

LDV75M-R



75W LDMos Technology Amplifier

Designed for analog and digital TV transposers and transmitters, this amplifier incorporates microstrip technology and single end LDMos Devices to enhance ruggedness and reliability.

- 170 230 MHz •
- (28 ÷32 V) 30V Nominal .
- Input/Output 50 Ω 50 Ω
- Pout: 75 W CW • 75Wps separate amplification 50Wps common amplification 15Wrms DAB 10 Wrms DVB-T
- Gain: 20 dB min
- Class AB •

Symbol

- **Devices: MRF9060 or equivalent**
- Connectorized version available .
- APL corrector on board .
- **RoHS** Compliant

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



Vs	Voltage Supply	35	V dc
Is	Current Supply	12	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	-
	Max cw output power	75	Watt

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

Symbol	Parameter	Test Conditions		Value		Unit
			Min	Тур.	Max	
BW	Bandwidth	$P_{out} = 75 W (CW)$	170		230	MHz
Gp	Power gain	$P_{ref} = 75 W (CW)$	20	22	-	dB
P _{out} – 1dB	Power Output @ 1dB Compression	Referred to $P_{out} = 15W$ (CW)	75	-	-	W
I _a *	Quiescent Current	$P_{out} = 0 W - Total^{3 * (3)}$	-	-	2	Α
I _{tot} *	@ P _{Max}		-		7	Α
Irl	Input return loss	$P_{out} = 75 W CW$	16	18	-	dB
Ψ	Load mismatch	Pref = 75 W CW, f= 230MHz, load VSWR = 2:1, all phase angles		No degradation in Pout		n Pout
Gr	Gain Flatness	Pref = 75 W CW, BW: 170-230MHz		±0.5	±1	dB
η	Drain Efficiency	$P_{out} = 75 W (CW)$	35	45	-	%
	Pout separate ampl.	Sync. Compression < 1dB without correction	75			Wps
	Pout common ampl.	Pout 50W ps common ampl. dual sound, with Red Field sound 1 @ -13dB and sound 2 @ - 20dB without precorrection	-48	-52		dBc
	Pout DVB-T	Pout 10Wrms without precorrection	-28	-30		dBc
	Pout DAB	Pout 15Wrms without precorrection	-27	-30		

(Warning: Do not exceed the specified max Iq value). * Depending of handling signal (analog /digital)

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 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.
³The 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.



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RoHS



NOTE. In response to customer request, this pallet has been designed to allow two different positions of IN/OUT connections: /TL = connection on the left side, /TR = connection on the right side.

HEATSINK MOUNTING/HARDWARE

1.HEATSINK TOOLING

-Planarity: typical value 0.8

-Roughness: better than 0.03 mm

2.THERMAL COMPOUND

-Paste with silicones

-Thickness: optimum between 0.06 mm and 0.15 mm, on the whole back surface of the amplifier. 3.SCREWS

4 x M3 -Cross head screws (position 5, 6, 7, 8) – 4 x M2.5 (position 1, 2, 3, 4).

- The recommended Torque is 12 Kg/cm for M3 type screws and 10 Kg/cm for M2.5 type screws. 4.TIGHTENING ORDER

-See next figure:



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Res-Ingenium Via dei Vasari, 17 Zona Industriale Fontanelle di Bardano 05018 Orvieto (TR) Italy Telephone: +39 0736 316333 Fax: +39 0763 316002 Internet: res-ingenium.com E-Mail: map@res-ingenium.com

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