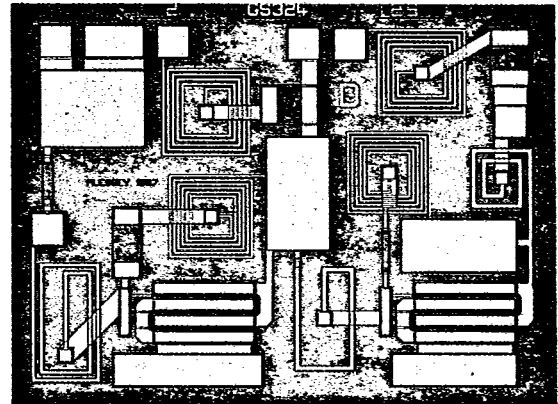
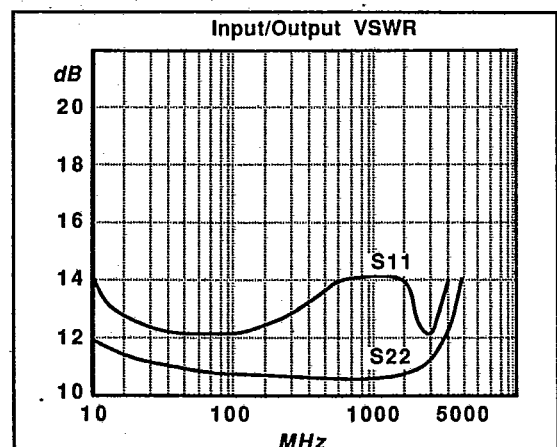
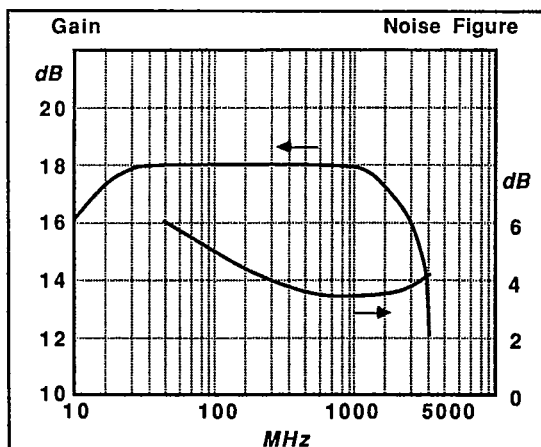


**Three Five Product Information****GaAs Monolithic Broadband Amplifier****P35-4104****0.05 - 3.0 GHz frequency range****Features**

- Ultra broadband.
- High gain.
- Cascadable.
- 13dB Output power capability.
- Input and output matched to 50Ω.
- Surface mount package.

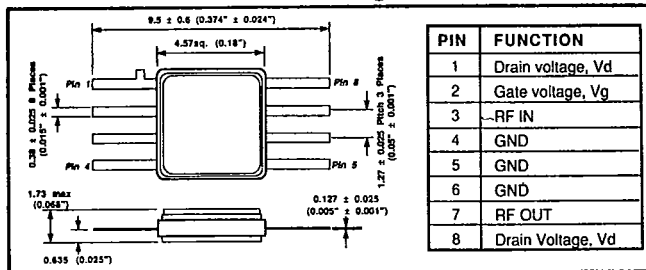
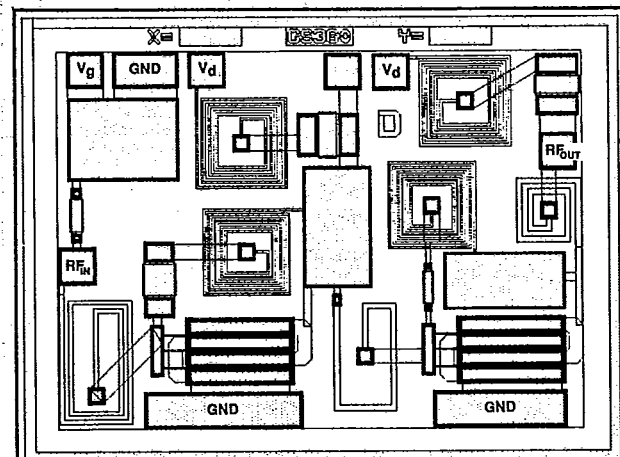
**Typical Performance**

**P35-4104****Specification (at 25°C) Frequency range 0.05-3.0GHz**

Parameter	Conditions	Min.	Typ.	Max.	Units
Small Signal Gain	Vd = 8 volt, Id = 60 mA (See Note 1)	16.5	18	-	dB
Gain Flatness	Vd = 8 volt, Id = 60 mA	-	±1.0	±1.5	dB
Input VSWR	Vd = 8 volt, Id = 60 mA	-	1.8	2.0	
Output VSWR	Vd = 8 volt, Id = 60 mA	-	1.3	1.5	
Noise Figure: 0.5-3.0GHZ 0.05-3.0GHZ	Vd = 8 volt Id = 60 mA	- -	4.0 6.0	4.5 7.0	dB
Output Power at 1dB Compression	Vd = 8 volt, Id = 60 mA	12	13	-	dBm
Reverse Isolation	Vd = 8 volt, Id = 60 mA	30	35	-	dB
Voltage	Drain, Vd	6	8	9	volts
	Gate, Vg (See Note 2)	-0.5	-1	-1.5	volts

**Notes:**

- The nominal operating current,  $I_d$ , is 60mA set by  $V_g$ , typically -1 volt.
- The range of  $V_g$  to set  $I_d = 60$ mA.
- It is important that the leads designated GND are connected with minimum lead length to a good r.f. ground. the back face of the package can be used for r.f. grounding.
- External r.f. decoupling capacitors are required at pins 1, 2 and 8, and d.c. blocking capacitors at pins 3 and 7, type AVX 10,000 pf ± 10%, 0851C103KN7001.
- It is recommended that the chip is mounted with a silver loaded epoxy and bonding to all pads using 25µm diameter pure gold wire, thermally compression bonded.

**P35-4104-1 Pin Configuration****P35-4104-0 Bond Pad Configuration**

Chip size: 1702µm x 1295µm  
Chip thickness: 210µm

**Ordering Information**

P35-4104-0 Chip  
P35-4104-1 Packaged



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Publication No. PRT-0007 Issue 1 1-90