

DO NOT SCALE PRINT
A3 FORMAT
CSNX25-001
CMR-25
CATALOGUE LISTING
F.W. BELL PART NUMBER
1
ISSUE
12/03
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AUTHOR 'N

Honeywell

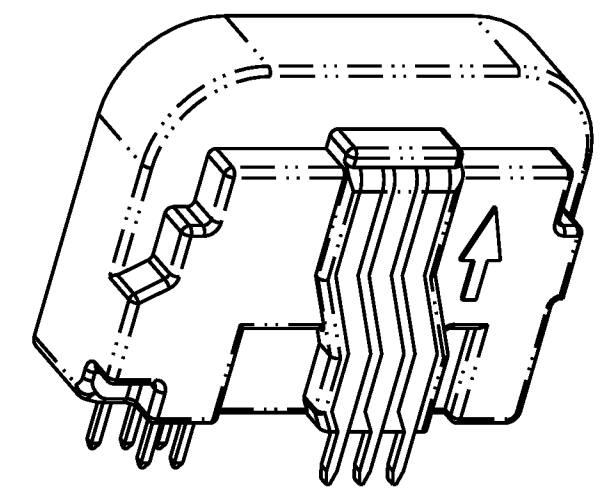
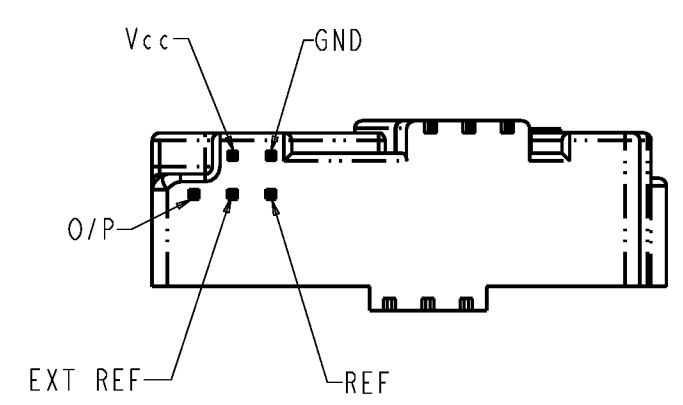
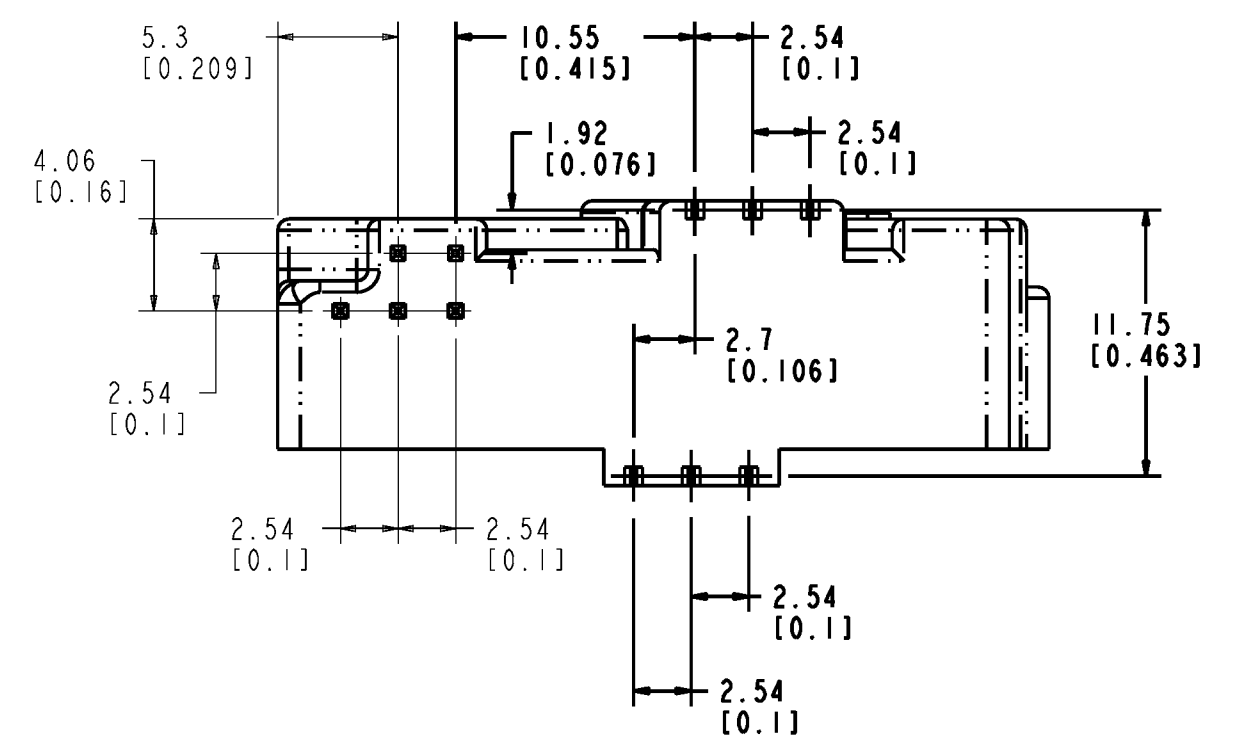
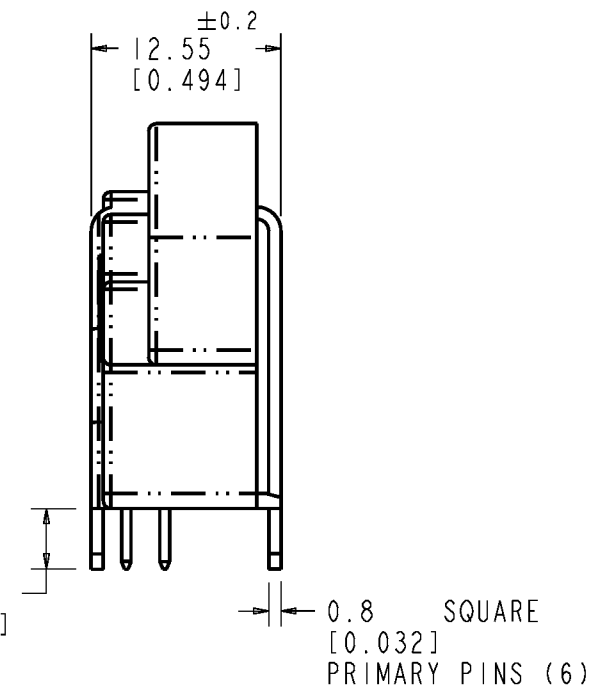
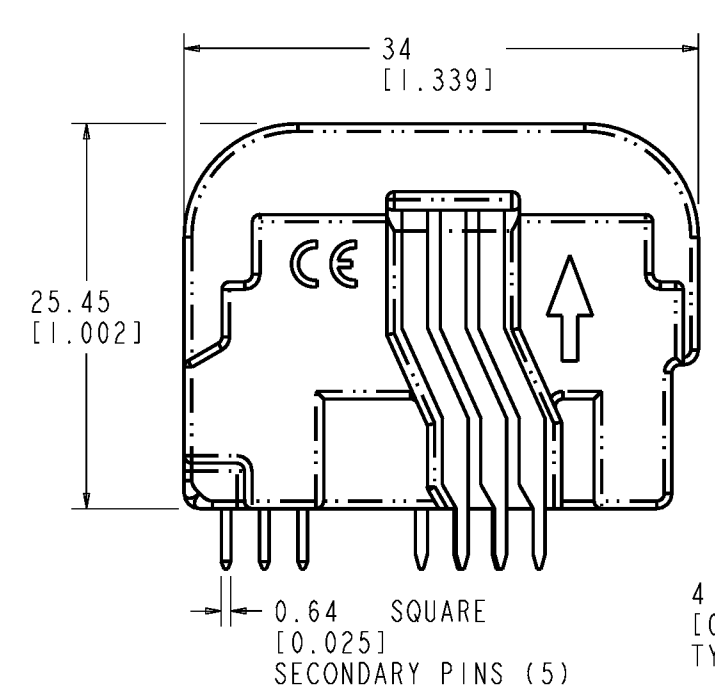
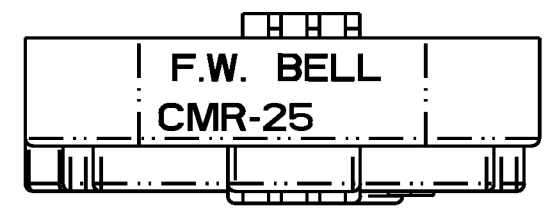
NULL BALANCE CURRENT SENSOR

