



| Pin | Description |
|---------|-----------------|
| 1 | monitor current |
| 5 | +V _B |
| 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 1000 MHz at a voltage supply of +24V(DC)

QUICK REFERENCE DATA

| SYMBOL | PARAMETER | CONDITIONS | MIN. | TYP. | MAX. | UNITS |
|------------------|-------------------------------|---------------------|------|------|------|-------|
| f | Frequency range | | 40 | - | 1000 | MHz |
| S ₂₂ | Return losses | f=40 to 1000 MHz | - | - | -11 | dB |
| | Optical input return losses | | 45 | - | - | dB |
| CNR | Noise carrier rating | | 51 | - | - | dB |
| I _{tot} | Total current consumption(DC) | V _B =24V | 240 | - | 290 | 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_{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 1000MHz; $T_{mb}=30^{\circ}C$, $V_B=24V$, $Z_S=Z_L=75\Omega$)

| PART NUMBER | | | Ogi10002524 | | | |
|---------------|-----------------------------------|------|-------------|------|------------|---|
| SYMBOL | PARAMETER | UNIT | MIN. | TYP. | MAX. | CONDITIONS |
| S | responsivity | V/W | 850 | - | - | $\lambda=1310nm$ |
| FL | flatness of frequency response | dB | - | - | ± 0.75 | $f=40$ to 1000 MHz |
| S_{22} | return loss | dB | - | - | -11 | $f=40$ to 1000 MHz |
| | Optical input return losses | dB | 45 | - | - | - |
| CTB | composite triple beat | dB | - | - | -66 | 110 channels flat; $P_{opt}=-1dBm$; CTB measured at 745.25 MHz; CSO measured at 746.5 MHz; |
| CSO | composite second order distortion | dB | - | - | -65 | |
| CNR | Noise carrier rating | | 51 | - | - | |
| V_o | output voltage | dBmV | - | 30 | - | |
| S_{λ} | Spectral sensitivity | A/W | 0.85 | - | - | $\lambda=1310\pm 20nm$ |
| | | A/W | 0.9 | - | - | $\lambda=1550\pm 20nm$ |
| λ | 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

