

Magnetic, Linear and Position Sensors

ALPS HIGH RELIABILITY MAGNETIC SENSOR SWITCHING OUTPUT TYPE

Applications:

- To detect opening and closing of lids and doors on all kinds of consumer equipment such as mobile phones, notebook PCs and digital camcorders
- Contributes to increased flexibility in set design through a diverse lineup
- High reliability achieved through high precision and compactness
- Low-profile types made possible through magnetic sensing device technologies

Features:

- High flexibility in sensitivity design (from high to low sensitivity)
- Compact and low-profile (1.1x0.9x0.55mm for the MAP Type)
- Low current consumption (3.0µA at VDD=1.8V)
- Diverse lineup (functions, operating magnetic field and package specifications)



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Alps Part No.	Package Specs	Package Size	Function	Operating Magnetic Field	Drive Voltage	Current Consumption	Price Each			
								1	25	50	100
688-HGDESN021A	HGDESN021A	SON	2.1x2.1x0.75mm	Single Polarity/Single Output	2.0mT	Typ. 1.8V	3.0µA Ave.	2.77	2.55	2.31	1.85
688-HGDEST021A	HGDEST021A	SOT23	2.9x2.8x1.1mm	Single Polarity/Single Output	2.0mT	Typ. 1.8V	3.0µA Ave.	1.50	1.38	1.25	1.00
688-HGDEPN021A	HGDEPN021A	SON	2.1x2.1x0.75mm	Dual Polarity/Single Output	2.0mT	Typ. 1.8V	3.0µA Ave.	1.73	1.47	1.28	1.20
688-HGDEPT031A	HGDEPT031A	SOT23	2.9x2.8x1.1mm	Dual Polarity/Single Output	3.0mT	Typ. 1.8V	3.0µA Ave.	1.59	1.46	1.33	1.06
688-HGDEDN021A	HGDEDN021A	SON	2.1x2.1x0.75mm	Dual Polarity/Dual Output	2.0mT	Typ. 1.8V	3.0µA Ave.	2.11	1.80	1.57	1.47
688-HGDEDN031A	HGDEDN031A	SON	2.1x2.1x0.75mm	Dual Polarity/Dual Output	3.0mT	Typ. 1.8V	3.0µA Ave.	.50	.459	.418	.334

ALPS RDC10 SERIES LINEAR SENSORS

Specifications:

- Light operating force (250gF)
- Total resistance: 10KW ±30%
- Rated voltage: 5VDC
- Operating life: 100,000 cycles
- Linearity: ±0.5%

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MOUSER STOCK NO.	Alps Part No.	Fig.	Travel	Length of Lever	Price Each			
					1	25	50	100
688-RDC1014A09	RDC1014A09	A	14mm	4.5mm	2.96	2.47	2.22	1.97
688-RDC1022A05	RDC1022A05	A	22mm	4.5mm	2.96	2.47	2.22	1.97
688-RDC10320RB	RDC10320RB	A	32mm	4.5mm	3.66	3.05	2.75	2.44

ALPS RDC50 SERIES ROTARY POSITION SENSORS

Specifications:

- Operating life: 1,000,000 cycles
- Rated voltage: 5VDC
- Effective variable range: 320°
- Total resistance: 10KW ±30%
- Linearity: ±2%

Model with optional gear: Gear provided with product and is delivered unmounted.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Alps Part No.	Fig.	Hollow Shaft Variation	Optional Gear	Price Each					
					1	25	50	100	500	1000
688-RDC503013A	RDC503013A	B	ø3.5 mm	No	2.18	1.82	1.63	1.45	1.31	1.16
688-RDC503015A	RDC503015A	C	ø3.5 mm w/ radius	Yes	2.18	1.82	1.63	1.45	1.31	1.16
688-RDC506002A	RDC506002A	D	ø4 mm	No	2.60	2.16	1.95	1.73	1.56	1.38

