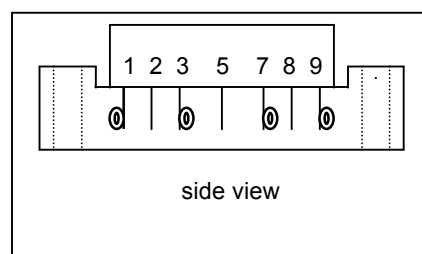


FEATURES

- Superior Return Loss Performance
- Extremely Low Distortion
- Excellent Linearity
- Low Noise
- Optimal Reliability

OUTLINE

PIN CONFIGURATION



DESCRIPTION

The SMF8346S is a Push Pull amplifier module.

The part employs Si dies and is operated from 40MHz to 860MHz with supply voltage +6V(DC)

Pin	Description
1	Input
5	+V _B
9	Output
2、3、7、8	GND

QUICK REFERENCE DATA

SYMBOL	PARAMETER	CONDITIONS	MIN.	MAX.	UNITS
G _p	Power Gain	f=50 MHz	33.5	35	dB
I _{tot}	Total current consumption(DC)	V _B =6V	340	370	mA

LIMITING VALUES

In accordance with the Absolute Maximum Rating System

SYMBOL	PARAMETER	MIN.	MAX.	UNITS
V_i	RF input voltage	-	50	dBmV
T_{stg}	Storage temperature	-40	+100	°C
T_{mb}	Operating mounting base temperature	-20	+90	°C

CHARACTERISTICS

(Bandwidth 40 to 860MHz; $T_{mb}=25^{\circ}\text{C}$, $V_B=6\text{V}$, $Z_S=Z_L=75\ \Omega$)

SYMBOL	PARAMETER	UNIT	MIN.	TYP.	MAX.	CONDITIONS
G_p	Power Gain	dB	33.5	34	35	f=50MHz
SL	Slope cable equivalent	dB	1	2	3	f=40 to 860 MHz
FL	Flatness of frequency response	dB	-	-	± 0.5	f=40 to 860 MHz
S_{11}	Input Return Loss	dB	-	-	-16	f=40 to 860 MHz
S_{22}	Output Return Loss	dB	-	-	-16	f=50 to 860 MHz
CTB	Composite Triple Beat	dB	-	-	-50	60 channels flat; $V_o=42\text{dBmV}$;
CSO	Composite Second Order Distortion	dB	-	-	-50	CTB measured at 543.25 MHz;
X_{mod}	Cross Modulation	dB	-	-	-51	CSO measured at 544.5 MHz;
V_o	Output Voltage	dBmV	58	-	-	$d_{im}=-60\text{dB}$
F	Noise Figure	dB	-	-	7.5	f=860 MHz
I_{tot}	Total Current Consumption	mA	340	-	370	$V_B=+6\text{V}$

The module normally operates at $V_B=6\text{ V}(\pm 0.5)$

