



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

DESCRIPTION

Hybrid amplifier module operating over a frequency range of 40 to 860 MHz at a voltage supply of +24V(DC)

QUICK REFERENCE DATE

SYMBOL	PARAMETER	CONDITIONS	MIN.	TYP.	MAX.	UNITS
f	Frequency range		40	-	860	MHz
S ₂₂	Return losses	f=40 to 860 MHz	-	-	-11	dB
	Optical input return losses		45	-	-	dB
CNR	Noise carrier rating		51	-	-	dB
I _{tot}	Total current consumption(DC)	V _B =24V	180	-	210	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 860MHz; $T_{mb}=30^{\circ}C$, $V_B=24V$, $Z_S=Z_L=75\Omega$)

PART NUMBER			Oi8601824			
SYMBOL	PARAMETER	UNIT	MIN.	TYP.	MAX.	CONDITIONS
S	responsivity	V/W	850	-	-	$\lambda=1300nm$
FL	flatness of frequency response	dB	-	-	± 0.75	$f=40$ to 860 MHz
SL	slope cable equivalent	dB	-1.0	-	1.0	$f=40$ to 860 MHz
S_{22}	return loss	dB	-	-	-11	$f=40$ to 860 MHz
	Optical input return losses	dB	45	-	-	-
CTB	composite triple beat	dB	-	-	-65	77 channels flat; $P_{opt} = -1dBm$; CTB measured at 547.25 MHz; CSO measured at 548.5 MHz;
CSO	composite second order distortion	dB	-	-	-60	
CNR	Noise carrier rating		51	-	-	
V_o	output voltage	dBmV	-	27	-	
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	180	-	210	$V_B=+24V$

The module normally operates at $V_B=24V (\pm 0.5)$, but the reliability can't get guarantee if the voltage beyond 27V.

MODULE DIMENSIONS

