



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 50 to 860 MHz at a voltage supply of +12V(DC) ,employing GaAs MMIC.

**QUICK REFERENCE DATA**

SYMBOL	PARAMETER	CONDITIONS	MIN.	TYP.	MAX.	UNITS
G <sub>p</sub>	power gain	f=50 MHz	25	-	26	dB
G <sub>p</sub>	power gain	f=860 MHz	26	-	27	dB
I <sub>tot</sub>	total current consumption(DC)	V <sub>B</sub> =12V	410	-	450	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 50 to 860MHz;  $T_{mb}=30^{\circ}\text{C}$ ,  $V_B=12\text{V}$ ,  $Z_S=Z_L=75\Omega$ )

PART NUMBER			Egi8602512DS			
SYMBOL	PARAMETER	UNIT	MIN.	TYP.	MAX.	CONDITIONS
$G_p$	power gain	dB	25		26	f =50MHz
			26		27	f =860MHz
SL	slope cable equivalent	dB	0.5	-	1.0	f =50 to 860 MHz
FL	flatness of frequency response	dB	-	-	$\pm 0.5$	f =50 to 860 MHz
$S_{11}$	input return loss	dB	-	-	-16	f =50 to 860 MHz
$S_{22}$	output return loss	dB	-	-	-16	f =50 to 860 MHz
CTB	composite triple beat	dB	-	-	-62	110 channel
CSO	composite second order distortion	dB	-	-	-65	$V_o=46\text{dBmV}$ at 745.25MHz
$X_{mod}$	cross modulation	dB	-	-	-60	6dB tilted across the band
$V_o$	output voltage	dBmV	63	-	-	$d_{im}=-60\text{dB}$
F	noise figure	dB	-	-	4	f=860 MHz
$I_{tot}$	total current consumption(DC)	mA	410	-	450	$V_B=+12\text{V}$

The module normally operates at  $V_B=12\text{V} (\pm 0.5)$ .

## MODULE DIMENSIONS

