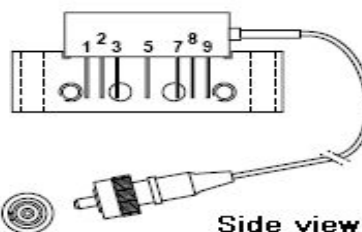




## OUTLINE

### PIN CONFIGURATION



Side view

### Pin

### Description

1 monitor current

5 +V<sub>B</sub>

9 output

2,3,7,8 common

## FEATURES >>

- Excellent linearity
- Extremely low noise
- Excellent flatness
- Excellent return loss properties
- GaAs MMIC
- High reliability

## DESCRIPTION

Hybrid amplifier module operating over a frequency range of 40 to 870 MHz at a voltage supply of +24V(DC)

## QUICK REFERENCE DATA

| SYMBOL           | PARAMETER                     | CONDITIONS          | MIN. | TYP. | MAX. | UNITS |
|------------------|-------------------------------|---------------------|------|------|------|-------|
| f                | Frequency range               | -                   | 40   | -    | 870  | MHz   |
| S <sub>22</sub>  | Return losses                 | f=40 to 870 MHz     | -    | -    | -11  | dB    |
|                  | Optical input return losses   | -                   | 45   | -    | -    | dB    |
| CNR              | Noise carrier rating          | -                   | 51   | -    | -    | dB    |
| I <sub>tot</sub> | Total current consumption(DC) | V <sub>B</sub> =24V | 240  | -    | 290  | mA    |

## HANDLING

Fibreglass optical coupling: maximum tensile strength=5N;minimum bending radius=35mm

## LIMITING VALUES

In accordance with the Absolute Maximum Rating System

| SYMBOL    | PARAMETER                                                      | MIN. | MAX. | UNITS |
|-----------|----------------------------------------------------------------|------|------|-------|
| $P_{in}$  | Optical input power (continuous)                               | -    | 3    | mW    |
| ESD       | ESD sensitivity(Human body model; $R=1.5K\Omega$ ; $C=100pF$ ) | 500  | -    | V     |
| $T_{stg}$ | storage temperature                                            | -40  | +85  | °C    |
| $T_{mb}$  | operating mounting base temperature                            | -20  | +85  | °C    |

## CHARACTERISTICS

(Bandwidth 40 to 870MHz;  $T_{mb}=30^{\circ}C$ ,  $V_B=24V$ ,  $Z_S=Z_L=75\Omega$ )

| PART NUMBER   |                                   |      | Ogi8602524 |      |            |                                                                                                   |
|---------------|-----------------------------------|------|------------|------|------------|---------------------------------------------------------------------------------------------------|
| SYMBOL        | PARAMETER                         | UNIT | MIN.       | TYP. | MAX.       | CONDITIONS                                                                                        |
| S             | responsivity                      | V/W  | 850        | -    | -          | $\lambda=1310nm$                                                                                  |
| FL            | flatness of frequency response    | dB   | -          | -    | $\pm 0.75$ | $f=40$ to 870 MHz                                                                                 |
| $S_{22}$      | return loss                       | dB   | -          | -    | -11        | $f=40$ to 870 MHz                                                                                 |
|               | Optical input return losses       | dB   | 45         | -    | -          | -                                                                                                 |
| CTB           | composite triple beat             | dB   | -          | -    | -66        | 110 channels flat; $P_{opt}=-1dBm$ ;<br>CTB measured at 745.25 MHz;<br>CSO measured at 746.5 MHz; |
| CSO           | composite second order distortion | dB   | -          | -    | -65        |                                                                                                   |
| CNR           | Noise carrier rating              | dB   | 51         | -    | -          |                                                                                                   |
| $V_o$         | output voltage                    | dBmV | -          | 30   | -          |                                                                                                   |
| $S_{\lambda}$ | Spectral sensitivity              | A/W  | 0.85       | -    | -          | $\lambda=1310\pm 20nm$                                                                            |
|               |                                   | A/W  | 0.9        | -    | -          | $\lambda=1550\pm 20nm$                                                                            |
| $\lambda$     | Optical wavelength                | nm   | 1290       | -    | 1600       | -                                                                                                 |
| $I_{tot}$     | total current consumption(DC)     | mA   | 240        | -    | 290        | $V_B=+24V$                                                                                        |

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

## MODULE DIMENSIONS

