



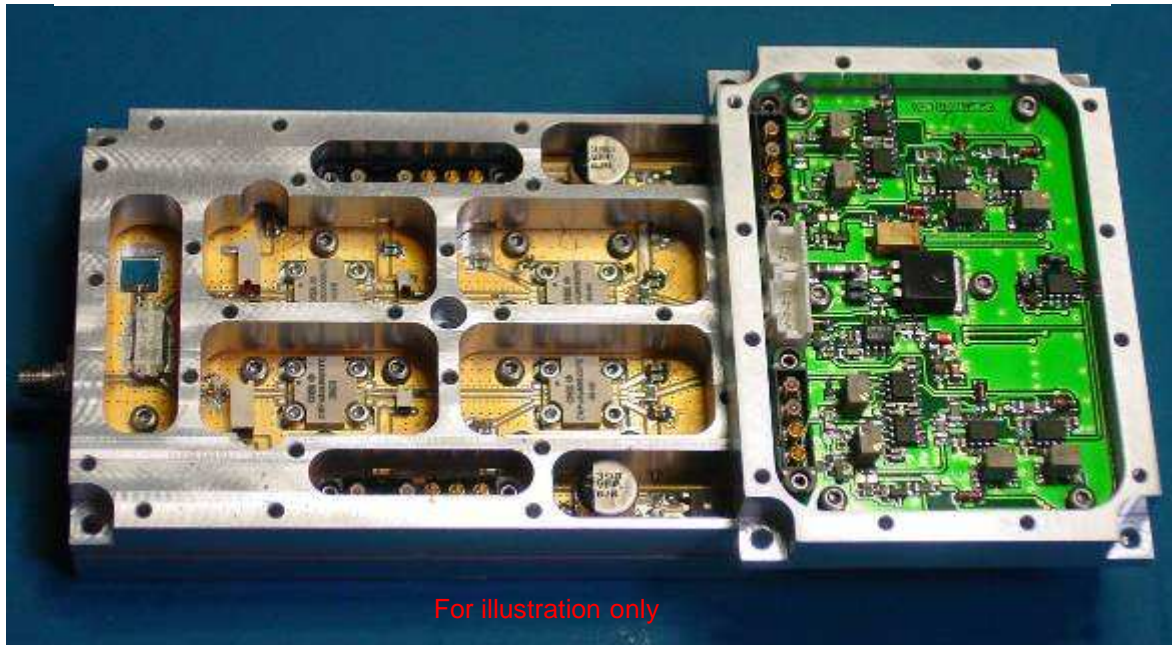
**FEUILLE DE Spécifications
DATASHEET**

**P/N: AAMCS-AMP-0080M-0800M-50dB-52dBm-000022-M
Designation : 150W, 50dB, 80-800MHz Amplifier**

150W, 50dB, 80-800MHz Amplifier

EW, IED, COM-INT, ECM, EMC or instrumentation purpose featuring:

- ➔ **French design and manufacture**
- ➔ **ITAR free design**
- ➔ **No export license or end user statement**
- ➔ **RoHs compliant**
- ➔ **Ultra small package**
- ➔ **GaN technology for ruggedness**
- ➔ **Input power and thermally protected**
- ➔ **Ultra fast switch time for noise quieting / blanking mode**
- ➔ **Gate current protection for saturated power operation**
- ➔ **Palet drop-in configuration available on request**
- ➔ **Rack mount configuration available on request**



Frequency (MHz)	50	80	100	200	300	400	500	600	700	800
Psat (dBm)	50.9	52.1	52	52.1	52.2	50.8	51	52.4	52.2	52.4
I (A) @ Psat 28Vdc	8.2	7.9	7.8	9.4	9.1	9.4	10.7	9.8	10.5	9.9
PAE (%)	54	73	73	62	65	46	42	63	56	63

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Caractéristiques électriques <i>electrical specifications</i>		All measurements performed @ +25°C and +28Vdc unless specified other	
	Conditions de mesures <i>Measuring conditions</i>	Mesures <i>Measurements</i>	Unités <i>Units</i>
Bande de fréquence <i>Bandwidth</i>		80-800 (usable from 50 to 850MHz)	MHz
Puissance de sortie <i>Output power</i>	@ Psat @ baseplate temp = +25°C & +28Vdc	min. 50.5 typ. 52 max. 52.5	dBm
Puissance d'entrée <i>Input power</i>	@ Psat Damage level	-5 typ. 0 max. +15 max. (gate current self cutoff)	dBm
Gain <i>Gain</i>	Small signal @ Psat @ +25°C	min. 57 max. 67 min. 50.5 typ. 52 max. 52.5	dB
Ondulation dans la bande <i>In band ripple</i>	Petit signal @ Psat	max. +/- 5 max. +/- 1	dB
Appairage phase / amplitude <i>Phase & Gain in batch matching</i>	Phase per batch Amplitude per batch	max. +/-5 per batch max. +/-0.5	° dB
Adaptation d'entrée / sortie <i>Input/output return loss</i>	Input output	min.10 typ.17 min.5 typ.10	dB
TOS de sortie <i>Load mismatch</i>		max. 10:1	
Distorsion harmonique <i>Harmonics</i>	@ Psat	-15 typ. -10 max.	dBc
OIP3 <i>OIP3</i>	2 carriers 40 dBm each	min. 55 typ. 57	dBm
Extinction <i>Noise quieting</i>	TTL	low or not connected = RF / bias ON high = RF / bias OFF	
Temps d'extinction <i>Noise quieting time</i>		200 typ. 500 max.	ns
Tension d'alimentation <i>Supply voltage</i>		min.+24 typ +28 max. +32	Vdc
Consommation <i>Consumption</i>	Pout =150W Vcc=28V	typ. 9 max. 11	A

