



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 47 to 1008 MHz at a voltage supply of +24V(DC) ,employing GaAs MMIC.

QUICK REFERENCE DATA

SYMBOL	PARAMETER	CONDITIONS	MIN.	TYP.	MAX.	UNITS
G _p	power gain	f=47 MHz	33.5	34	34.5	dB
I _{tot}	total current consumption(DC)	V _B =24V	280	300	320	mA

LIMITING VALUES

In accordance with the Absolute Maximum Rating System

SYMBOL	PARAMETER	MIN.	MAX.	UNITS
V _i	RF input voltage (single tone)	-	70	dBmV
V _{vo}	DC Supply over-voltage(5minutes)		30	V
T _{stg}	storage temperature	-40	+100	°C
T _{mb}	operating mounting base temperature	-30	+100	°C

CHARACTERISTICS

(Bandwidth 47 to 1008MHz; $T_{mb}=25^{\circ}\text{C}$, $V_B=24\text{V}$, $Z_S=Z_L=75\Omega$)

PART NUMBER			Egi10003424PG			
SYMBOL	PARAMETER	UNIT	MIN.	TYP.	MAX.	CONDITIONS
G_P	power gain	dB	33.5	34	34.5	$f = 47\text{MHz}$
G_P	power gain	dB	-	35	-	$f = 870\text{MHz}$
G_P	power gain	dB	34.5	36.0	37.5	$f = 1008\text{MHz}$
SL	slope cable equivalent	dB	0.5	2	3.5	$f = 47$ to 1008 MHz
FL	flatness of frequency response	dB	-	-	0.8	$f = 47$ to 1008 MHz
S_{11} & S_{22}	Input & output return loss	dB	-	-	-18	$f = 47$ to 800 MHz
S_{11} & S_{22}	Input & output return loss	dB	-	-	-15	$f = 800$ to 1008 MHz
CTB	composite triple beat	dB	-	-65	-62	Vo=45dBmV at 862MHz, flat, 98 Analog channels
CSO	composite second order distortion	dB	-	-65	-62	
XMOD	X modulation	dB	-	-62	-	
CTB	composite triple beat	dB	-	-70	-	NTSC:
CSO	composite second order distortion	dB	-	-68	-	Vo=47dBmV at 1008MHz, 0dB extrapolated tilt
CIN		dB	-	-64	-	79 analog channels plus 111QAM(-6dB offset)
F	noise figure	dB	-	4.5	5.0	$f = 47$ to 1008 MHz
I_{tot}	total current consumption(DC)	mA	260	270	290	$V_B = +24\text{V}$

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

MODULE DIMENSIONS

