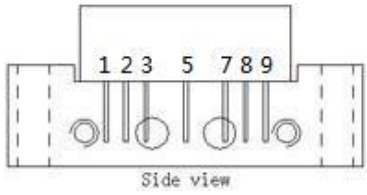
OUTLINE

PIN CONFIGURATION



Pin	Description
1	input
4	$+V_{Bias}$
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 40 to 1218 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=45 MHz	33.6	34.3	35	dB
I_{tot}	total current consumption(DC)	V_B=24V	290	300	320	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	℃

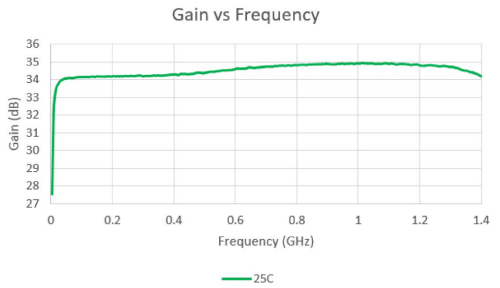
CHARACTERISTICS

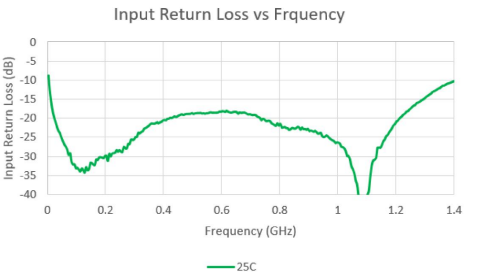
(Bandwidth 40 to 1218MHz; T_{mb}=25℃,V_B=24V,Z_S=Z_L=75Ω)

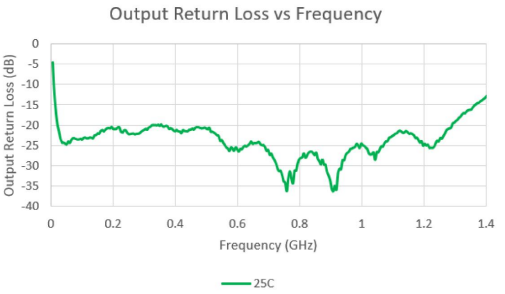
PART NUMBER			Egi12003424DG			
SYMBOL	PARAMETER	UNIT	MIN.	TYP.	MAX.	CONDITIONS
G_P	power gain	dB	33.6	34.3	35	f =45MHz
G_P	power gain	dB	-	34.6	-	f =1000MHz
G_P	power gain	dB	34	34.5	36	f =1218MHz
SL	slope cable equivalent	dB	0.5	1.0	1.5	f =40 to 1218 MHz
FL	flatness of frequency response	dB	-	-	0.8	f =45 to 1218 MHz
S_{11}&S_{22}	Input&output return loss	dB	-	-	-20	f =45 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 1000 MHz
S_{11}&S_{22}	Input&output return loss	dB	-	-	-15	f =1000 to 1218 MHz
CTB	composite triple beat	dB	-	-65	-62	PAL:
CSO	composite second order distortion	dB	-	-65	-62	Vo=45dBmV at 862MHz,flat,99
XMOD	X modulation	dB	-	-62	-	Analog channels
CTB	composite triple beat	dB	-	-70	-	NTSC:
CSO	composite second order distortion	dB	-	-68	-	Vo=47dBmV at 1200MHz,
CIN		dB	-	-64	-	0dB extrapolated tilt 79 analog channels plus 111QAM(-6dB offset)
F	noise figure	dB	-	5.0	5.5	f=45 to 1218 MHz
I_{tot}	total current consumption(DC)	mA	280	290	320	V_B=+24V

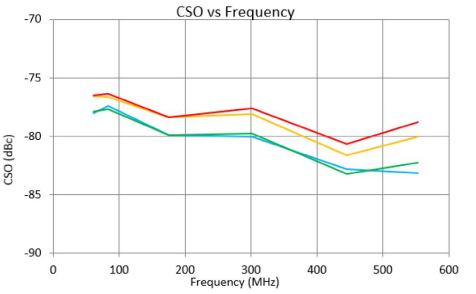
The module normally operates at V_B=24V（±0.5).

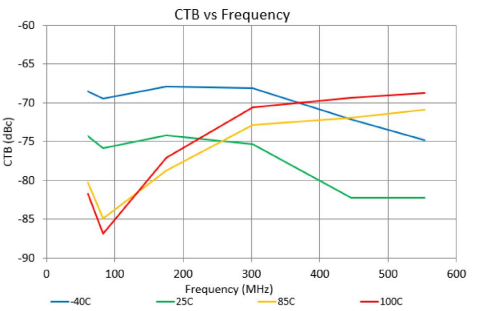
Performance data@24V











MODULE DIMENSIONS