CATALOGUE LISTING **CSNX25-001**
F.W. BELL PART NUMBER **CMR-25**

SUPPLY VOLTAGE	NOM.	SENSING RANGE MAX (RMS)	MAX (AC PEAK)	OUTPUT NOMINAL	MAXIMUM COIL RESISTANCE AT 70°C	No. OF TURNS
+5V ±5%	25A	40A	56A	12.5mA	50Ω	2000

APPROVALS

CE **RU**® **US**



NOTES:-

- FOR INTERNAL 2.5V REFERENCE MODE 'EXT REF' PIN MUST BE CONNECTED TO GND.
- FOR EXTERNAL 2.5V REFERENCE VOLTAGE MODE - APPLY VOLTAGE IN THE RANGE +1.0V TO +3.0V TO THE 'EXT REF' PIN.
- HOUSING MATERIAL:- GLASS FILLED POLYAMIDE. FULLY ENCAPSULATED CONSTRUCTION.

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THIRD ANGLE PROJECTION

MODIFY ON PROE SYSTEM ONLY

DIMENSIONS ARE IN MILLIMETRES (INCHES)

SCALE :- 2/1

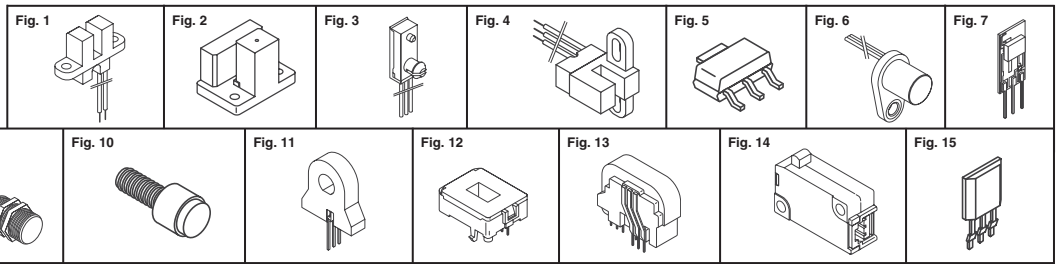
TOLERANCES UNLESS OTHERWISE STATED

±0.2

Honeywell

Sensing and Control

Sensors



Hall Effect Sensors

Fig.	Supply Voltage	Output Current	Output Type	Terminal Type	Polarity	Digi-Key Part No.	1	50	100	T & R Pricing * 1,000	Honeywell Part No.
1	3.8 VDC ~ 30 VDC	10 mA	Sink	Lead Wires	—	480-1922-ND	5.75	4.89	4.32	—	SR16C-J6
2	4.5 VDC ~ 24 VDC	40 mA	Sink	Lead Wires	—	480-1990-ND	22.85	19.02	16.79	—	4AV16F
3	3.8 VDC ~ 30 VDC	20 mA	Sink	Lead Wires	Unipolar	480-1991-ND	4.30	3.66	3.23	—	SR19C-A1
4	3.8 VDC ~ 30 VDC	40 mA	Sink	Lead Wires	—	480-1993-ND	5.80	4.93	4.35	—	SR17C-J6
5	4.5 VDC ~ 24 VDC	20 mA	Sink	SOT89	Bipolar	480-2010-1-ND	2.60	2.24	1.86	1116.00	SS51T
6	4.5 VDC ~ 24 VDC	40 mA	Sink	Lead Wires	—	480-2021-ND	23.53	20.01	17.66	—	1GT101DC
7	8 VDC ~ 16 VDC	10 mA	Source	PC Board	Ratiometric Linear	480-2007-ND	10.80	9.18	8.10	—	91SS12-2
	6.6 VDC ~ 12.6 VDC	1 mA	Sink/Source	PC Board	Ratiometric	480-2008-ND	13.70	11.65	10.28	—	SS94A1
	6.6 VDC ~ 12.6 VDC	1 mA	Sink/Source	PC Board	Ratiometric	480-2009-ND	16.00	13.60	12.00	—	SS94A1F
5	3.8 VDC ~ 30 VDC	20 mA	Sink	SOT89	Bipolar	480-2011-1-ND	3.17	2.73	2.27	1361.00	SS511AT
	3.8 VDC ~ 30 VDC	20 mA	Sink	SOT89	Unipolar	480-2012-1-ND	3.17	2.73	2.27	1361.00	SS541AT
	3.8 VDC ~ 30 VDC	20 mA	Sink	SOT89	Bipolar Latch	480-2013-1-ND	3.17	2.73	2.27	1361.00	SS561AT
