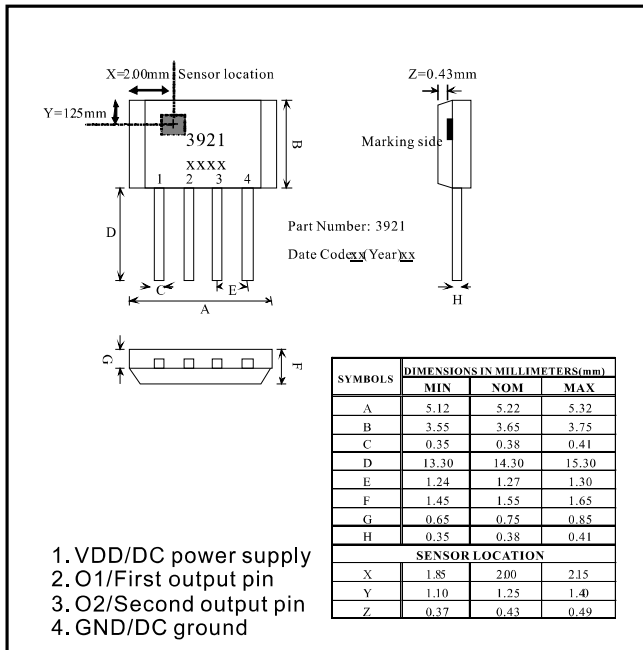


Package: T092-4pin



The PT3921 is designed for magnetic actuating using a bipolar magnetic field. The built-in dynamic offset cancellation of pre-amplifier stage achieves optimal symmetrical magnetic sensing. The output driver provides a linear drive to eliminate switching noise. This Hall-effect IC is optimal for DC brushless fan application. The supply voltage range is from 2.7V to 17V and the output current is 400mA.

Key Features

- 2.7V~17V supply voltage
- Single phase full wave
- Soft switching output
- Built-in Hall sensor
- Motor locked protection & automatic restart
- ESD protection: 8KV
- Built-in hysteresis comparator
- Built-in Zener diode
- High sensitivity & low thermal drift magnetic sensing
- Low power consumption & high driving efficiency
- Support pre-driver application

Applications

- Single coil 12V brushless DC fan
- Cooling fan for household electronics
- General purpose cooling fan solution e.g. Audio
- Cooling fan for game consoles.

Specifications

Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Conditions	Rating	Units
Maximum supply voltage	VDDmax		18	V
Allowable power dissipation	Pd		568 ^{*1}	mW
Operating temperature	Ta		-40~+100	°C
Storage temperature	Ts		-50~+150	°C
Max. output current	Iomax	0.5sec	800 ^{*2}	mA
Thermal resistance	Raj		220	°C/W
Junction temperature	Tj		150	°C

*1: Reduced by 4.5mW for each increase in Ta of 1°C over 25°C When mounted on 50mm x 50mm x 1.6mm glass epoxy board

*2: Should not exceed Pd