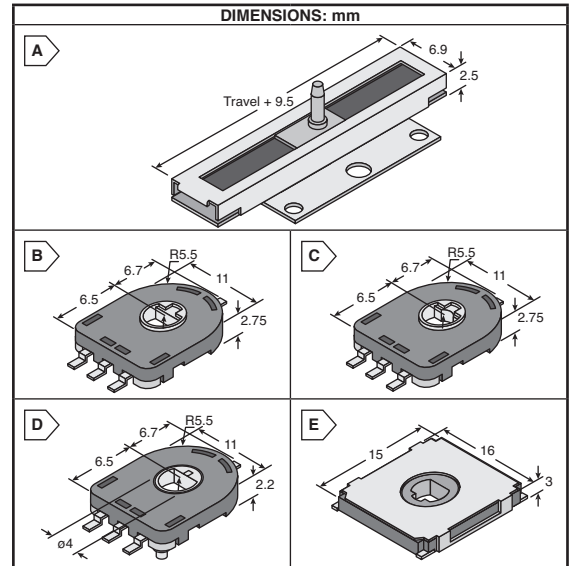
ALPS RDC80 SERIES 15MM ROTARY POSITION SENSORS

Specifications:

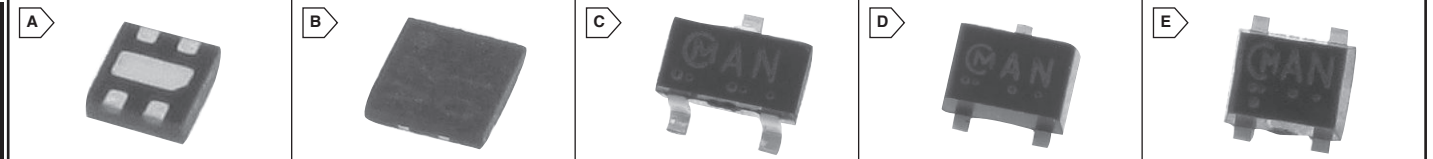
- Operating life: 100,000 cycles
- Rated voltage: 5VDC
- Total resistance: 10KW ±30%
- Linearity: ±3% (absolute)

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Alps Part No.	Fig.	Effective Variable Range		Price Each					
			Phase 1	Phase 2	1	25	50	100	500	1000
688-RDC803001A	RDC803001A	E	330°	360°	1.82	1.52	1.37	1.21	1.09	.97



Motion/Position Sensors



MURATA BOARD MOUNT HALL EFFECT/MAGNETIC SENSORS

Murata expands range of AMR sensors to include horizontal and vertical sensing Murata's AS-M and AS-V series of absolute magneto resistance (AMR) sensors are designed to provide a non-contact magnetic sensor of high sensitivity for use in a relatively low magnetic field.

These devices, the smallest measuring 1.2 x 1.2 x 0.37mm, can detect a magnetic field in either a horizontal or vertical direction. Compared to traditional magnetic switch components, such as a reed switch or Hall effect IC, AMR sensors are designed to offer high detection sensitivity and a wide detection area. Within the series, the AS-M15SAH-R and AS-M15KAH-R sensors feature a narrow range of sensitivity, from 0.5 to 1.6mT that suit high accuracy applications.

The AS-M15SA-R and AS-M15KA-R parts have a sensitivity range, from 0.5 to 2.2mT. The AS-V series provides vertical magnetic field detection, and is designed as a more cost effective replacement for Hall IC designs. Both the AS-M series and AS-V series have the same land compatibility as SOT23 and SON4, and are suitable for reflow soldering.

