



Pin	Description
1	monitor current
4	NC
5	+V <sub>B</sub> of the amplifier
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(pin-5) supply of +5V(DC) .

**QUICK REFERENCE DATA**

SYMBOL	PARAMETER	CONDITIONS	MIN.	TYP.	MAX.	UNITS
f	Frequency range		40	-	1000	MHz
S <sub>22</sub>	Return losses	f=40 to 1000 MHz	-	-	-12	dB
	Optical input return losses		45	-	-	dB
SL	slope cable equivalent	f=40 to 1000 MHz	2	-	3	dB
CNR	Noise carrier rating		50	-	-	dB
I	Total current consumption(DC)	V <sub>B</sub> =5V	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 45 to 1000MHz;  $T_{mb}=30^{\circ}C$ ;  $V_A=5\sim 12V$ ;  $V_B=8V$ ;  $Z_S=Z_L=75\Omega$ )

PART NUMBER			Ogi10003005A			
SYMBOL	PARAMETER	UNIT	MIN.	TYP.	MAX.	CONDITIONS
S	responsivity	V/W	850	-	-	$\lambda=1310\sim 1600nm$
FL	flatness straight line	dB	-	-	$\pm 0.5$	$f=45$ to 1000 MHz
SL	slope straight line	dB	2	-	3	$f=45$ to 1000 MHz
$S_{22}$	return loss	dB	-	-	-12	$f=45$ to 1000 MHz
	Optical input return losses	dB	45	-	-	-
CTB	composite triple beat	dB	-	-	-63	110 channels flat; $P_{opt}=-1dBm$ ;
CSO	composite second order distortion	dB	-	-	-60	CTB measured at 547.25 MHz;
CNR	Noise carrier rating		-	51	-	CSO measured at 548.5 MHz;
$V_o$	output voltage	dBmV	-	30	-	$P_{opt}=-8\sim +2dBm$
$S_{\lambda}$	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	total current consumption(DC)	mA	250	-	270	$V_B=+5V$

MODULE DIMENSIONS

