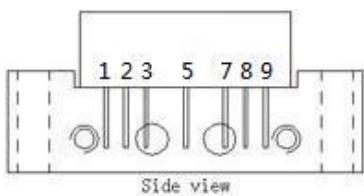




OUTLINE

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 40 to 1218 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=50 MHz	26.5	27.0	27.5	dB
I _{tot}	total current consumption(DC)	V _B =24V	420	440	450	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 _o	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 40 to 1218MHz; $T_{mb}=25^{\circ}\text{C}$, $V_B=24\text{V}$, $Z_S=Z_L=75\Omega$)

PART NUMBER		Egi12002724DG				
SYMBOL	PARAMETER	UNIT	MIN.	TYP.	MAX.	CONDITIONS
G_P	power gain	dB	26.5	27	27.5	$f = 50\text{MHz}$
G_P	power gain	dB	-	27	-	$f = 870\text{MHz}$
G_P	power gain	dB	27.0	27.0	28.0	$f = 1218\text{MHz}$
SL	slope cable equivalent	dB	0.5	1.0	2.0	$f = 40 \text{ to } 1218 \text{ MHz}$
FL	flatness of frequency response	dB	-	-	0.8	$f = 40 \text{ to } 1218 \text{ MHz}$
$S_{11} & S_{22}$	Input & output return loss	dB	-	-	-20	$f = 47 \text{ to } 320 \text{ MHz}$
$S_{11} & S_{22}$	Input & output return loss	dB	-	-	-19	$f = 320 \text{ to } 640 \text{ MHz}$
$S_{11} & S_{22}$	Input & output return loss	dB	-	-	-17	$f = 640 \text{ to } 870 \text{ MHz}$
$S_{11} & S_{22}$	Input & output return loss	dB	-	-	-16	$f = 870 \text{ to } 1003 \text{ MHz}$
$S_{11} & S_{22}$	Input & output return loss	dB	-	-	-15	$f = 1003 \text{ to } 1218 \text{ MHz}$
CTB	composite triple beat	dB	-	-66	-62	$V_o=48\text{dBmV at } 862\text{MHz, flat, 98}$ Analog channels
CSO	composite second order distortion	dB	-	-65	-62	
XMOD	X modulation	dB	-	-68	-	$V_o=56.4\text{dBmV at } 1218\text{MHz,}$ $13.4\text{dB extrapolated tilt}$
CTB	composite triple beat	dB	-	-75	-	
CSO	composite second order distortion	dB	-	-79	-	$79 \text{ analog channels plus}$ $75 \text{ digital channels } (-6\text{dB offset})$
XMOD	X modulation	dB	-	-70	-	
CIN		dB	-	-66	-	$75 \text{ digital channels } (-6\text{dB offset})$
F	noise figure	dB	-	5.0	5.5	$f=50 \text{ to } 1218 \text{ MHz}$
I_{tot}	total current consumption(DC)	mA	420	440	450	$V_B=+24\text{V}$

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

MODULE DIMENSIONS

