

Expand

Differentiate your set with a magnetic dial

Hall Sensor

Detects direction by the change in magnetic field

LSI Series

part 2



For remote controls for multichannel TVs



For fax address registry



For page turning in electronic books



For next-generation game controllers



For car navigation menu selection

Overview

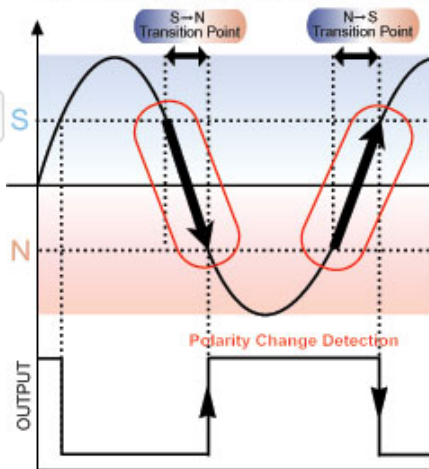
ROHM's Hall sensors for alternating field detection vary the electric signal based on changes in the magnetic field (from S to N and N to S pole transition). This method is contact-less, unlike mechanical systems, eliminating the likelihood of misdetection, increasing reliability.

BU52040HFV Hall Sensor IC Features

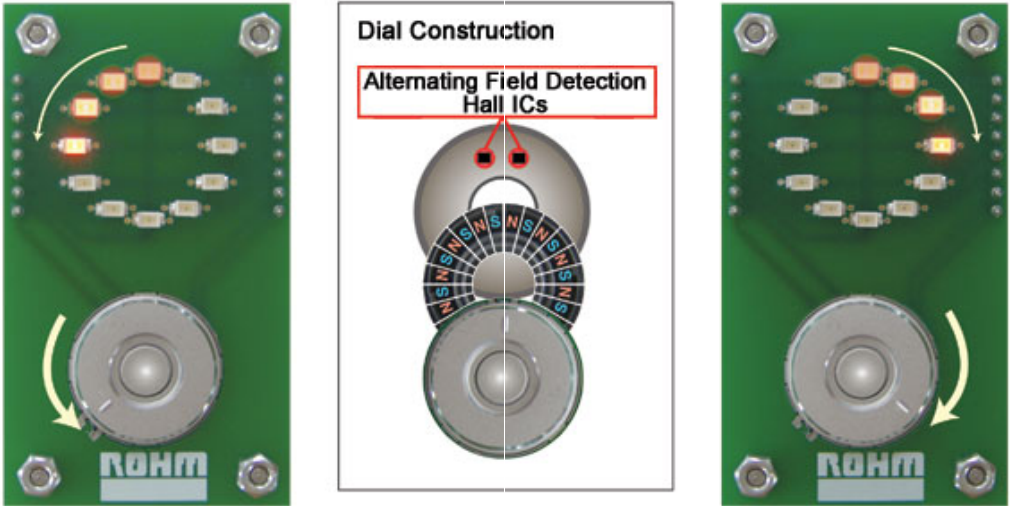
1. Alternating field detection based on polarity changes
2. Intermittent operation for lower power consumption
3. 8kV ESD resistance ensures greater reliability
4. +/-3.0mT operating magnetic flux density results in high sensitivity
5. Compact surface mount package (1.6mm×1.6mm×0.6mm) contributes to end-product miniaturization
6. Detection errors due to temperature fluctuations minimized
7. Non-contact method strong against deterioration for greater reliability
8. Contact-less system facilitates waterproof, dustproof designs

Applications

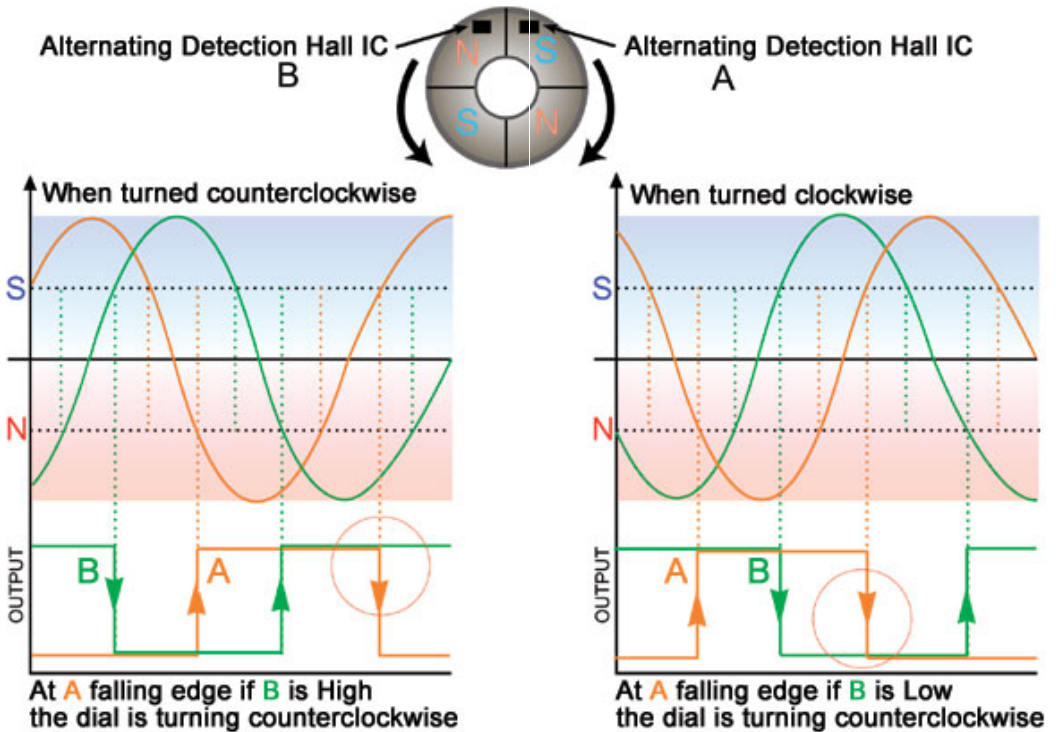
Alternating Field Detection Hall IC



Specific LEDs light up based on the direction the dial is turned



<Turning Direction Detection Details>



Lineup

Part No	Supply Voltage(V)	Operating Magnetic Flux Density(mT)	Pulse Driving Cycle(μs)	Package
BU52040HFV	1.65 to 3.3	+/-3.0	500	HVSOF5