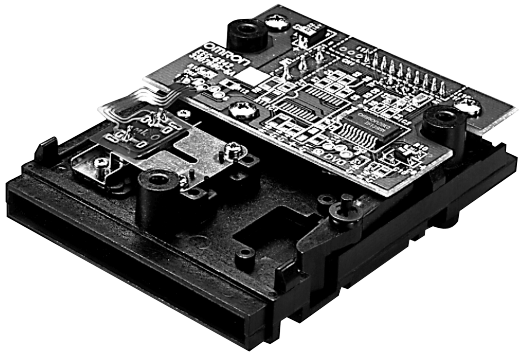
OMRON®

Manual Insert Magnetic Card Reader | 3S4YR-SBRN

Compact, Highly Reliable Insert Reader Reads 62% of Magnetic Track

- Effective strip length of 46.6 mm max.
- Microswitches incorporated for card detection
- Wide operating temperature range
- Low power CMOS technology
- Current save mode
- Housing compatible with SCR type for easy conversion to IC cards
- TTL-compatible interface (clock & data)



Ordering Information

Magnetic Tracks Supported (R, R/W)										
1	2	3	Center	JIS II	IC Contact	Interface	Cable	Cover	Color	**Part Number**
R	—	—	—	—	No	TTL	No	No	Black	**3S4YR-SBR3N-50**
—	R	—	—	—	No	TTL	No	No	Black	**3S4YR-SBR4N-50**
—	—	R	—	—	No	TTL	No	No	Black	**3S4YR-SBR5N-50**

Note: Consult the *IC Card Basics* section of this catalog for IC contact descriptions.

■ TYPICAL APPLICATIONS

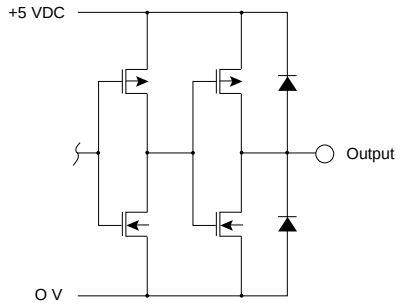
- Access Control
- Time and Attendance
- Remote Terminals for Computers
- Telephones
- Electronic Locks
- Vending
- ID Card Checkers
- Gaming Machines

Specifications

Part number		3S4YR-SBRN
Recommended card type	Magnetic head	ISO 7810, 7811/1-5, 7812, 7813. Please inquire if using high-coercivity cards.
Card feeding speed		10 to 100 cm/sec (4 to 39 in/sec)
Service life	Magnetic head	300,000 passes (one round trip)
	PCB	50,000 hours
Operating power supply		5 VDC ± 10%
Current consumption	Operation	5 mA max., 3 mA mean
	Standby	1.5 mA max., 1 mA mean
Mounting location		Indoors away from wind, rain and sunlight.
Ambient temperature	Operation	-10° to 55°C (14° to 131°F)
	Storage	-30° to 70°C (-22° to 158°F)
Ambient humidity	Operation	10% to 95% RH without condensation
	Storage	10% to 95% RH without condensation
Vibration		10 to 55 Hz, 2 mm double amplitude, for 30 minutes in X, Y, and Z directions.
Shock	Storage	300 m/sec^2 (30 G) three times in each of X, Y, and Z directions for a total of 18 times.
Dimensions		78L x 60W x 21.5H mm (3.07L x 2.36W x 0.85H in)
Weight		50 g (1.8 oz)

Engineering Data

■ OUTPUT CIRCUIT DIAGRAM



Output signal levels:

