



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	24.5	25.0	25.5	dB
I _{tot}	total current consumption(DC)	V _B =24V	420	-	460	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; $T_{mb}=25^{\circ}C$, $V_B=24V$, $Z_S=Z_L=75\Omega$)

PART NUMBER			Egi12002524DG			
SYMBOL	PARAMETER	UNIT	MIN.	TYP.	MAX.	CONDITIONS
G_P	power gain	dB	24.5	25	25.5	f =50MHz
G_P	power gain	dB	-	26	-	f =870MHz
G_P	power gain	dB	25.5	26.5	27	f =1218MHz
SL	slope cable equivalent	dB	0.5	1.0	2.0	f =40 to 1218MHz
FL	flatness of frequency response	dB	-	-	0.8	f =40 to 1218MHz
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 1003 MHz
S_{11} & S_{22}	Input & output return loss	dB	-	-	-15	f =1003 to 1218 MHz
CTB	composite triple beat	dB	-	-66	-62	Vo=48dBmV at 862MHz, flat, 98 Analog channels
CSO	composite second order distortion	dB	-	-65	-62	
XMOD	X modulation	dB	-	-68	-	
CTB	composite triple beat	dB	-	-75	-	VO=56.4dBmV at 1218MHz, 13.4dB extrapolated tilt 79 analog channels plus 75 digital channels (-6dB offset)
CSO	composite second order distortion	dB	-	-79	-	
XMOD	X modulation	dB	-	-70	-	
CIN		dB	-	-66	-	
F	noise figure	dB	-	5.0	5.5	f=50 to 1218 MHz
I_{tot}	total current consumption(DC)	mA	420	440	460	$V_B=+24V$

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

MODULE DIMENSIONS