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Alarmes et informations <i>Alarm and display</i>			
Réarmement polarisation <i>Reset gate</i>	command	Rising edge of a pulse = biasing ON	
Commande d'extinction <i>Noise quieting/blanking control</i>	TTL command	low or not connected = RF / bias ON high = RF / bias OFF	
Etat de l'alarme grille <i>Gate protection status</i>	TTL info	Low = OK High = alarm	
Etat de l'alarme temperature <i>Temperature protection</i>	TTL info	Low = OK High = alarm (autosutdown of the biasing if temperature of the baseplate exceeds +85°C – auto recovery when temperature decrease below 80°C)	

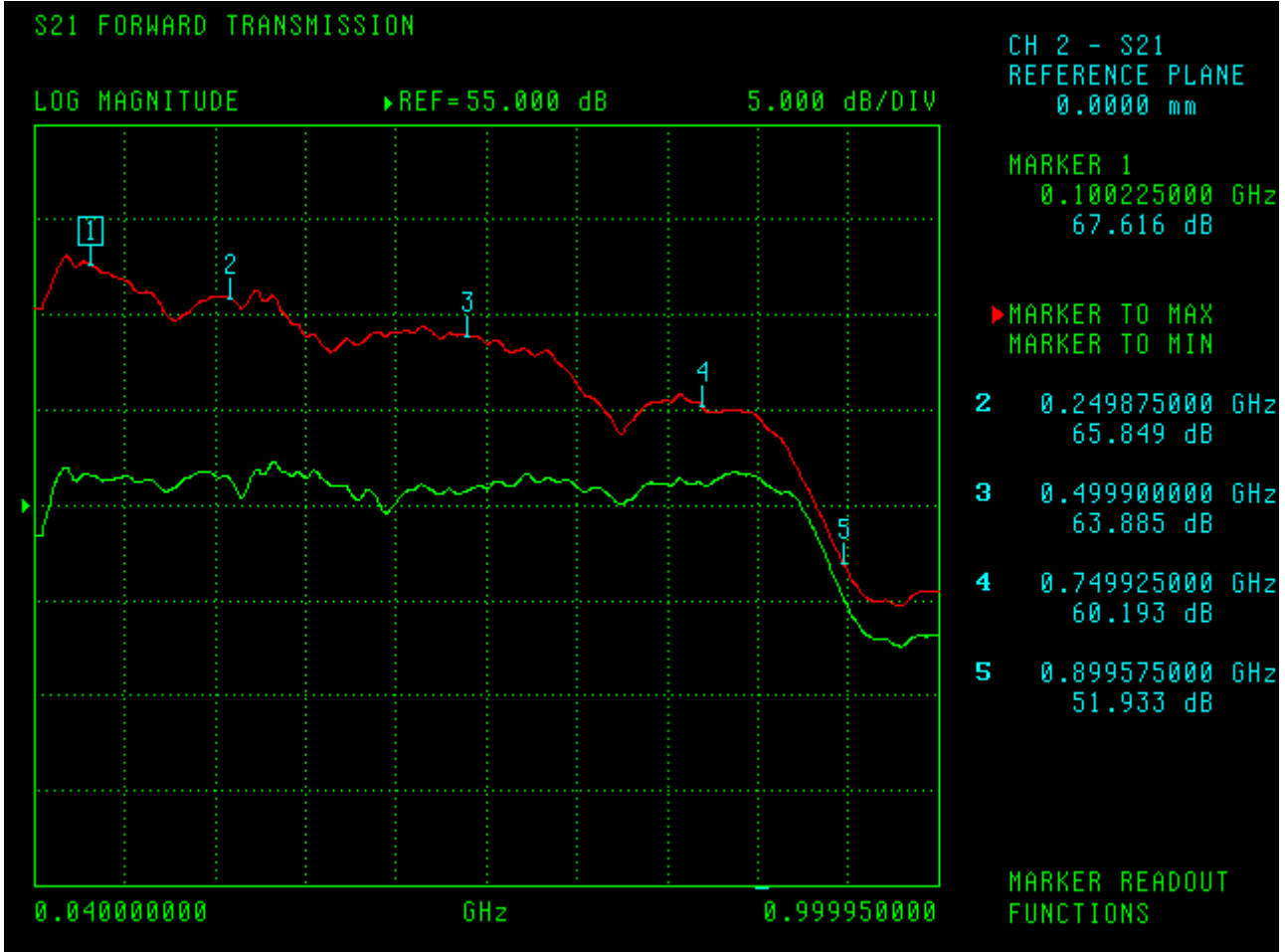
Caractéristiques mécaniques <i>Mechanical features</i>			
Longueur x largeur x Hauteur <i>Length x width x height</i>	L x W x H	300 x 110 x 30	mm
Dissipation <i>Cooling</i>		Conduction cooled	-
Connectique <i>Connectors</i>	Input/output	SMA female	-
Conditions environnementales <i>Environmental conditions</i>			
Température de service <i>Operating temperature</i>		-40 min. + 85 max. Internally protected	°C
Température de stockage <i>Storage temperature</i>		-40 min. +105 max.	°C

