FEATURES

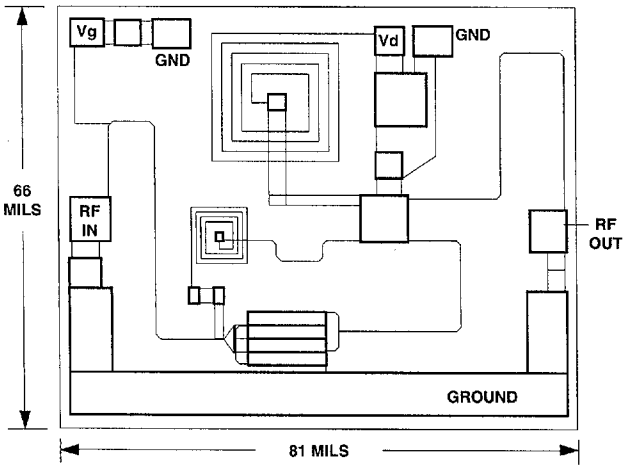
- 1 - 6 GHz Frequency Range
- Flat Frequency Response With Direct Gain Control
- +20 dBm Output Power Capability
- Matched to 50Ω
- No External Components Required

MODEL NO. P35-4110-0

GaAs MMIC Amplifier

MMIC

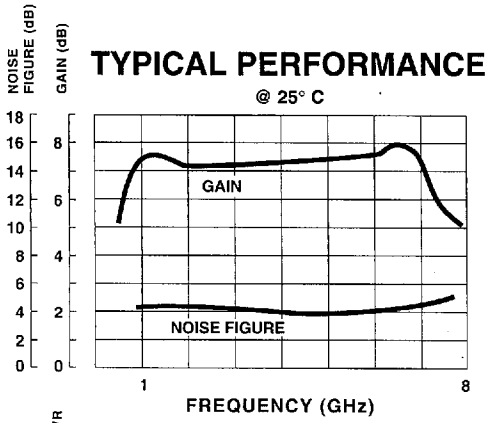
BOND PAD CONFIGURATION

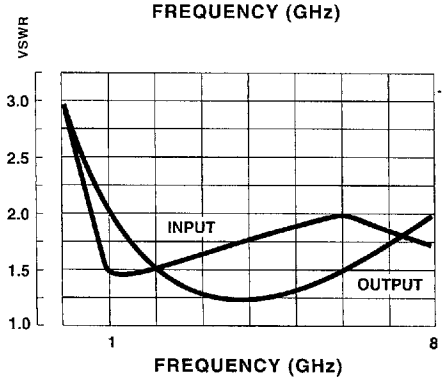


CHIP THICKNESS: 8 MILS

TYPICAL PERFORMANCE

@ 25° C





GUARANTEED PERFORMANCE

@ 25° C

PARAMETER		MIN	TYP	MAX	UNITS	CONDITIONS
OPERATING FREQUENCY		1		6	GHz	
GAIN		6.5	7.5		dB	SEE NOTE 2
GAIN FLATNESS			±0.2	±0.3	dB	
VSWR:	INPUT OUTPUT		2.0/1 2.0/1	2.2/1 2.4/1		SEE NOTE 3
OUTPUT POWER			+20		dBm	1 dB COMPRESSION
NOISE FIGURE			4.6	4.8	dB	
VOLTAGES:	GATE DRAIN	0 4.5	-1 5.0	-5 5.5	V V	SEE NOTE 2
CURRENT, Idss		100	150	180	mA	@ Vgs=0V
REVERSE ISOLATION			18	15	dB	

CONDITION IS Id = 80 mA

NOTES:

1. IT IS IMPORTANT THAT ALL THREE GROUND PADS ARE BONDED WITH MINIMUM INDUCTANCE TO A GOOD RF GROUND.
2. THE SMALL SIGNAL GAIN AND Id ARE BOTH REDUCED BY INCREASING THE MAGNITUDE OF Vg. VIRTUALLY NO CURRENT IS TAKEN FROM THE Vg SUPPLY.
3. FOR OPTIMUM LOW FREQUENCY PERFORMANCE, IT IS RECOMMENDED THAT Vd IS APPLIED TO THE P35-4110 VIA AN OFF-CHIP DECOUPLING CAPACITOR IN THE RANGE 430 - 1000 PF.
4. THE GATE BIAS Vg WILL APPEAR AT BOTH THE INPUT AND OUTPUT OF BOND PADS TO EASE BIAS CONNECTIONS WHEN CASCADING CHIPS.
5. FOLLOW RECOMMENDED MOUNTING INSTRUCTIONS.

This product is manufactured by GEC Marconi Materials, UK, and is distributed by Daico Industries.