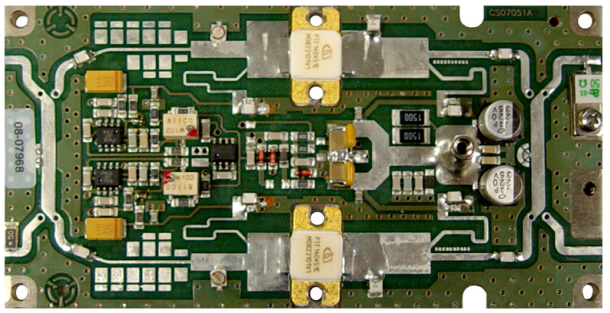
ELECTRONIC STUDIO.NET

AMP-80LS

80W DAB LDMos Technology

Designed for Digital Audio Broadcasting, this amplifier incorporates microstrip technology and push-pull LDMos Devices to enhance ruggedness and reliability.

- **1450 - 1500 MHz**
- **(28 ÷32 V) 30V Nominal**
- **Input/Output 50 Ω - 50 Ω**
- **P_{out} : 80W CW**
  80Wrms DAB
  Shoulder ≤ - 28 dB
- **Gain : 14 dB min**
- **Class AB**
- **Devices: PTF140451 or equivalent**
- **Connectorized version available**



Dimensions (LxWxH)64.3x126.1x21.5 mm (2.53"x4.97"x0.85")

This picture is a mere example, it does not bind the provided product

ABSOLUTE MAXIMUM RATINGS (Device Flange T = 70 °C)

Symbol	Parameter	Value	Unit
V_S	**Voltage Supply**	35	**V dc**
I_S	**Current Supply**	25	**A dc**
Tstg	**Storage Temperature Range**	-30 + 100	**°C**
Tc	**Operating Base Plate Temperature**	0 + 75[1]	**°C**
ψ	**VSWR max**	3:1 all phase angle	**-**
	Max input power	See note[2]	**-**

ELECTRICAL SPECIFICATIONS (Base Plate T. = 45 °C, 50Ω loaded, Vd = 30 V)

Symbol	Parameter	Test Conditions	Value Min	Typ.	Max	Unit
BW	**Bandwidth**	P_{out} = 200 W (CW)	1450		1500	**MHz**
Gp	**Power gain**	P_{ref} = 50 W (CW)	14	15	-	**dB**
P_{out} – 1dB	**Power Output @ 1dB Compression**	Referred to P_{out} = 50W (CW)	80	170	-	**W**
I_q *	**Quiescent Current**	P_{out} = 0 W – Total[3] *	-	-	4	**A**
I_{tot} *	**@ P_{Max}**		-		20	**A**
Irl	**Input return loss**	P_{out} = 80 W CW	18	20	-	**dB**
Ψ	**Load mismatch**	Pref = 80 W CW, f= 1500MHz, load VSWR = 2:1, all phase angles		No degradation in Pout		
Gr	**Gain Flatness**	Pref = 80W CW, BW: 1450-1500MHz		±0.5	±1	**dB**
η	**Drain Efficiency**	P_{out} = 80 W (CW)	35	45	-	**%**

[1] **Warning**: The base plate temperature must be 75 °C max, using an appropriate Heatsink.
[2] The input power must not exceed +6dB, for 1 microsec. , the nominal input power referred to the 1dBcp power output.
[3] The Quiescient Current is set at typical value, in factory. This parameter can be adjusted by the final user depending on the applied signal and/or frequency and output power.
(**Warning:** Do not exceed the specified max Iq value).
* Depending of handling signal (analog /digital)