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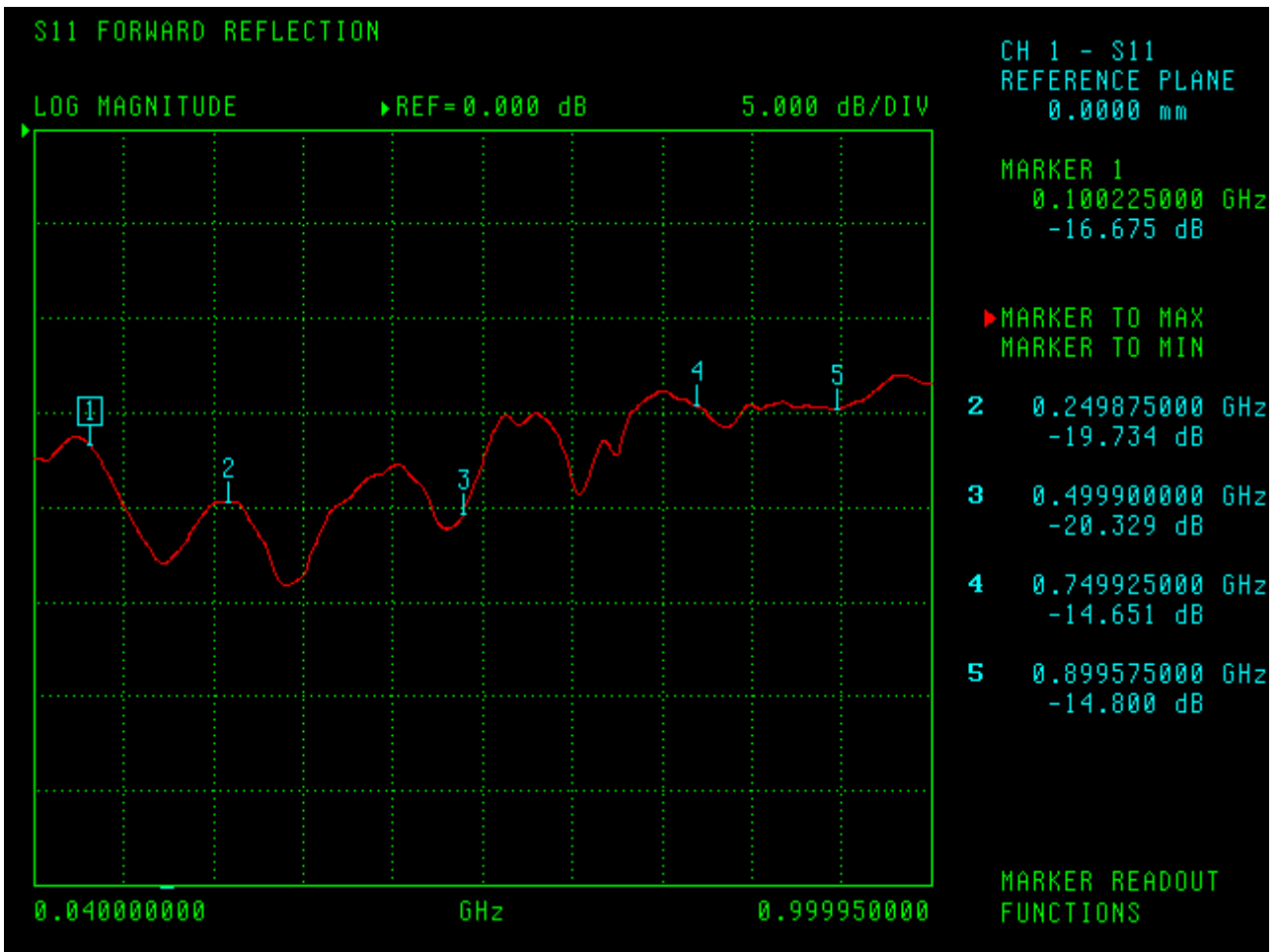
Red : Small signal @ Pin = -30dBm Gain
Green : Power gain @ Pin = -5dBm

