



Pin	Description
1	input
5	+V _B
9	output
2.3.7.8	common

FEATURES >>

- Excellent linearity
- Extremely low noise
- Excellent return loss properties
- High gain
- High reliability

DESCRIPTION

Hybrid amplifier module operating over a frequency range of 40to750 MHz at a voltage supply of +24V(DC)

QUICK REFERENCE DATE

SYMBOL	PARAMETER	CONDITIONS	MIN.	TYP.	MAX.	UNITS
G _p	power gain	f=50 MHz	18	-	19	dB
I _{tot}	total current consumption(DC)	V _B =24V	200	-	220	mA

LIMITING VALUES

In accordance with the Absolute Maximum Rating System

SYMBOL	PARAMETER	MIN.	MAX.	UNITS
V _i	RF input voltage	-	55	dBmV
T _{stg}	storage temperature	-40	+100	°C
T _{mb}	operating mounting base temperature	-20	+90	°C

CHARACTERISTICS(Bandwidth 40 to 750MHz; $T_{mb}=30^{\circ}\text{C}$, $V_B=24\text{V}$, $Z_S=Z_L=75\Omega$)

PART NUMBER			Ei7501824P			
SYMBOL	PARAMETER	UNIT	MIN.	TYP.	MAX.	CONDITIONS
G_P	power gain	dB	18	-	19	f=50MHz
SL	slope cable equivalent	dB	0.5	-	1.5	f=40 to 750 MHz
FL	flatness of frequency response	dB	-	-	± 0.4	f=40 to 750 MHz
S_{11}	input return loss	dB	-	-	-16	f =40 to 750 MHz
S_{22}	output return loss	dB	-	-	-16	f =40 to 750 MHz
CTB	composite triple beat	dB	-	-	-58	77channels flat; $V_o=44\text{dBmV}$;
CSO	composite second order distortion	dB	-	-	-58	CTB measured at 547.25 MHz;
X_{mod}	cross modulation	dB	-	-	-60	CSO measured at 548.5 MHz;
V_o	output voltage	dBmV	60	-	-	$d_{im}=-60\text{dB}$
F	noise figure	dB	-	-	7	f=750 MHz
I_{tot}	total current consumption(DC)	mA	200	-	220	$V_B=+24\text{V}$

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S_{22}	output return loss	dB	-	-	-16	f =40 to 750 MHz
CTB	composite triple beat	dB	-	-	-55	110channels flat; $V_o=44\text{dBmV}$;
CSO	composite second order distortion	dB	-	-	-55	CTB measured at 745.25 MHz;
X_{mod}	cross modulation	dB	-	-	-58	CSO measured at 746.5 MHz;
V_o	output voltage	dBmV	60	-	-	$d_{im}=-60\text{dB}$
F	noise figure	dB	-	-	7	f=750 MHz
I_{tot}	total current consumption(DC)	mA	200	-	220	$V_B=+24\text{V}$

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

