



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 40 to 1000 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=50 MHz	23.5	24	24.5	dB
G <sub>p</sub>	power gain	f=1000MHz	25	-	26.5	dB
I <sub>tot</sub>	total current consumption(DC)	V <sub>B</sub> =24V	270	-	310	mA

**LIMITING VALUES**

In accordance with the Absolute Maximum Rating System

SYMBOL	PARAMETER	MIN.	MAX.	UNITS
V <sub>i</sub>	RF input voltage	-	55	dBmV
T <sub>stg</sub>	storage temperature	-40	+100	°C
T <sub>mb</sub>	operating mounting base temperature	-20	+90	°C

## CHARACTERISTICS

(Bandwidth 40 to 1000MHz;  $T_{mb}=25^{\circ}\text{C}$ ,  $V_B=24\text{V}$ ,  $Z_S=Z_L=75\Omega$ )

PART NUMBER			Egi10002524PT			
SYMBOL	PARAMETER	UNIT	MIN.	TYP.	MAX.	CONDITIONS
$G_P$	power gain	dB	23.5	24	24.5	$f = 50\text{MHz}$
SL	slope cable equivalent	dB	1.0	2	2.5	$f = 50$ to $1000$ MHz
FL	flatness of frequency response	dB	-	-	$\pm 0.5$	$f = 40$ to $1000$ MHz
$S_{11}$ & $S_{22}$	Input & output return loss	dB	-	-	-16	$f = 40$ to $860$ MHz
$S_{11}$ & $S_{22}$	Input & output return loss	dB	-	-	-12	$f = 861$ to $1000$ MHz
CTB	composite triple beat	dB	-	-	-69	110 channel
CSO	composite second order distortion	dB	-	-	-68	$V_0=42\text{dBmV}$ at $745.25\text{MHz}$
$X_{\text{mod}}$	cross modulation	dB	-	-	-61	6dB tilted across the band
F	noise figure	dB	-	-	5.0	$f=860$ MHz
$I_{\text{tot}}$	total current consumption(DC)	mA	270	-	310	$V_B=+24\text{V}$

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

## MODULE DIMENSIONS