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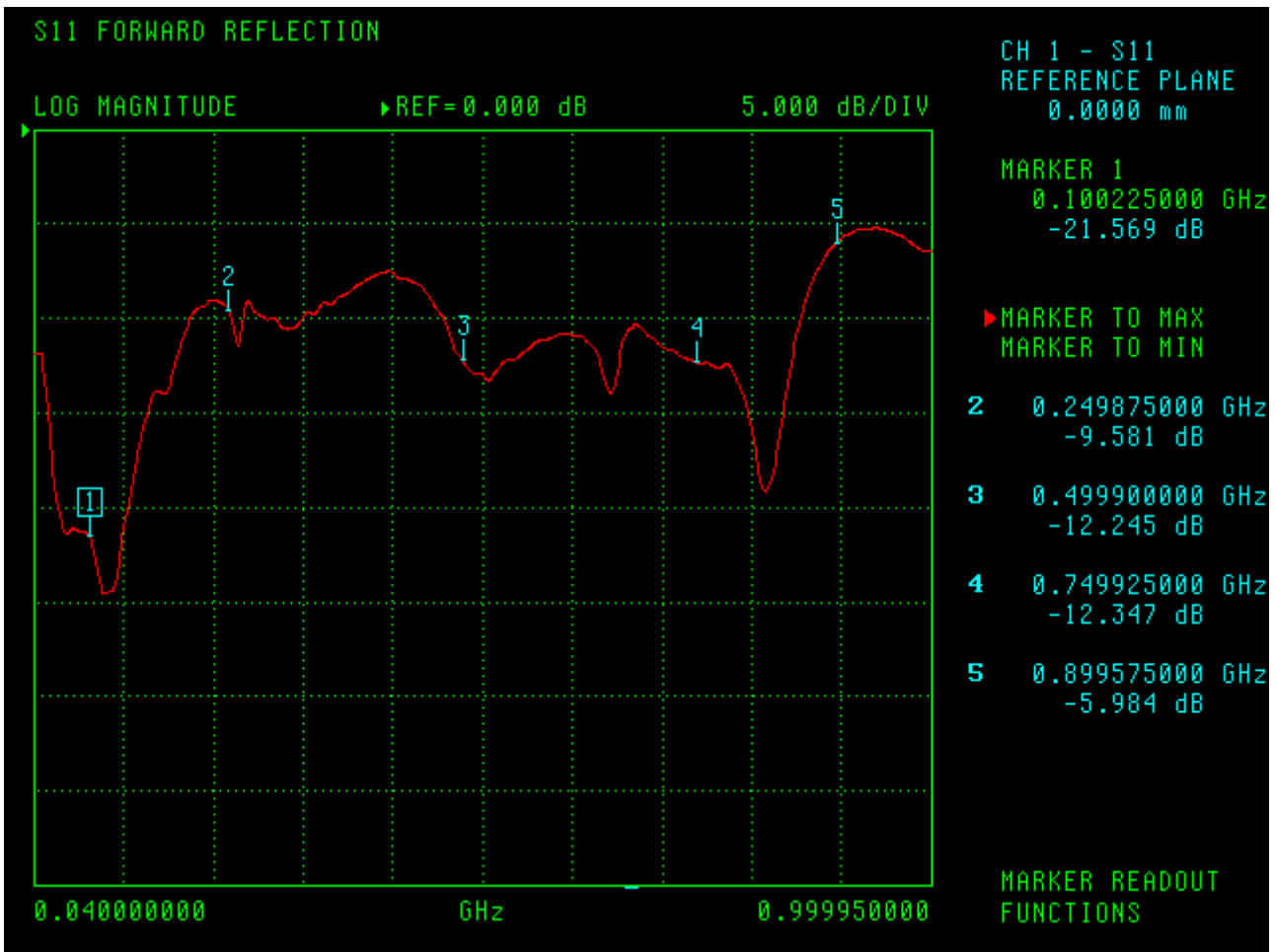
Input return loss