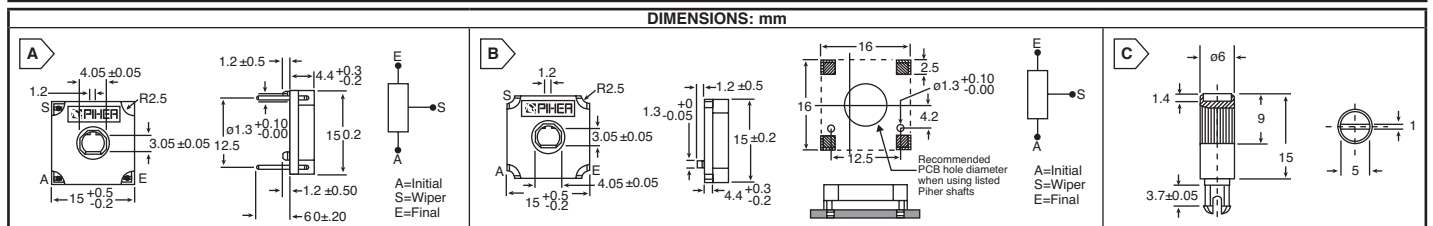
NEW!
TECHNOLOGY



RoHS Compliant

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Murata Part No.	Fig.	Supply Voltage	Current Consumption	Operating Magnetic Field		Storage Temp. Range	Price Each			
					1	2		1	2	50	100
81-AS-M15KA-R	AS-M15KA-R	A	1.6 to 6.0 V	1.6 to 3.0µA	2.2mT max.	0.5mT min.	-50 to +125°C	.50	.468	.382	.347
81-AS-M15SA-R	AS-M15SA-R	A	1.6 to 6.0 V	1.6 to 3.0µA	2.2mT max.	0.5mT min.	-50 to +125°C	.50	.468	.382	.347
81-AS-M15SAH-R	AS-M15SAH-R	B	1.6 to 6.0 V	1.6 to 3.0µA	1.6mT max.	0.7mT min.	-40 to +85°C	.58	.514	.448	.407
81-AS-M15KAH-R	AS-M15KAH-R	B	1.6 to 6.0 V	1.6 to 3.0µA	1.6mT max.	0.5mT min.	-50 to +125°C	.68	.52	.52	.473
81-AS-M15TAN-R	AS-M15TAN-R	C	1.6 to 6.0 V	1.6 to 3.0µA	2.5mT max.	0.5mT min.	-40 to +125°C	.62	.548	.476	.432
81-AS-V20TA-R	AS-V20TA-R	D	2.5 to 5.5V	5.0 to 12.0µA	4.0mT max.	0.8mT min.	-50 to +125°C	.69	.61	.531	.483
81-AS-V20NA-R	AS-V20NA-R	E	1.6 to 6.0 V	1.6 to 3.0µA	4.0mT max.	0.8mT min.	-40 to +125°C	.66	.583	.507	.461



PIHER 15MM CARBON POSITION SENSORS

Here is Piher's "revolutionary" answer to the majority of Multi-Purpose Control and Rotary Sensor design problems which were un-resolvable until now. The N15 series offers you full endless rotation, 340° ± 10° wide electrical angle, SMD or through-hole mount, extended working temperature range of -40°C to +120°C plus a whole series of customization possibilities making it the most flexible product on the market. The N15 is ideal for Appliance and Automotive Control and Sensor applications.

Specifications:

- Resistance Values: 5K, 10K, 100K
- Taper: Linear
- Mechanical Life: 100,000 cycles
- Temperature Range: -40°C to +120°C
- Linearity (absolute): ±3%
- Electrical Angle: 340° ± 10°
- Rotational Torque: ≤ 20 mNm
- Max. Voltage: 250VDC



RoHS Compliant

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Piher Part No.	Fig.	Price Each			
			1	25	50	100
Through Hole						
531-N15TV-10K	NT15TV-103A3030	A	4.86	4.52	4.02	3.69
531-N15TV-100K	NT15TV-104A3030	A	4.86	4.52	4.02	3.69
Surface Mount						
531-N15TS-10K	NT15TS-103A3030	B	3.34	3.11	2.77	2.53
Shaft						
9CR	5219CR	C	.38	.34	.30	.28