



# **TMR Magnetic Sensor Product Catalog**

*Advanced Switching and Magnetic Sensing Solutions*

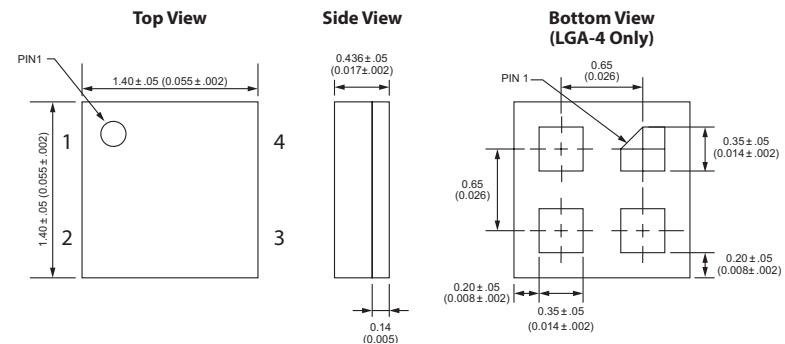
Coto Part Number	Magnetic Polarity Response	Operative Sensitivity (G)	Release Sensitivity (G)	Frequency (Hz)	I <sub>AVG</sub> (μA)	Temp Rating (°C)	Supply Voltage (V <sub>DD</sub> )	Output Response	Package	Axis of Sensitivity
RR121-1A23-311	Omnipolar	9	5	10	0.24	-40 to +125	2.7 to 3.6	Active Low	SOT-23-3	X-Axis
RR121-1A53-311	Omnipolar	9	5	250	1.44	-40 to +125	2.7 to 3.6	Active Low	SOT-23-3	X-Axis
RR121-1B13-311	Omnipolar	30	20	2	0.2	-40 to +125	2.7 to 3.6	Active Low	SOT-23-3	X-Axis
RR121-1B13-312	Omnipolar	30	20	2	0.2	-40 to +125	2.7 to 3.6	Active Low	LGA-4	X-Axis
RR121-1B53-311	Omnipolar	30	20	250	1.44	-40 to +125	2.7 to 3.6	Active Low	SOT-23-3	X-Axis
RR121-1B93-312	Omnipolar	30	20	10000	36	-40 to +125	2.7 to 3.6	Active Low	LGA-4	X-Axis
RR121-1E73-311	Omnipolar	15	10	2500	8	-40 to +125	2.7 to 3.6	Active Low	SOT-23-3	X-Axis
RR121-1F23-311	Omnipolar	70	50	10	0.24	-40 to +125	2.7 to 3.6	Active Low	SOT-23-3	X-Axis
RR121-3C63-311	Bipolar	-10	10	500	1.7	-40 to +125	2.7 to 3.6	Active Low	SOT-23-3	X-Axis
RR121-3C73-311	Bipolar	-10	10	2500	8	-40 to +125	2.7 to 3.6	Active Low	SOT-23-3	X-Axis
RR121-2A32-364	Unipolar	9	5	20	0.28	-40 to +85	2.7 to 3.6	Dual Active Low	Leaded LGA-4	X-Axis
RR131-1B13-351	Omnipolar	30	20	2	0.2	-40 to +125	2.7 to 3.6	Open Drain	SOT-23-3	X-Axis
RR131-1B13-352	Omnipolar	30	20	2	0.2	-40 to +125	2.7 to 3.6	Open Drain	LGA-4	X-Axis
RR131-2E23-351	Unipolar	15	10	10	0.24	-40 to +125	2.7 to 3.6	Open Drain	SOT-23-3	X-Axis

Coto Part Number	Magnetic Polarity Response	Magnetic Sensitivity Range Minimum (G)	Magnetic Sensitivity Range Maximum (G)	Frequency (Hz)	I <sub>AVG</sub> (mA)	Temp Rating (°C)	Supply Voltage (V <sub>DD</sub> )	Output Response	Package	Axis of Sensitivity
RR110-A111-00	Linear Analog	0	100	Continuous	0.1	-40 to +85	1.2 to 12	Analog Resistance	SOT-23-3	Y-Axis
RR111-1DC2-331	Linear Analog	-10	10	Continuous	1.5	-40 to +85	2.7 to 3.6	Analog Voltage	SOT-23-3	X-Axis
RR111-1DC2-332	Linear Analog	-10	10	Continuous	1.5	-40 to +85	2.7 to 3.6	Analog Voltage	LGA-4	X-Axis