V_{OL} = 0.4 V at 4 mA

V_{OH} = 3.5 V at 1 mA

■ I/O INFORMATION

3S4YR-SBR4N-50

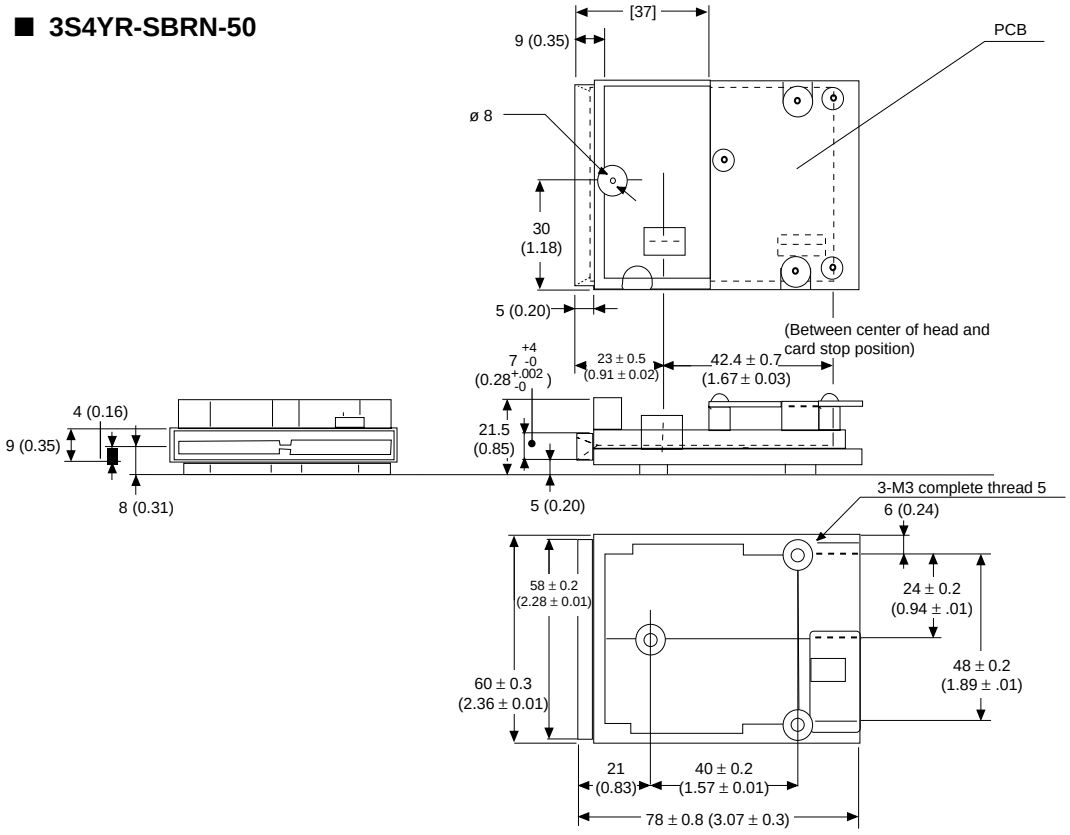
10-pin JAE single-pin header part number IL-10P-S3FP2-1.
Connector JAE part number IL-10S-S3L-N.

Pin #	Signal	Input/Output	Description
1	NC	—	Not connected
2	$\overline{RDP}$	Output	Read data
3	$\overline{RCP}$	Output	Read clock
4	$\overline{CLS}$	Output	Card load
5	SW1-COM	Output	Card detection for rear
6	SW1-NO	Input	Card detection for rear
7	SW2-COM	Output	Card detection for front
8	SW2-NO	Input	Card detection for front
9	5 VDC	—	V_{cc}
10	0 V	—	Ground

Dimensions

Unit: mm (inch)

■ 3S4YR-SBRN-50



NOTE: DIMENSIONS SHOWN ARE IN MILLIMETERS. To convert millimeters to inches divide by 25.4.

OMRON®
OMRON ELECTRONICS, INC.
One East Commerce Drive
Schaumburg, IL 60173
1-800-55-OMRON

OMRON CANADA, INC.
885 Milner Avenue
Scarborough, Ontario M1B 5V8
416-286-6465

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