



Pin	Description
1	input
5	+V <sub>B</sub>
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 40 to 750 MHz at a voltage supply of +24V(DC)

### QUICK REFERENCE DATE

SYMBOL	PARAMETER	CONDITIONS	MIN.	TYP.	MAX.	UNITS
G <sub>p</sub>	power gain	f=50 MHz	18	-	19	dB
I <sub>tot</sub>	total current consumption(DC)	V <sub>B</sub> =24V	350	-	380	mA

### LIMITING VALUES

In accordance with the Absolute Maximum Rating System

SYMBOL	PARAMETER	MIN.	MAX.	UNITS
V <sub>i</sub>	RF input voltage	-	55	dBmV
T <sub>stg</sub>	storage temperature	-40	+100	°C
T <sub>mb</sub>	operating mounting base temperature	-20	+90	°C

## CHARACTERISTICS

(Bandwidth 40 to 750MHz;  $T_{mb}=25^{\circ}\text{C}$ ,  $V_B=24\text{V}$ ,  $Z_S=Z_L=75\Omega$ )

PART NUMBER			Ei7501824D			
SYMBOL	PARAMETER	UNIT	MIN.	TYP.	MAX.	CONDITIONS
$G_P$	power gain	dB	18	-	19	f=50MHz
$S_L$	slope cable equivalent	dB	0.5	-	1.8	f=40 to 750 MHz
$F_L$	flatness of frequency response	dB	-	-	$\pm 0.4$	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	-	-	-61	110 channels flat; $V_o=44\text{dBmV}$ ;
CSO	composite second order distortion	dB	-	-	-62	CTB measured at 745.25 MHz;
$X_{mod}$	cross modulation	dB	-	-	-63	CSO measured at 746.5 MHz;
$V_o$	output voltage	dBmV	63	-	-	$d_{im}=-60\text{dB}$
F	noise figure	dB	-	-	7	f=750 MHz
$I_{tot}$	total current consumption(DC)	mA	350	-	380	$V_B=+24\text{V}$

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.

MODULE DIMENSIONS

