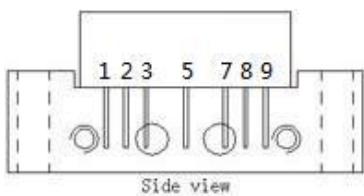




OUTLINE

PIN CONFIGURATION



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	$f = 47 \text{ to } 1008 \text{ MHz}$
FL	flatness of frequency response	dB	-	-	0.8	$f = 47 \text{ to } 1008 \text{ MHz}$
$S_{11} \& S_{22}$	Input & output return loss	dB	-	-	-18	$f = 47 \text{ to } 800 \text{ MHz}$
$S_{11} \& S_{22}$	Input & output return loss	dB	-	-	-15	$f = 800 \text{ to } 1008 \text{ MHz}$
CTB	composite triple beat	dB	-	-65	-62	$V_o=45\text{dBmV at } 862\text{MHz, flat, 98}$ Analog channels
CSO	composite second order distortion	dB	-	-65	-62	
XMOD	X modulation	dB	-	-62	-	NTSC: $V_o=47\text{dBmV at } 1008\text{MHz,}$ 0dB extrapolated tilt
CTB	composite triple beat	dB	-	-70	-	
CSO	composite second order distortion	dB	-	-68	-	79 analog channels plus 111QAM(-6dB offset)
CIN		dB	-	-64	-	
F	noise figure	dB	-	4.5	5.0	$f=47 \text{ to } 1008 \text{ MHz}$
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

