

Performance Characteristics:

- Output signal: -5V-0V
- Switching time: 20ns
- Chip size: 1.36mm×0.9mm×0.1mm

Product Description:

CW-FEN4 is a 4-bit negative pressure output FET driver chip, manufactured by GaAs process, which can generate the input TTL pulse signal to output a complementary pulse signal of -5.1V/-0.3V. The product can be widely used to control the FET switch, CNC attenuator, CNC phase shifter and other circuits.

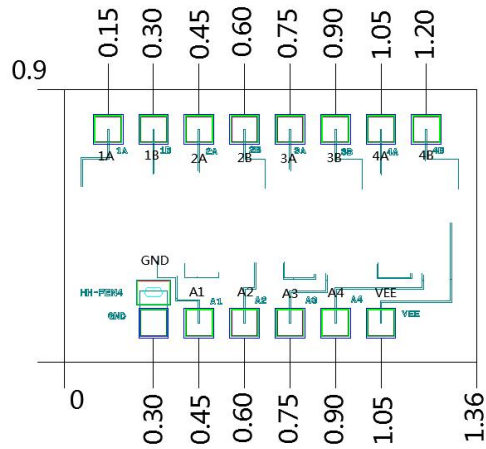
Electrical parameters: (TA=25°C, VEE=-5V)

Indicators	Symbols	Minimum	Typical value	Maximum value	Units	Remarks
Static current	lees	-	-	2	mA	-
Drive current	lo	-	0.2	-	mA	Related to load
Input current	li	-	0.2	-	mA	Single way
Output high level	Vh	-0.3	-	-	V	Open circuit
Output low	VI	-5.1	-	-	V	Open circuit
Switching time	ts	-	15	-	ns	f=100KHz
Operating frequency	f	-	10	-	MHz	Load dependent

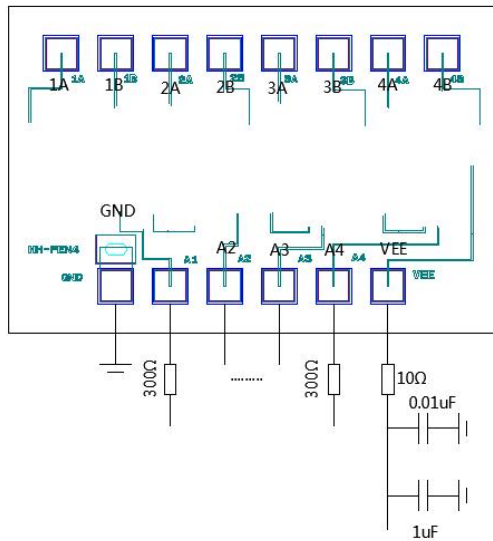
Truth table:

VEE=-5V		
Enter (V)	Output (V)	
A1	1A	1B
0	-5	0
5	0	-5
A2	2A	2B
0	-5	0
5	0	-5
A3	3A	3B
0	-5	0
5	0	-5
A4	4A	4B
0	-5	0
5	0	-5

Size drawing: (unit mm)



Suggested assembly drawing:



Instructions:

Storage: The chip must be placed in a container with electrostatic protection and stored in a nitrogen environment.

Cleaning treatment: The bare chip must be operated and used in a purified environment. It is forbidden to use liquid cleaning agent to clean the chip.

Electrostatic protection: Strictly comply with the ESD protection requirements to avoid electrostatic damage to the components.

General operation: Use vacuum chuck or precision pointed tweezers to pick up the chip. Avoid touching the surface of the chip with tools or fingers during handling.

Mounting operation: The chip can be installed using AuSn solder eutectic welding or conductive adhesive bonding process. The mounting surface must be clean and flat.

Bonding operation: Input and output with 2 (recommended diameter of 25um gold wire) bonding wire, bonding wire length less than 250um is optimal. It is recommended to use the smallest possible ultrasonic energy. Bonding begins at the pressure point on the chip and ends at the package (or substrate).