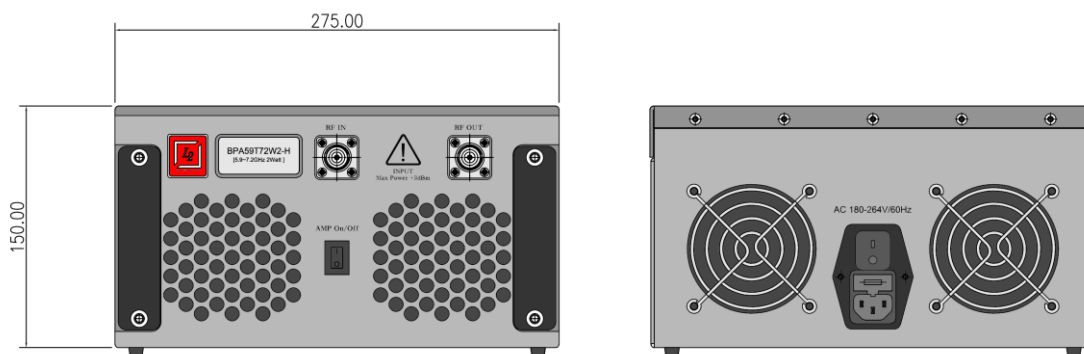
MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Note
Dimensions (H x W x D)	150 x 275 x 370 (TBD)	mm	Handy
Weight	Typ. 4	kg	Max
RF Connectors Input/Output	N type, Female		Front
Primary Power	88~264 VAC, 50/60Hz 3 pin Single phase		
Cooling	Air cooling Self-contained fans & Heat sink		

ENVIRONMENTAL CHARACTERISTICS (Design to Meet)

Parameter	Symbol	Min	Typ	Max	Unit
Operating Case Temperature	T _c	-20		+65	°C
Storage Temperature	T _{stg}	-40		+85	°C
Relative humidity (non-condensing)	RH			95	%

OUTLINE DRAWING (TBD)



Performance Plots

Plots 1 - Small Signal Gain

Top Curve: Small Signal Gain @ $P_{IN} = -20$ dBm

Reference: 48 dB, 4 dB/div.

Bottom Curve: Input Return Loss

Reference: 5 dB, 5 dB/div.

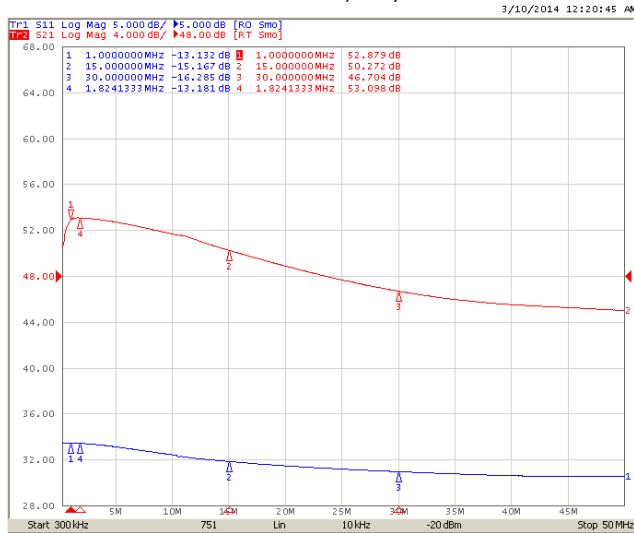


Table 1 – Power vs Input

Frequency (MHz)	P_{IN} / P_{OUT}	P_{OUT} @ $P_{IN}+1dB^*$
1	-9 dBm / 44.83 dBm	-8 dBm / 45.83 dBm
5	-8.6 dBm / 44.67 dBm	-7.6 dBm / 45.83 dBm
10	-7.7 dBm / 44.83 dBm	-6.7 dBm / 45.83 dBm
15	-6.4 dBm / 44.83 dBm	-5.4 dBm / 45.83 dBm
20	-4.9 dBm / 44.7 dBm	-3.9 dBm / 45.67 dBm
25	-3.2 dBm / 44.83 dBm	-2.2 dBm / 45.67 dBm
30	-2.1 dBm / 44.83 dBm	-1.1 dBm / 45.67 dBm

* $P_{OUT} = 44.7$ dBm (30W) 일 때의 P_{IN} 기준에서 1dB 증가 시 P_{OUT} .