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Output return loss

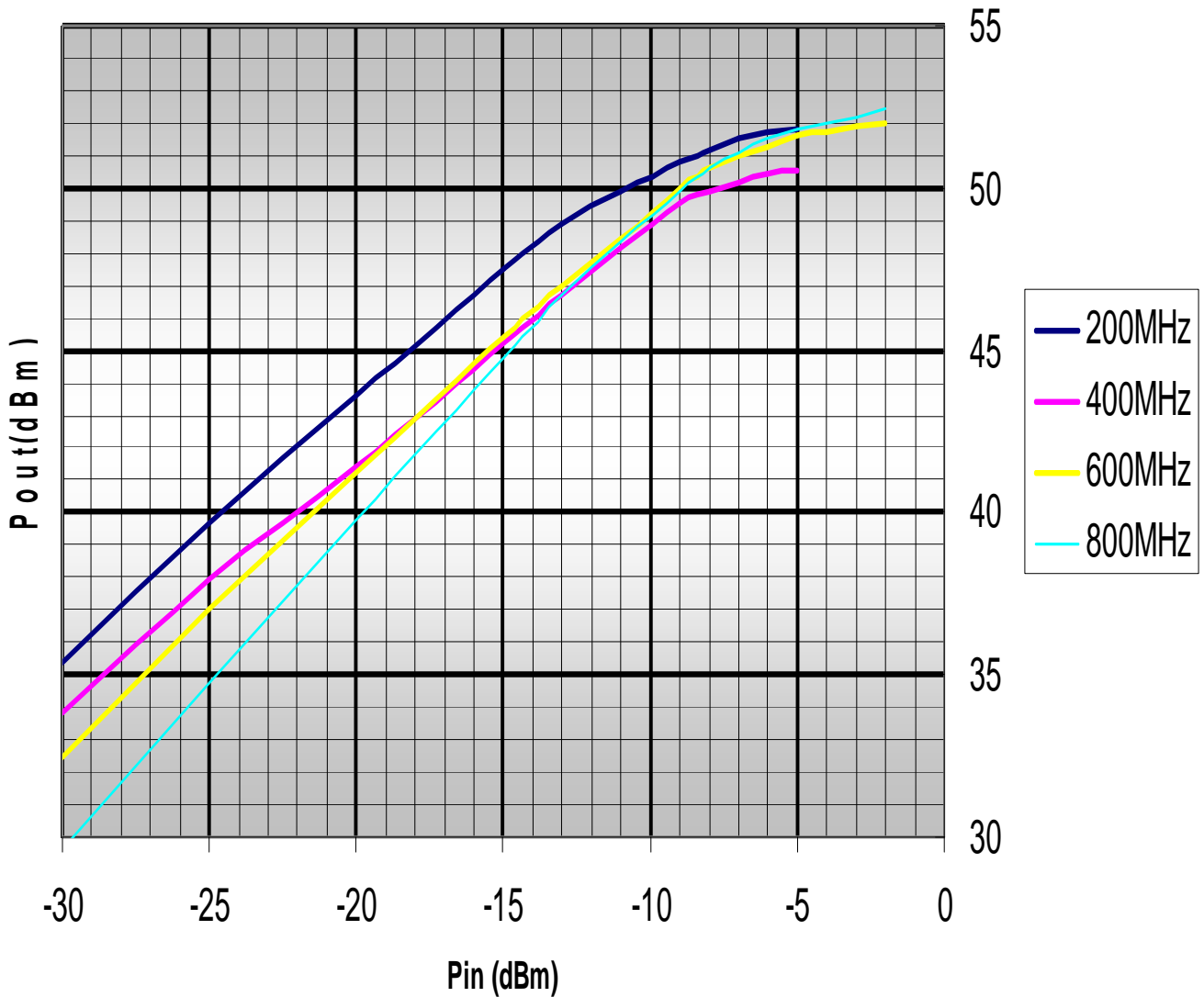
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Pout = f(Pin)

