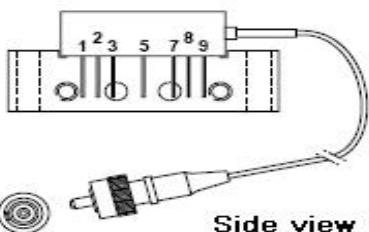




## OUTLINE

### PIN CONFIGURATION



### 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 1200 MHz at a voltage supply of +24V(DC)

## QUICK REFERENCE DATA

| SYMBOL           | PARAMETER                     | CONDITIONS               | MIN. | TYP. | MAX. | UNITS |
|------------------|-------------------------------|--------------------------|------|------|------|-------|
| f                | Frequency range               | -                        | 40   | -    | 1200 | MHz   |
| S <sub>22</sub>  | Return losses                 | f=40 to 1200 MHz         | -    | -    | -11  | dB    |
| ORL              | Optical input return losses   | λ=1310                   | 45   | -    | -    | dB    |
| CNR              | Noise carrier rating          | P <sub>opt</sub> = -1dBm | 51   | -    | -    | dB    |
| I <sub>tot</sub> | Total current consumption(DC) | V <sub>B</sub> =24V      | 230  | -    | 280  | mA    |

## HANDLING

Fiberglass 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 <sub>in</sub>  | Optical input power (continuous)                    | -    | 3    | mW    |
| ESD              | ESD sensitivity(Human body model; R=1.5KΩ ;C=100pF) | 500  | -    | V     |
| T <sub>stg</sub> | storage temperature                                 | -40  | +100 | °C    |
| T <sub>mb</sub>  | operating mounting base temperature                 | -30  | +90  | °C    |

## CHARACTERISTICS

(Bandwidth 40 to 1200MHz; T<sub>mb</sub>=30°C, V<sub>B</sub>=24V, Z<sub>S</sub>=Z<sub>L</sub>=75Ω)

| PART NUMBER      |                                   |      | Ogi12002824 |      |       |  |
|------------------|-----------------------------------|------|-------------|------|-------|--|
| SYSMBOL          | PARAMETER                         | UNIT | MIN.        | TYP. | MAX.  | CONDITIONS                                   |
| S                | Response                          | V/W  | 850         | -    | -     | λ=1310nm                                     |
| SL               | Slope cable equivalent            | dB   | 0.5         |      | 1.5   | f=40 to 1200 MHz                             |
| FL               | flatness of frequency response    | dB   | -           | -    | ±0.75 | f=40 to 1200 MHz                             |
| S <sub>22</sub>  | return loss                       | dB   | -           | -    | -11   | f=40 to 1200 MHz                             |
|                  | Optical input return losses       | dB   | 45          | -    | -     | λ=1310                                       |
| CTB              | composite triple beat             | dB   | -           | -    | -62   |  |
| CSO              | composite second order distortion | dB   | -           | -    | -63   | 110 channels flat; P <sub>opt</sub> = -1dBm; |
| CNR              | Noise carrier rating              | dB   | 51          | -    | -     | CSO measured at 547.25 MHz;                  |
| V <sub>o</sub>   | output voltage                    | dBmV | -           | 33   | -     | CSO measured at 548.5 MHz;                   |
| S <sub>λ</sub>   | Spectral sensitivity              | A/W  | 0.85        | -    | -     | λ=1310±20nm                                  |
|                  |                                   | A/W  | 0.9         | -    | -     | λ=1550±20nm                                  |
| λ                | Optical wavelength                | nm   | 1290        | -    | 1600  | -  |
| I <sub>tot</sub> | total current consumption(DC)     | mA   | 230         | -    | 280   | V <sub>B</sub> =+24V                         |

The module normally operates at V<sub>B</sub>=24V (±0.5)

## MODULE DIMENSIONS

