



Pin	Description
1	input
5	+V <sub>B</sub>
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 1218 MHz at a voltage supply of +24V(DC) ,employing GaAs MMIC.

## QUICK REFERENCE DATA

SYMBOL	PARAMETER	CONDITIONS	MIN.	TYP.	MAX.	UNITS
G <sub>p</sub>	power gain	f=47 MHz	23.5	24	24.6	dB
I <sub>tot</sub>	total current consumption(DC)	V <sub>B</sub> =24V	260	270	290	mA

## LIMITING VALUES

In accordance with the Absolute Maximum Rating System

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

## CHARACTERISTICS

(Bandwidth 47 to 1218MHz;  $T_{mb}=25^{\circ}C$ ,  $V_B=24V$ ,  $Z_S=Z_L=75\Omega$ )

PART NUMBER			Egi12002424PG			
SYMBOL	PARAMETER	UNIT	MIN.	TYP.	MAX.	CONDITIONS
$G_P$	power gain	dB	23.5	24	24.6	f =47MHz
$G_P$	power gain	dB	-	24.8	-	f =870MHz
$G_P$	power gain	dB	24	25	25.5	f =1218MHz
SL	slope cable equivalent	dB	0.5	1.0	2.0	f =47 to 1218 MHz
FL	flatness of frequency response	dB	-	-	0.8	f =47 to 1218 MHz
$S_{11}$ & $S_{22}$	Input & output return loss	dB	-	-	-20	f =47 to 320 MHz
$S_{11}$ & $S_{22}$	Input & output return loss	dB	-	-	-19	f =320 to 640 MHz
$S_{11}$ & $S_{22}$	Input & output return loss	dB	-	-	-17	f =640 to 870 MHz
$S_{11}$ & $S_{22}$	Input & output return loss	dB	-	-	-16	f =870 to 1000 MHz
$S_{11}$ & $S_{22}$	Input & output return loss	dB	-	-	-15	f =1000 to 1218 MHz
CTB	composite triple beat	dB	-	-68	-63	Vo=44dBmV at 862MHz, flat, 98 Analog channels
CSO	composite second order distortion	dB	-	-66	-61	
XMOD	X modulation	dB	-	-67	-	
CTB	composite triple beat	dB	-	-68	-	VO=44dBmV, 79 analog channels plus 75 digital channels (-6dB offset)
CSO	composite second order distortion	dB	-	-75	-	
XMOD	X modulation	dB	-	-64	-	
CIN		dB	-	-65	-	
F	noise figure	dB	-	4.5	5.0	f=47 to 1218 MHz
$I_{tot}$	total current consumption(DC)	mA	260	270	290	$V_B=+24V$

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

MODULE DIMENSIONS

