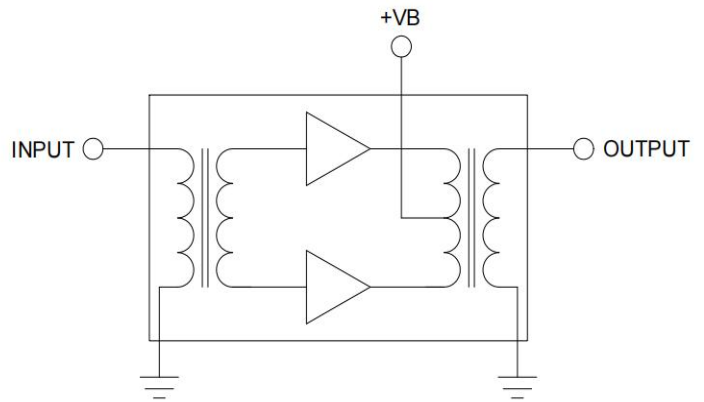




Hybrid amplifier module operating over a frequency range of 47 to 1800MHz at a voltage supply of +24V( DC).It provides excellent linearity and superior return loss performance with low noise and optimal reliability.

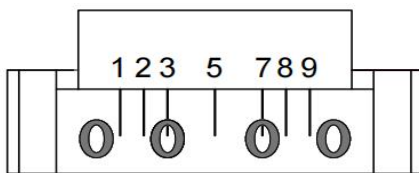
### FEATURES

- Excellent Linearity
- Superior Return Loss Performance
- Extremely Low Distortion
- Optimal Reliability
- Low Noise
- Unconditionally Stable Under All Terminations
- Power gain @23dB
- DOCSIS 3.1 and 4.0 compliant



### OUTLINE

#### PIN CONFIGURATION



side view

Pin	Description
1	Input
5	+V <sub>B</sub>
9	Output
2、3、7、8	GND

### QUICK REFERENCE DATA

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNITS
G <sub>p</sub>	Power Gain	f=47 MHz	21	22.5	dB
I <sub>tot</sub>	Total current consumption(DC)	V <sub>B</sub> =24V	520	570	mA

### LIMITING VALUES

In accordance with the Absolute Maximum Rating System

SYMBOL	PARAMETER	MIN	MAX	UNITS
V <sub>i</sub>	RF input voltage	-	75	dBmV
T <sub>stg</sub>	Storage temperature	-40	+100	°C
T <sub>mb</sub>	Operating mounting base temperature	-20	+90	°C

### CHARACTERISTICS

(Bandwidth 47 to 1800MHz ; T<sub>mb</sub> = 25°C, V<sub>B</sub> = 24V, Z<sub>S</sub> = Z<sub>L</sub> = 75Ω)

SYMBOL	PARAMETER	MIN	TYP	MAX	UNIT	CONDITIONS
G <sub>P</sub>	power gain	21	22	22.5	dB	f = 47MHz
SL	slope cable equivalent	0.5	1	2	dB	f = 47 to 1800MHz
FL	flatness of frequency response	-	-	±0.5	dB	f = 47 to 1800MHz
S <sub>11</sub> & S <sub>22</sub>	Input & output return loss	-	-	-16	dB	f = 47 to 1800MHz
P <sub>OUT</sub>	45dB MER, Source Corrected	-	68.6	-		dBmV Total Composite Power
	42dB MER, Source Corrected	-	69.3	-		
OIP2L	47 - 250 MHz	-	82	-	dBm	15 dBm/tone output
	250 - 1250 MHz	-	75	-	dBm	
	1250 - 1800 MHz	-	81	-	dBm	
OIP2U	47 - 250 MHz	-	81	-	dBm	15 dBm/tone output
	250 - 1250 MHz	-	67	-	dBm	
	1250 - 1800 MHz	-	73	-	dBm	
OIP3	47 - 250 MHz	-	48	-	dBm	15 dBm/tone output
	250 - 1250 MHz	-	47.7	-	dBm	
	1250 - 1800 MHz	-	42.3	-	dBm	
F	noise figure	-	-	3.0	dB	f = 47 to 108MHz
F	noise figure	-	-	3.5	dB	f = 108 to 1218MHz
F	noise figure	-	-	4.6	dB	f = 1218 to 1800MHz
I <sub>tot</sub>	total current consumption(DC)	520	550	570	mA	V <sub>B</sub> =+24V

The module normally operates at V<sub>B</sub>=24 V(±0.5)

### MODULE DIMENSIONS

