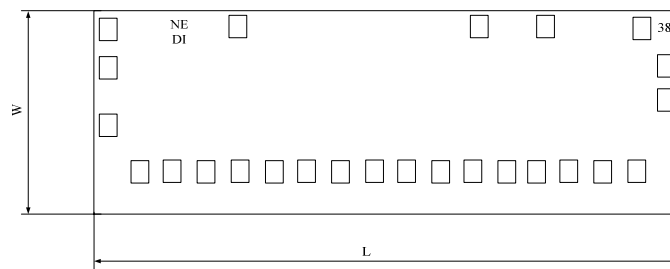


➤ **Product feature ver1.0**

- 1,38 decoding drive chip, decoding and driver finishing once
- 2, Input signal and TTL/CMOS compatible
- 3, Difference impulse signal output
- 4, 4, Excellent drive power
- 5, High speed, low power dissipation

➤ **Product description**

WQD0004H is a 38 decoding driver chip, it realize the combination of two functions of 38 decoding and driver once, it is used in the conversion from TTL/CMOS frequency to difference control grid frequency which used in GaAs FET microwave switch, attenuator, phase shifter. the high output frequency can be adjustable between 0V~2V, it has features like low power dissipation, high speed and convenient in using.



L=3.85mm, W=1.45mm

Min pressure point:0.12mm×0.12mm, chip thickness:0.35mm

➤ **Typical electronic feature (at 25°C)**

Feature ^{1, 2}	Frequency	Min	Max	Unit
Conducting delay(input50%~output50%)	DC-20MHz		35	ns
Shutting delay (input50%~output50%)	DC-20MHz		35	ns
Upedge (10%~90%)	DC-20MHz		8	ns
Downedge (10%~90%)	DC-20MHz		8	ns
High output level	DC-20MHz	-0.5		V
Low output level	DC-20MHz		-4.5	V
Static current			100	uA

1. Condition: VDD=5V, VEE=-5V, VOPT=0V, output load grouding 24pF

2. High output frequency can be changed according with VOPT, generally the two are equal

➤ **Truth table**

INPUT			OUTPUT															
INC	INB	INA	1P	1N	2P	2N	3P	3N	4P	4N	5P	5N	6P	6N	7P	7N	8P	8N
0	0	0	1	0	0	1	0	1	0	1	0	1	0	1	0	1	0	1
0	0	1	0	1	1	0	0	1	0	1	0	1	0	1	0	1	0	1
0	1	0	0	1	0	1	1	0	0	1	0	1	0	1	0	1	0	1
0	1	1	0	1	0	1	0	1	1	0	0	1	0	1	0	1	0	1
1	0	0	0	1	0	1	0	1	0	1	1	0	0	1	0	1	0	1
1	0	1	0	1	0	1	0	1	0	1	0	1	1	0	0	1	0	1
1	1	0	0	1	0	1	0	1	0	1	0	1	0	1	1	0	0	1
1	1	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	1	0

➤ **Chip outline**

