



Pin	Description
1	input
5	+V _B
9	output
2.3.7.8	common

FEATURES >>>

- Excellent linearity
- Extremely low noise
- Excellent return loss properties
- High gain
- High reliability

DESCRIPTION

Hybrid amplifier module operating over a frequency range of 40 to 1000 MHz at a voltage supply of +24V(DC) ,employing GaN MMIC.

QUICK REFERENCE DATA

SYMBOL	PARAMETER	CONDITIONS	MIN.	TYP.	MAX.	UNITS
G _p	power gain	f=50 MHz	22	22.5	23	dB
I _{tot}	total current consumption(DC)	V _B =24V	410	-	460	mA

LIMITING VALUES

In accordance with the Absolute Maximum Rating System

SYMBOL	PARAMETER	MIN.	MAX.	UNITS
V _i	RF input voltage	-	55	dBmV
T _{stg}	storage temperature	-40	+100	°C
T _{mb}	operating mounting base temperature	-20	+90	°C

CHARACTERISTICS

(Bandwidth 40 to 1000MHz; $T_{mb}=25^{\circ}\text{C}$, $V_B=24\text{V}$, $Z_S=Z_L=75\Omega$)

PART NUMBER			Egi10002424DG			
SYMBOL	PARAMETER	UNIT	MIN.	TYP.	MAX.	CONDITIONS
G_P	power gain	dB	22	22.5	23	$f = 50\text{MHz}$
SL	slope cable equivalent	dB	0	1	2	$f = 50$ to 1000 MHz
FL	flatness of frequency response	dB	-	-	± 0.5	$f = 40$ to 1000 MHz
S_{11} & S_{22}	Input & output return loss	dB	-	-	-16	$f = 40$ to 860 MHz
S_{11} & S_{22}	Input & output return loss	dB	-	-	-14	$f = 861$ to 1000 MHz
CTB	composite triple beat	dB	-	-	-66	110 channel
CSO	composite second order distortion	dB	-	-	-66	$V_O=59\text{dBmV}$ at 745.25MHz
X_{mod}	cross modulation	dB	-	-	-60	13dB tilted across the band
F	noise figure	dB	-	-	3.5	$f=860\text{ MHz}$
I_{tot}	total current consumption(DC)	mA	-	410	460	$V_B=+24\text{V}$

The module normally operates at $V_B=24\text{V}(\pm 0.5)$.

MODULE DIMENSIONS

