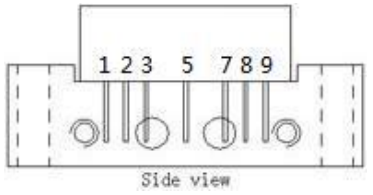
OUTLINE

PIN CONFIGURATION



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 47 to 1003 MHz at a voltage supply of +24V(DC) ,employing GaAs MMIC.

QUICK REFERENCE DATA

SYMBOL	PARAMETER	CONDITIONS	MIN.	TYP.	MAX.	UNITS
G_p	power gain	f=47 MHz	24.5	25	25.5	dB
I_{tot}	total current consumption(DC)	V_B=24V	260	270	290	mA

LIMITING VALUES

In accordance with the Absolute Maximum Rating System

SYMBOL	PARAMETER	MIN.	MAX.	UNITS
V_i	RF input voltage（single tone）	-	70	dBmV
Vvo	DC Supply over-voltage(5minutes)		30	V
T_{stg}	storage temperature	-40	+100	℃
T_{mb}	operating mounting base temperature	-30	+100	℃

CHARACTERISTICS

(Bandwidth 47 to 1003MHz; T_{mb}=25℃, V_B=24V, Z_S=Z_L=75Ω)

PART NUMBER			Egi10002524PG			
SYMBOL	PARAMETER	UNIT	MIN.	TYP.	MAX.	CONDITIONS
G_P	power gain	dB	24.5	25	25.5	f =47MHz
G_P	power gain	dB	-	26.5	-	f =870MHz
G_P	power gain	dB	25.5	26.5	27	f =1003MHz
SL	slope cable equivalent	dB	0.5	1.0	2.0	f =47 to 1003 MHz
FL	flatness of frequency response	dB	-	-	0.8	f =47 to 1003 MHz
S_{11}&S_{22}	Input&output return loss	dB	-	-	-20	f =47 to 320 MHz
S_{11}&S_{22}	Input&output return loss	dB	-	-	-19	f =320 to 640 MHz
S_{11}&S_{22}	Input&output return loss	dB	-	-	-17	f =640 to 870 MHz
S_{11}&S_{22}	Input&output return loss	dB	-	-	-16	f =870 to 1003 MHz
CTB	composite triple beat	dB	-	-68	-63	Vo=43dBmV at 862MHz,flat,98 Analog channels
CSO	composite second order distortion	dB	-	-66	-61	
XMOD	X modulation	dB	-	-67	-	
CTB	composite triple beat	dB	-	-68	-	VO=46dBmV, 79 analog channels plus 75 digital channels (-6dB offset)
CSO	composite second order distortion	dB	-	-75	-	
XMOD	X modulation	dB	-	-64	-	
CIN		dB	-	-65	-	
F	noise figure	dB	-	4.5	5.0	f=47 to 1003 MHz
I_{tot}	total current consumption(DC)	mA	260	270	290	V_B=+24V

The module normally operates at V_B=24V(±0.5).

MODULE DIMENSIONS