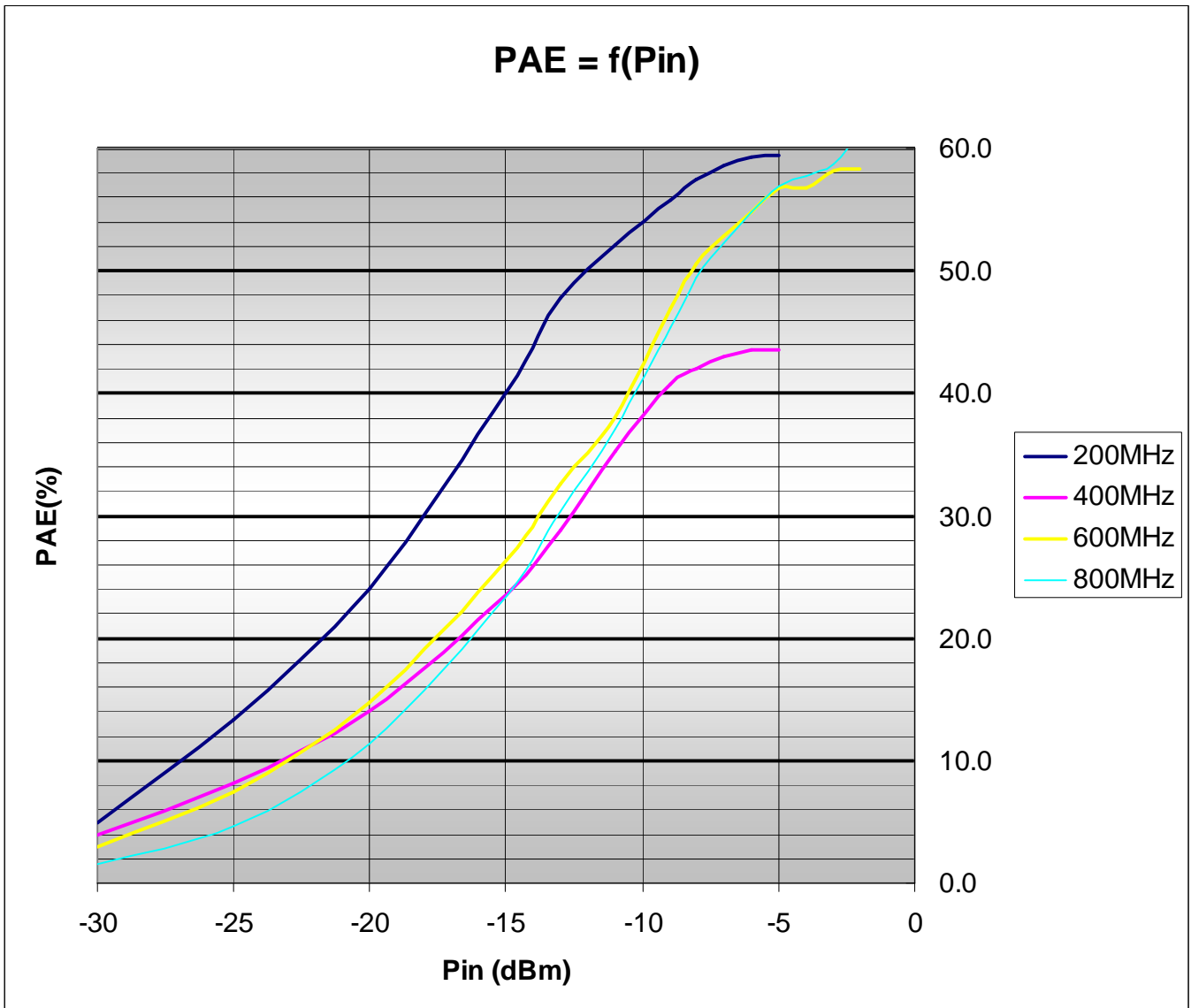


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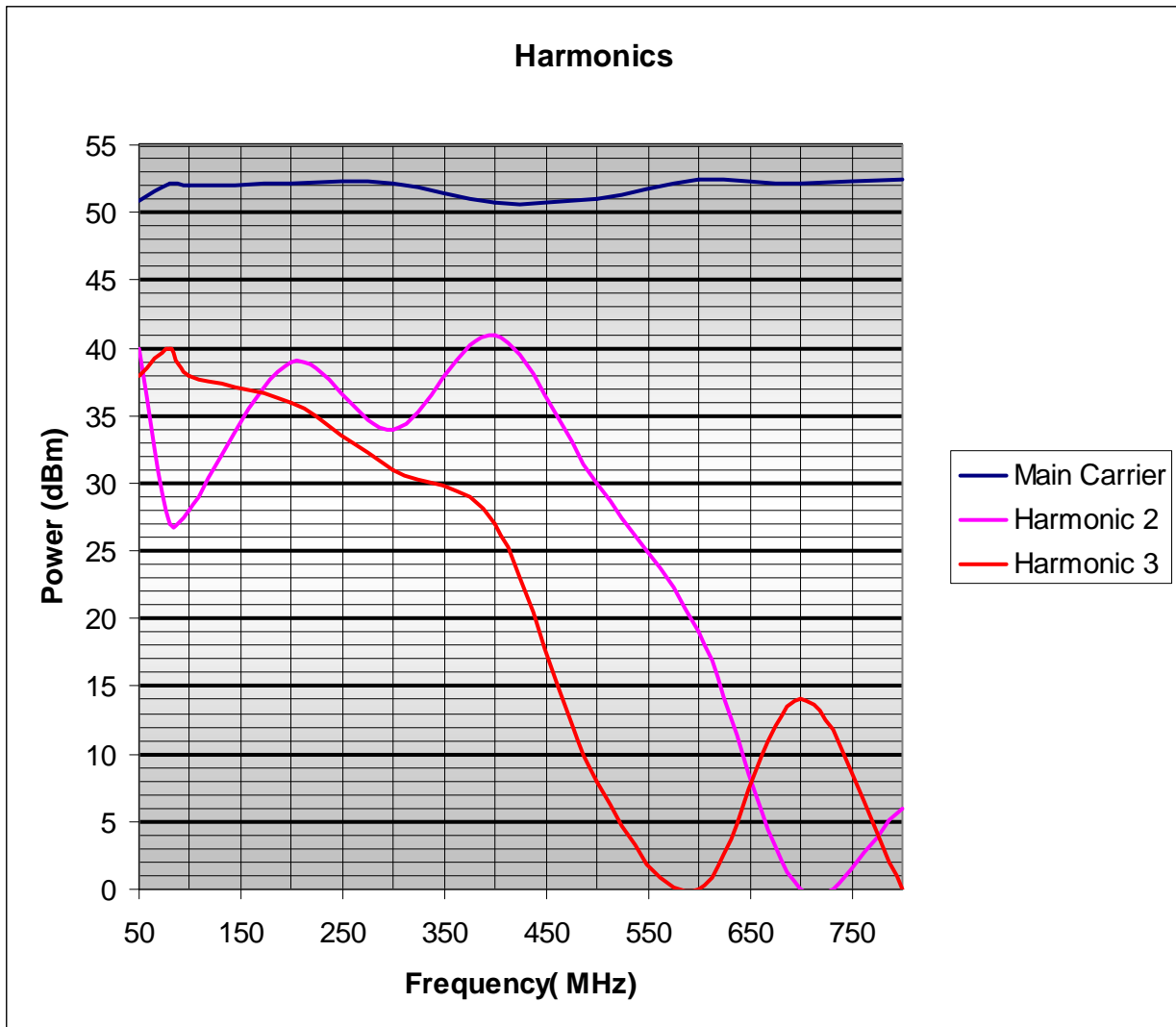


