



Selection Guide of Hall Effect Sensor ICs

SMD Hall Effect Sensor ICs

Description	Part number	Features	Typical Applications
<u>SMD Hall Effect ICs</u>	CYD543 CYD513 CYD3601 CYD3661	<ul style="list-style-type: none"> • Wide supply voltage range • Fast response time • Wide frequency and temperature range • Long operating life • Small size, convenient installing • Output compatible with all digital logic families 	<ul style="list-style-type: none"> • Contactless switch • Speed measurement • Isolation measurement • Automotive igniters • Position control • Revolution detection • Brushless dc motor

Linear Hall Effect Sensor ICs

Description	Part number	Features	Typical Applications
<u>Linear Hall Effect Sensor IC</u>	<u>CYL3503</u>	<ul style="list-style-type: none"> • High linearity • High sensitivity • Low output resistance • Long operating life 	<ul style="list-style-type: none"> • Magnetometer • Speed detection • Remote instrument • Ferrous metal detection • Notch sensing • Brushless DC motors • Contactless range measurements • motion detection • Gear-tooth sensors • Proximity detectors • Current sensors • Speed control systems
	<u>CYL49E</u>	<ul style="list-style-type: none"> • Low current consumption • High sensitivity • Wide linear range 	<ul style="list-style-type: none"> • Sport equipment • Hall Effect current sensors • Speed control systems in electronic bicycles and scooters

Hall Effect Elements

Description	Part number	Features	Typical Applications
<u>CYSJ series GaAs Hall Effect elements</u>	<u>CYSJ411</u> <u>CYSJ422</u> <u>CYSJ119</u> <u>CYSJ1069</u>	<ul style="list-style-type: none"> • High linearity • Low offset voltage • Excellent thermal stability • wide operating temperature range • plastic spatial resolution • high spatial resolution • High magnetic sensitivity 	<ul style="list-style-type: none"> • Detection of speed • Position control • Contactless switch • Brushless D.C motor • Magnetic fields measurement • Current sensor • Detection of Revolution
<u>CYTY series InSb Hall Effect elements</u>	<u>CYTY211</u> <u>CYTY101A</u> <u>CYTY300B</u> <u>CYTY320</u>	<ul style="list-style-type: none"> • High magnetic sensitivity • high linearity • High spatial resolution, • Low offset voltage 	<ul style="list-style-type: none"> • Brushless DC motor • Current sensor • Magnetic fields measurement • Position control • Speed detection

Bipolar Hall Effect Sensor ICs

Description	Part number	Features	Typical Applications
<u>CYD2000 Series Complementary Dual-Output Hall Effect IC</u>	<u>CYD277</u> <u>CYD2018DA₁</u> <u>CYD2018DA₂</u> <u>CYD2018DB</u> <u>CYD2018DC</u>	<ul style="list-style-type: none"> • Temperature compensation • wide temperature range • Open collector complementary output • Low cost, 4 pin SIP package • High reliability and easy welded for electroplating with tin alloy 	<ul style="list-style-type: none"> • High sensitive Contactless switch • Brushless DC motor • Brushless DC fan motor in big power

Unipolar Hall Effect Sensor ICs

Description	Part number	Features	Typical Applications
<u>CYD3000 Series Hall Effect digital IC</u>	<u>CYD3020I</u> <u>CYD3020II</u>	<ul style="list-style-type: none"> • Fast response time • Wide frequency range (DC - 100KHZ) • Long operating life • Small volume, install conveniently • Be compatible with digital logic families • can operate with block and disc/cylinder magnets 	<ul style="list-style-type: none"> • Contactless switch • Position control • Revolution detection • Isolation measurement • Brushless DC motor • Current sensor • Automotive igniters • Warning device
<u>CYD3100 Series Hall Effect digital IC</u>	<u>CYD3120</u> <u>CYD3141E, CYD3141L</u> <u>CYD3142E, CYD3142L</u> <u>CYD3143E, CYD3143L</u> <u>CYD3144E, CYD3144L</u>	<ul style="list-style-type: none"> • Low current consumption • Wide supply voltage range • Fast response time • Wide frequency range (DC - 100KHZ) • Long operating life • Small volume, install conveniently • Be compatible with digital logic families 	<ul style="list-style-type: none"> • Position control and detect • Speed control and detect • Igniters • Warning device • Braking IC • Weaving control system

Hall Effect Latching ICs

Description	Part number	Features	Typical Applications
<u>Hall Effect Latching IC</u>	<u>CYD3172X</u> <u>CYD512</u>	<ul style="list-style-type: none"> • High sensitivity • Resistant to physical stress • Wide supply voltage range • Interfacing with All Kinds of Logic Circuits Directly 	<ul style="list-style-type: none"> • High sensitive Contactless switch • Brushless DC motor • Brushless DC fan motor