



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 40to860 MHz at a voltage supply of +24V(DC) ,employing GaAs MMIC.

QUICK REFERENCE DATE

SYMBOL	PARAMETER	CONDITIONS	MIN.	TYP.	MAX.	UNITS
G _p	power gain	f=50 MHz	20.3	-	22.2	dB
		f=860 MHz	20.3	-	-	dB
I _{tot}	total current consumption(DC)	V _B =24V	410	-	440	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 860MHz; $T_{mb}=30^{\circ}\text{C}$, $V_B=24\text{V}$, $Z_S=Z_L=75\Omega$)

PART NUMBER			Egi8602224DH			
SYMBOL	PARAMETER	UNIT	MIN.	TYP.	MAX.	CONDITIONS
G _P	power gain	dB	20.3	-	22.2	f =50MHz
			20.3	21	22.2	f =860MHz
SL	slope cable equivalent	dB	0.0	-	1.0	f =40 to 860 MHz
FL	flatness of frequency response	dB	-	-	±0.5	f =40 to 860 MHz
S ₁₁	input return loss	dB	-	-	-16	f =40 to 860 MHz
S ₂₂	output return loss	dB	-	-	-16	f =40 to 860 MHz
CTB	composite triple beat	dB	-	-	-69	77 channels flat; V _O =48dBmV;
CSO	composite second order distortion	dB	-	-	-67	CTB measured at 547.25 MHz;
X _{mod}	cross modulation	dB	-	-	-63	CSO measured at 548.5 MHz;
V _O	output voltage	dBmV	68	-	-	d _{im} =-60dB
F	noise figure	dB	-	-	4	f=860 MHz
I _{tot}	total current consumption(DC)	mA	410	-	440	V _B =+24V

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S ₁₁	input return loss	dB	-	-	-16	f =40 to 860 MHz
S ₂₂	output return loss	dB	-	-	-16	f =40 to 860 MHz
CTB	composite triple beat	dB	-	-	-67	110 channels flat; V _O =48dBmV;
CSO	composite second order distortion	dB	-	-	-66	CTB measured at 745.25 MHz;
X _{mod}	cross modulation	dB	-	-	-61	CSO measured at 746.5 MHz;
V _O	output voltage	dBmV	67	-	-	d _{im} =-60dB
F	noise figure	dB	-	-	4	f=860 MHz
I _{tot}	total current consumption(DC)	mA	410	-	440	V _B =+24V

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