8	4.5 VDC ~ 24 VDC	20 mA	Sink	PC Board	Bipolar	480-1998-ND	1.30	1.05	.84	—	SS40A
	4.5 VDC ~ 24 VDC	20 mA	Sink	PC Board	Bipolar	480-1999-ND	1.69	1.35	1.09	—	SS41
	3.8 VDC ~ 30 VDC	20 mA	Sink	PC Board	Bipolar	480-2000-ND	2.15	1.72	1.39	—	SS411A
	3.8 VDC ~ 30 VDC	20 mA	Sink	PC Board	Unipolar	480-2001-ND	2.15	1.72	1.39	—	SS441A
	3.8 VDC ~ 30 VDC	20 mA	Sink	PC Board	Unipolar	480-2002-ND	1.80	1.45	1.17	—	SS443A
	3.8 VDC ~ 30 VDC	20 mA	Sink	PC Board	Bipolar Latch	480-2003-ND	2.15	1.72	1.39	—	SS461A
	3.8 VDC ~ 30 VDC	20 mA	Sink	PC Board	Bipolar Latch	480-2004-ND	1.86	1.49	1.20	—	SS466A
	4.5 VDC ~ 10.5 VDC	1.5 mA	Sink/Source	PC Board	Ratiometric	480-2005-ND	3.02	2.42	1.95	—	SS495A
9	3 VDC ~ 6.5 VDC	1.5 mA	Source	Lead Wires	Analog	480-2006-ND	1.80	1.45	1.17	—	SS49E
	4.5 VDC ~ 24 VDC	20 mA	Sink	Lead Wires	Unipolar	480-2014-ND	21.34	18.15	16.01	—	103SR13A-1

* For Tape and Reel part number, change -1-ND to -2-ND

Magnet

Fig.	Outside Diameter mm (Inch)	Thread Dim.	Length mm (Inch)	Digi-Key Part No.	1	50	100	Honeywell Part No.
10	7.9 (0.31)	8-32	17.0 (0.67)	480-2015-ND	7.25	6.16	5.44	102MG11

Current Sensor

Fig.	Supply Voltage	Output Current	Output Type	Terminal Type	Polarity	Sensor Type	Current Type	Response Time	Digi-Key Part No.	1	50	100	Honeywell Part No.
11	5.4 VDC ~ 13.2 VDC	—	Voltage	PCB	—	Open Loop Linear	AC or DC	3µs	480-1994-ND	14.05	11.95	10.54	CSLA2CD
12	4.5 VDC ~ 10.5 VDC	1.5 mA	Voltage	PCB	Positive	Open Loop	DC	50µs	480-1995-ND	6.35	5.40	4.77	CSLH3A45
13	4.75 VDC ~ 5.25 VDC	12.5 mA	Current	PCB	—	Closed Loop Linear	AC or DC	≤0.2µs	480-1996-ND	21.10	17.94	15.83	CSNX25

Switch

Fig.	Supply Voltage	Output Current	Output Type	Transistor State	Digi-Key Part No.	1	50	100	Honeywell Part No.
14	4.5 VDC ~ 24.0 VDC	10 mA	Sink	Normally Off	480-2018-ND	7.30	6.21	5.45	VX10
					480-2019-ND	7.30	6.21	5.48	VX80
					480-2020-ND	10.50	8.93	7.88	VX80-C1

MR

Fig.	Supply Voltage	Output Current	Output Type	Polarity	Operate Point	Release Point @25°C	Digi-Key Part No.	1	50	100	Honeywell Part No.
15	3.8 VDC ~ 30.0 VDC	20 mA	Sink	Omnipolar	1.5 mT	1.1 mT	480-1997-ND	2.68	2.14	1.73	2SS2M

