

MGFG5H1503

13.75 – 14.5 GHz BAND / 20W

Description

The MGFG5H1503, a 20W 4-stage GaN MMIC Power Amplifier including a linearizer, is designed as a driver amplifier for a 50W Internally Matched FET MGFK4G3745A and MGFK48G3745.

Features

- High output power: 43dBm
- Input and output matched to 50Ohm
- DC block capacitors built in
- 0.25um GaN HEMT Technology
- Independently adjustable bias pins
- Compact metal package with screw holes

Application

- Transmitter for Ku-band SATCOM

Quality

- General & Industrial

Packaging

- Tray : 12 devices in one tray

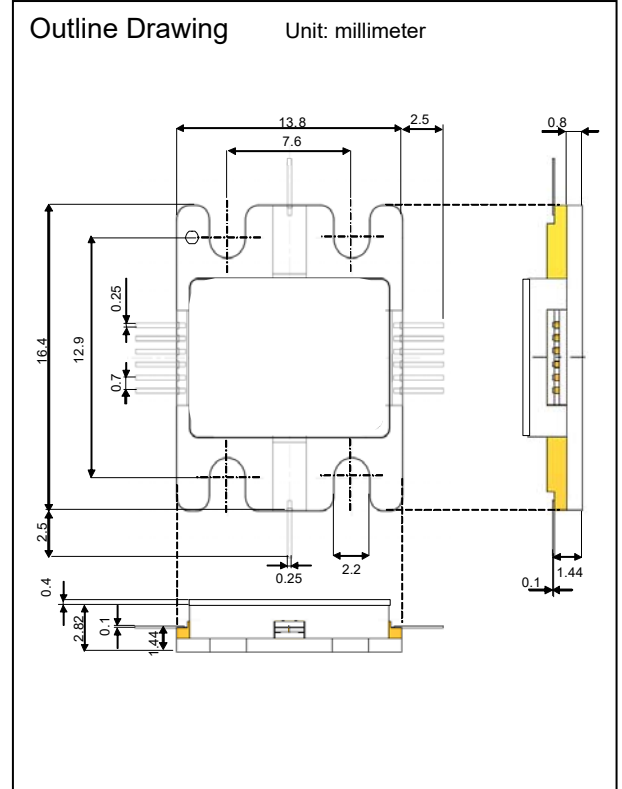
Absolute Maximum Ratings (Ta=25°C)

Symbol	Parameter	Ratings	Unit
Vd	Drain to Source Voltage	27	V
Vg	Gate to Source Voltage	-10	V
VI	Linearizer Voltage	10	V
Pin	RF Input Power	30	dBm
Vd_on	Drain to Source Voltage under RF operation	27	V
Tch	Channel Temperature	230	°C
Tstg	Storage Temperature	-55 to 125	°C

*1: Tc=25°C

Recommended Operating Conditions

Symbol	Parameter	Typ.	Unit
Vd	Drain Voltage	24	V
IdqB	Drain Current of buffer amp. without RF Drive	180	mA
Idq1	Drain Current of 1st stage without RF Drive	360	mA
Idq2	Drain Current of 2ndstage without RF Drive	720	mA
Idq3	Drain Current of 3rd stage without RF Drive	1440	mA
Vg	Gate Voltage	-2.7 to -1.7	V
VI	Control Voltage of Linearizer	0	V
Tch	Channel Temperature	≤175	°C



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