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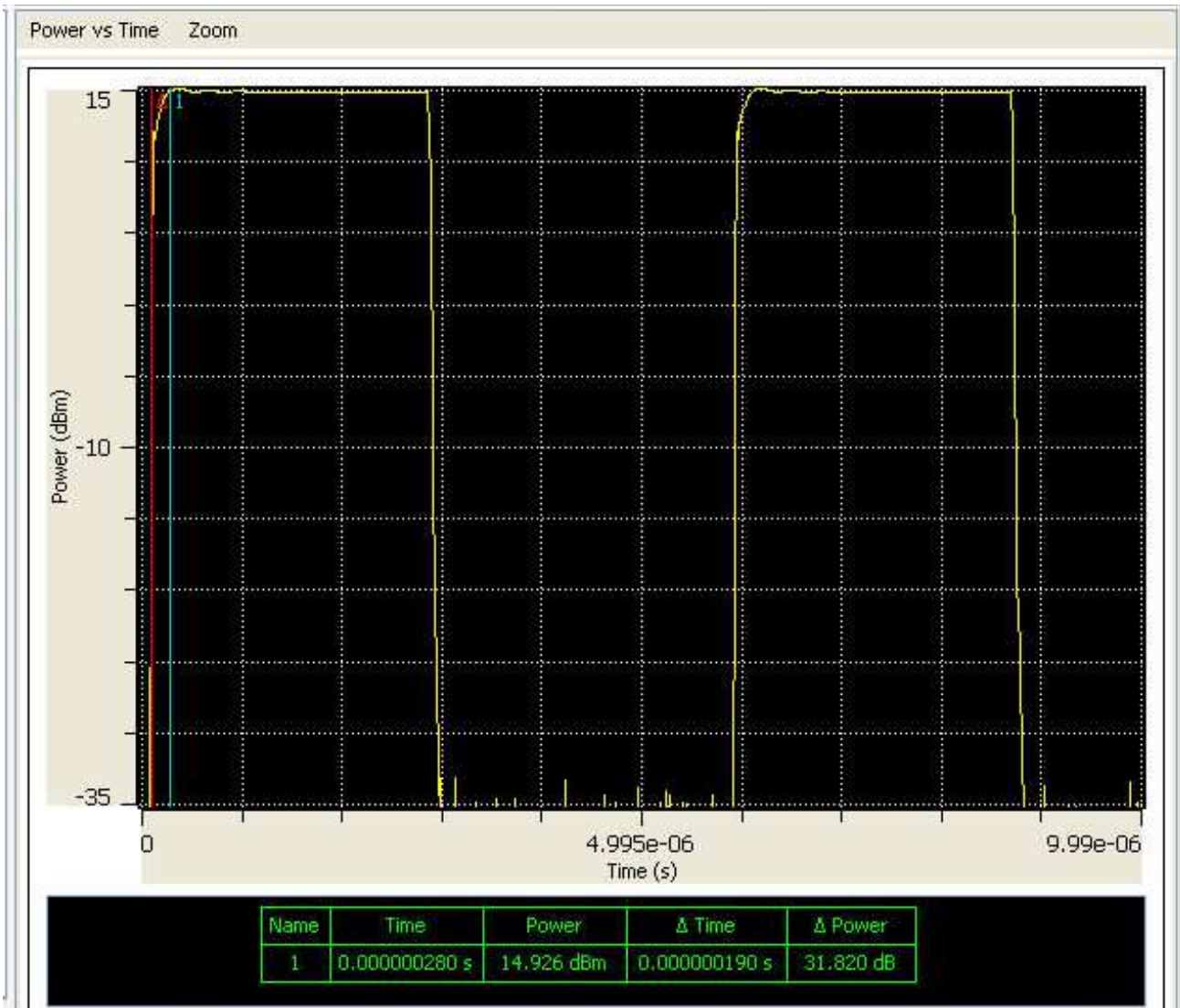


