



| 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
- High reliability
- GaAs MMIC
- OP-AGC

DESCRIPTION

Hybrid amplifier module operating over a frequency range of 40 to 870 MHz at a voltage supply of +8V(DC)

QUICK REFERENCE DATA

| SYMBOL | PARAMETER | CONDITIONS | MIN. | TYP. | MAX. | UNITS |
|------------------|-------------------------------|--------------------|------|------|------|-------|
| f | Frequency range | | 40 | - | 870 | MHz |
| S ₂₂ | Return losses | f=40 to 870 MHz | - | - | -12 | dB |
| | Optical input return losses | | 45 | - | - | dB |
| SL | slope cable equivalent | f=40 to 870 MHz | 2 | - | 2.5 | dB |
| CNR | Noise carrier rating | | 50 | - | - | dB |
| I _{tot} | Total current consumption(DC) | V _B =8V | 250 | - | 270 | 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 Ω ;C=100pF) | 500 | - | V |
| T_{stg} | storage temperature | -40 | +85 | $^{\circ}C$ |
| T_{mb} | operating mounting base temperature | -20 | +85 | $^{\circ}C$ |

CHARACTERISTICS

(Bandwidth 40 to 870MHz; $T_{mb}=25^{\circ}C$, $V_B=8V$, $Z_S=Z_L=75\Omega$)

| PART NUMBER | | | Ogi8603008A | | | |
|---------------|-----------------------------------|------|-------------|------|-----------|--|
| SYMBOL | PARAMETER | UNIT | MIN. | TYP. | MAX. | CONDITIONS |
| S | responsivity | V/W | 850 | - | - | $\lambda=1310nm$ |
| FL | flatness of frequency response | dB | - | - | ± 0.5 | $f=40$ to 870 MHz |
| SL | slope cable equivalent | dB | 2 | - | 2.5 | $f=40$ to 870 MHz |
| S_{22} | return loss | dB | - | - | -12 | $f=40$ to 870 MHz |
| | Optical input return losses | dB | 45 | - | - | - |
| CTB | composite triple beat | dB | - | - | -65 | 110 channels flat; $P_{opt} = -1dBm$; |
| CSO | composite second order distortion | dB | - | - | -61 | CTB measured at 547.25 MHz; |
| CNR | Noise carrier rating | - | - | 51 | - | CSO measured at 548.5 MHz; |
| V_o | output voltage | dBmV | - | 30 | - | $P_{opt} = -7 \sim +1dBm$ |
| S_{λ} | Spectral sensitivity | A/W | 0.85 | - | - | $\lambda=1310 \pm 20nm$ |
| | | A/W | 0.9 | - | - | $\lambda=1550 \pm 20nm$ |
| λ | Optical wavelengh | nm | 1290 | - | 1600 | - |
| I_{tot} | total current consumption(DC) | mA | 250 | - | 270 | $V_B=+8V$ |

The module normally operates at $V_B=8V (\pm 0.1)$

MODULE DIMENSIONS