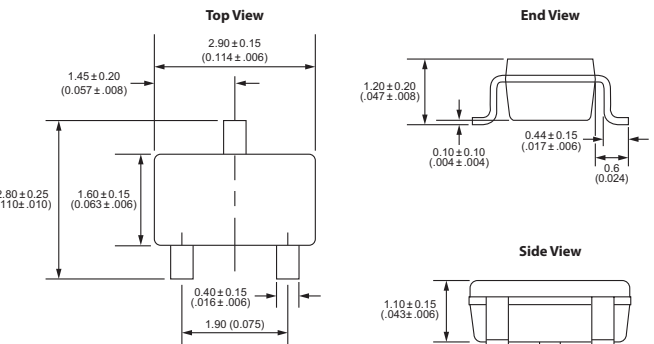


### DIMENSIONS

#### LGA-4 & Leaded LGA-4 Package



#### SOT-23-3 Package

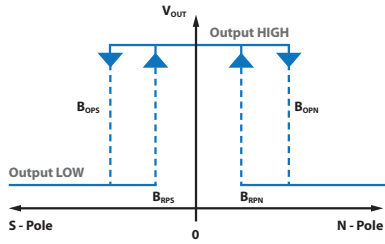


### TARGET APPLICATIONS

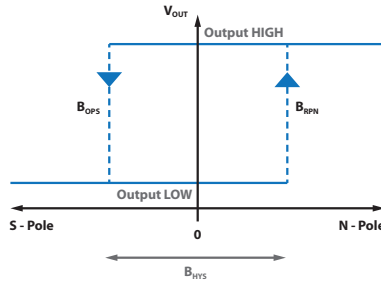
Bare Glass Reed Switch Replacement	Power Switch or Open-Close Detection
Consumer Electronics	Proximity Detection
Door & Lid Closure Detection	Linear Position Sensing
Fluid Level Detection	Rotary Position Sensing
Motor Controllers	Smart Phones, Tablets and Laptops
Open-Close Detection	Utility Meters
Portable Medical Devices	Wake-Up μProcessor

## OUTPUT RESPONSE VS. MAGNETIC FLUX

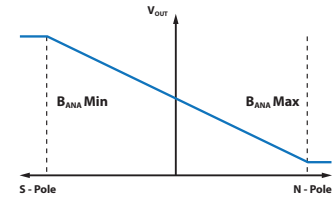
**Omnipolar Magnetic Flux Response (Active Low Option)**



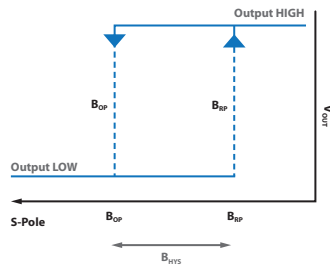
**Bipolar Magnetic Flux Response (Active Low Option)**



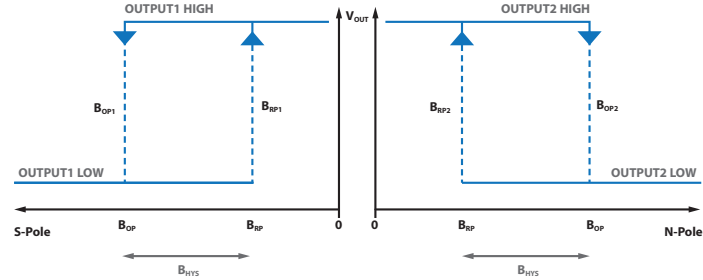
**Analog Magnetic Flux Response**



**Unipolar Magnetic Flux Response (Active Low Option)**

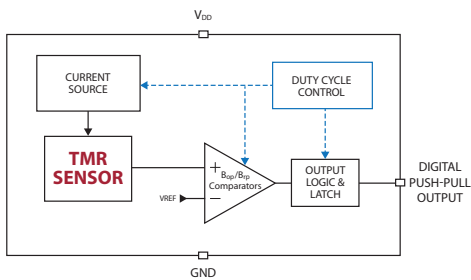


**Unipolar Magnetic Flux Response (Dual Active Low Option)**

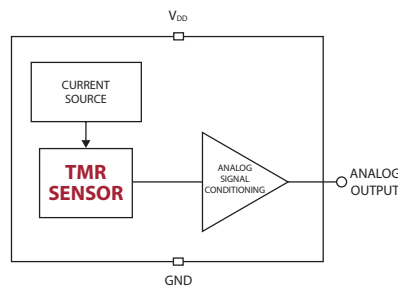


## BLOCK DIAGRAMS

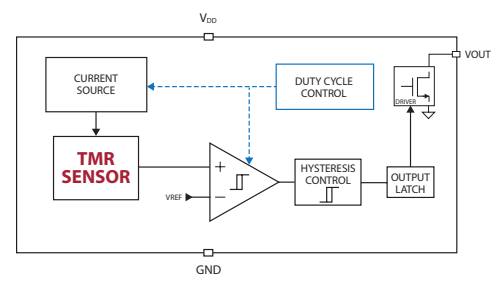
**Functional Block Diagram for Digital Push-Pull Output**



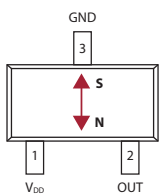
**Functional Block Diagram for Analog Output**



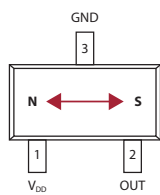
**Functional Block Diagram for Digital Open Drain Output**



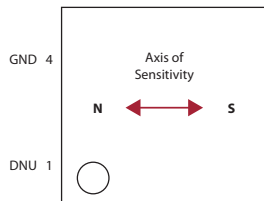
## AXIS OF SENSITIVITY & PIN OUT



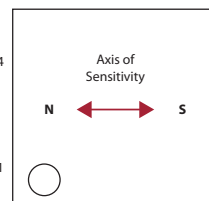
SOT-23 Package (Y-Axis)



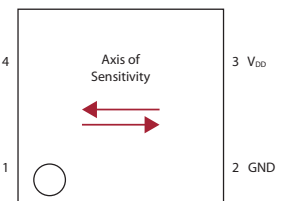
SOT-23 Package (X-Axis)



Digital LGA Package (X-Axis)



Analog LGA Package (X-Axis)



Leaded LGA-4 Package (Dual Active Low) (X-Axis)