Temperature

Fig.	Supply Voltage	Supply Current	Temp. Sensing Range	Length (Inch)	Termination	Packaging Type	Digi-Key Part No.	1	50	100	Honeywell Part No.
9	10.0 VDC	1 mA	—	1.5	Lead Wires	3/8-24 UNF-2A	480-2016-ND	27.54	23.41	20.66	TD4A
8	10.0 VDC	1 mA	-40°C ~ 150°C	—	SIP	Plastic Case	480-2017-ND	3.50	2.98	2.63	TD5A

Panasonic® Hall Effect Sensor ICs

Panasonic's Hall IC is a combination of a Hall element, amplifier, Schmitt circuit, and stabilized power supply/temperature compensator integrated on an identical chip by using the IC technology. It amplifies Hall element output at the amplifier, converts into a digital signal through the Schmitt circuit, and drives the TTL or MOS IC directly.

Features: • Stable temperature characteristics due to the additional temperature compensator • TTL and MOS ICs directly driveable by output • Semipermanent service life due to no contact parts • Small change of the operating flux density against mechanical stress • Provided with the output pull-up resistors (typ 27kΩ or open collector output

(see chart) • Operating Temperature: -40°C ~ 100°C (-40°C ~ 85°C for DN6851 - DN6853) • Supply Current Maximum: 6mA • Output Circuit Maximum: 20mA

Applications: • Speed Sensors • Position Sensors • Rotation Sensors • Keyboard Switches • Microswitches

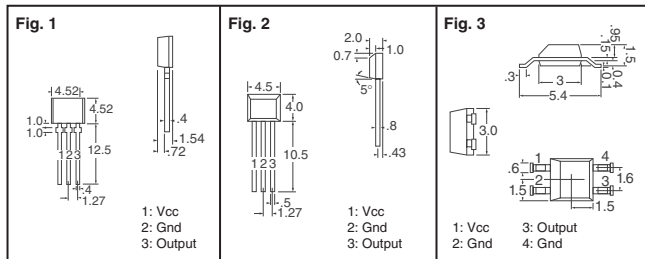


Fig.	Supply Voltage Range (V)	Oper. Flux Density (Gauss) (L-H)	Output Type	Oper. Type	Pkg.	Digi-Key Part No.	1	10	100
1	4.5 ~ 16	-175 ~ 175	Pull-up	Bidirectional	3-Sip	DN6847SE-ND	1.68	1.35	1.01
2	4.5 ~ 16	5 ~ 220	OC	Unidirectional	3-Sip	DN6848-ND	1.04	.87	.70
3	4.5 ~ 16	5 ~ 220	OC	Unidirectional	SOH-4D	DN6848S-E1VCT-ND	.90	.75	.60
3	4.5 ~ 16	5 ~ 220	OC	Unidirectional	SOH-4D	DN6848S-E1VTR-ND	362.00/1000		
2	4.5 ~ 16	-175 ~ 175	OC	Bidirectional	3-Sip	DN6849-ND	1.69	1.36	1.02
3	4.5 ~ 16	-175 ~ 175	OC	Bidirectional	SOH-4D	DN6849S-ND	1.69	1.36	1.02
1	4.5 ~ 16	-175 ~ 175	OC	Bidirectional	3-Sip	DN6849SE-ND	1.69	1.36	1.02
2	3.6 ~ 16	-200 ~ 200	Pull-up	Bidirectional	3-Sip	DN6851-A-ND	.90	.76	.61
2	3.6 ~ 16	100 ~ 450	OC	Unidirectional	3-Sip	DN6852-A-ND	1.04	.87	.70
2	4.5 ~ 16	-120 ~ 120	Pull-up	Bidirectional	3-Sip	DN8897-ND	1.69	1.36	1.02
4	4.5 ~ 16	-120 ~ 120	OC	Bidirectional	3-Sip	DN8899-ND	1.69	1.36	1.02

* Output Type: Pull-up Resistors = 27K Internal; OC = Open Collector. ** To convert Gauss to millitesla, divide by 10

† Unidirectional and is only sensitive to either north or southside of magnetic; Bidirectional is sensitive to an alternating magnetic fields of both north and south sides.

More Product Available Online: www.digikey.com

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