



| 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 860 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 | 23.5 | 24 | 24.5 | dB |
| G _p | power gain | f=860MHz | 25 | - | 26.5 | dB |
| I _{tot} | total current consumption(DC) | V _B =24V | 270 | - | 310 | mA |

LIMITING VALUES

In accordance with the Absolute Maximum Rating System

| SYMBOL | PARAMETER | MIN. | MAX. | UNITS |
|------------------|-------------------------------------|------|------|-------|
| V _i | RF input voltage | - | 55 | dBmV |
| T _{stg} | storage temperature | -40 | +100 | °C |
| T _{mb} | operating mounting base temperature | -20 | +90 | °C |

CHARACTERISTICS

(Bandwidth 40 to 860MHz; $T_{mb}=25^{\circ}\text{C}$, $V_B=24\text{V}$, $Z_S=Z_L=75\Omega$)

| PART NUMBER | | | Egi8602524PT | | | |
|---------------------|-----------------------------------|------|--------------|------|-----------|----------------------------------|
| 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 860 MHz |
| FL | flatness of frequency response | dB | - | - | ± 0.5 | $f = 40$ to 860 MHz |
| S_{11} & S_{22} | Input & output return loss | dB | - | - | -16 | $f = 40$ to 860 MHz |
| CTB | composite triple beat | dB | - | - | -69 | 110 channel |
| CSO | composite second order distortion | dB | - | - | -68 | $V_0=42\text{dBmV}$ at 745.25MHz |
| X_{Mod} | cross modulation | dB | - | - | -61 | 6dB tilted across the band |
| F | noise figure | dB | - | - | 5.0 | $f=860$ MHz |
| I_{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