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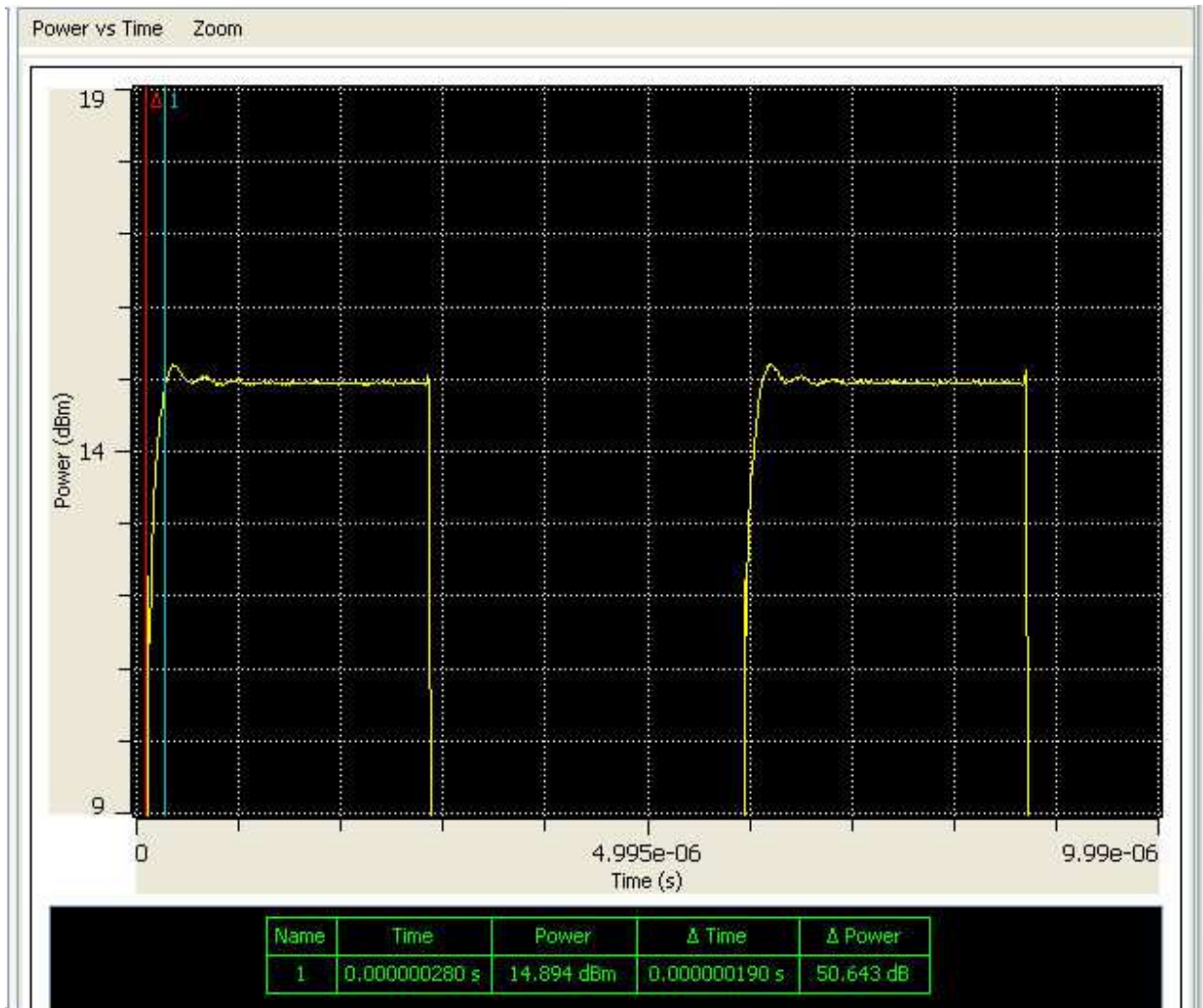
On/Off time thru the blanking command PRF 170KHz @ 500MHz & P1dB

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Zoom on On/Off time thru the blanking command PRF 170KHz @ 500MHz & P1dB

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