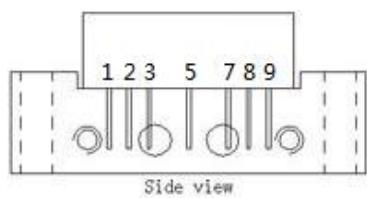


## ► OUTLINE

### PIN CONFIGURATION



### Pin Description

| 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            | 28   | 29   | 29.5 | dB    |
| I <sub>tot</sub> | total current consumption(DC) | V <sub>B</sub> =24V | 310  | -    | 350  | 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        |                                   |      | Egi10002924P |      |           |   |
|--------------------|-----------------------------------|------|--------------|------|-----------|---|
| SYMBOL             | PARAMETER                         | UNIT | MIN.         | TYP. | MAX.      | CONDITIONS                                      |
| $G_P$              | power gain                        | dB   | 28           | 29   | 29.5      | $f = 50\text{MHz}$                              |
| SL                 | slope cable equivalent            | dB   | 1            |      | 2         | $f = 50 \text{ to } 1000 \text{ MHz}$           |
| FL                 | flatness of frequency response    | dB   | -            | -    | $\pm 0.5$ | $f = 40 \text{ to } 1000 \text{ MHz}$           |
| $S_{11} \& S_{22}$ | Input&output return loss          | dB   | -            | -    | -16       | $f = 40 \text{ to } 1000 \text{ MHz}$           |
| CTB                | composite triple beat             | dB   | -            | -    | -61       | 110 channel<br>$V_O=44\text{dBmV}$ at 745.25MHz |
| CSO                | composite second order distortion | dB   | -            | -    | -61       |   |
| $X_{mod}$          | cross modulation                  | dB   | -            | -    | -61       | 6dB tilted across the band                      |
| $V_O$              | output voltage                    | dBmV | 64           | -    | -         | $\text{dim}=-60 \text{ dB}$                     |
| F                  | noise figure                      | dB   | -            | -    | 5.0       | $f=860 \text{ MHz}$                             |
| $I_{tot}$          | total current consumption(DC)     | mA   | 310          | -    | 350       | $V_B=+24\text{V}$                               |

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