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55085 Mini Vane Hall Effect Sensor Features and Benefits



Features

- Sensor and magnet contained in a single housing
- Sensor operates when ferrous vane passes through slot
- 3 pin leadout integral to sensor
- Vibration 50g max. @ 50-2,000Hz
- Shock 150g max. @ 11ms $1/2$ Sine
- EMC to DIN 40839 (Consult Hamlin)
- Reverse/Over Voltage Protection
- Built in temperature compensation

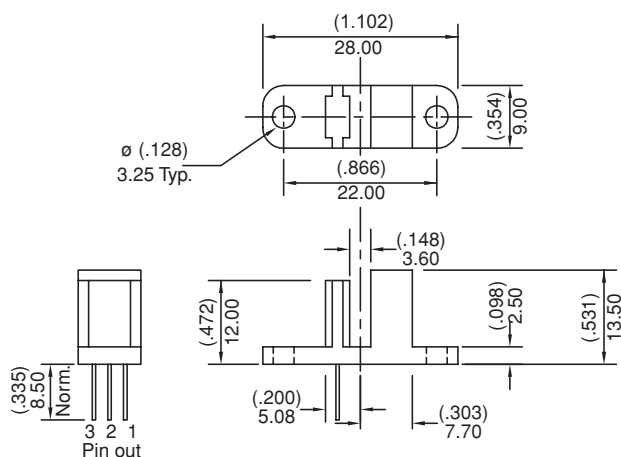
Benefits

- High switching speed up to 10kHz
- Long life; up to 20 billion operations
- Unaffected by harsh environments
- Operates in static or dynamic magnetic field
- Small package size
- Simple installation and adjustment

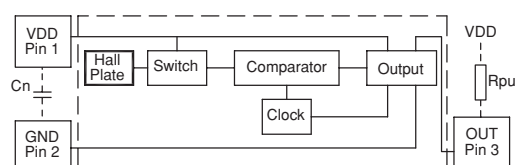
Applications

- Position and limit sensing
- Shaft rotation sensing
- Security systems
- Linear actuators
- Angle sensing
- Magnetic encoders

DIMENSIONS (in) mm



BLOCK DIAGRAM



Notes

- 1) Add capacitor Cn as shown, close to the sensor, for transient suppression if required
- 2) Add resistor Rpu as shown for sinking output

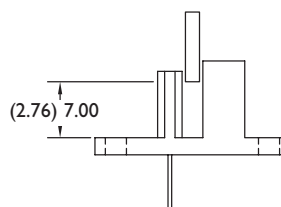
SPECIFICATIONS

Hall Type			Digital Switch
			3 Wire (Voltage Output)
Supply Voltage (Note 1)	Absolute Ratings	Vdc	-15 to +28
	Recommended	Vdc	+3.8 to +24
	Overvoltage Protection	Vdc-max	32
Output High Voltage		Vdc	sinking output
Output Low Voltage		Vdc-max	0.4 @ 20mA
Output Current (continuously on)		mA-max	20
Switching Speed		kHz-max	10
Temperature	Operating	°C	-40 to +100
	Storage	°C	-65 to +105

Note 1 - As long as Tj (Junction Temperature) max. is not exceeded

ACTIVATION (in) mm

Activate Distance is approximate using a (.100)
2.54 thick ferrous vane as illustrated



ORDERING INFORMATION

55085 - 3M - 00 - 0

Series 55085

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