



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
- High reliability
- GaAs MMIC
- OP-AGC

### DESCRIPTION

Hybrid amplifier module operating over a frequency range of 40 to 1000 MHz at a voltage supply of +8V(DC)

## QUICK REFERENCE DATA

SYMBOL	PARAMETER	CONDITIONS	MIN.	TYP.	MAX.	UNITS
f	Frequency range		40	-	1000	MHz
S <sub>22</sub>	Return losses	f=40to1000 MHz	-	-	-12	dB
	Optical input return losses		45	-	-	dB
SL	slope cable equivalent	f=40to1000 MHz	2	-	2.5	dB
CNR	Noise carrier rating		50	-	-	dB
I <sub>tot</sub>	Total current consumption(DC)	V <sub>B</sub> =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 $\Omega$ ;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 1000MHz; $T_{mb}=25^{\circ}$ C, $V_B=8V$ , $Z_S=Z_L=75\Omega$ )

PART NUMBER			Ogi10003008A			
SYMBOL	PARAMETER	UNIT	MIN.	TYP.	MAX.	CONDITIONS
S	responsivity	V/W	850	-	-	$\lambda=1310\text{nm}$
FL	flatness of frequency response	dB	-	-	$\pm 0.5$	$f=40$ to 1000 MHz
SL	slope cable equivalent	dB	2	-	2.5	$f=40$ to 1000 MHz
$S_{22}$	return loss	dB	-	-	-12	$f=40$ to 1000 MHz
	Optical input return losses	dB	45	-	-	-
CTB	composite triple beat	dB	-	-	-65	110 channels flat; $P_{opt} = -1\text{dBm}$ ;
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	-	$P_{opt} = -7 \sim +1\text{dBm}$
$S_{\lambda}$	Spectral sensitivity	A/W	0.85	-	-	$\lambda=1310 \pm 20\text{nm}$
		A/W	0.9	-	-	$\lambda=1550 \pm 20\text{nm}$
$\lambda$	Optical wavelength	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

