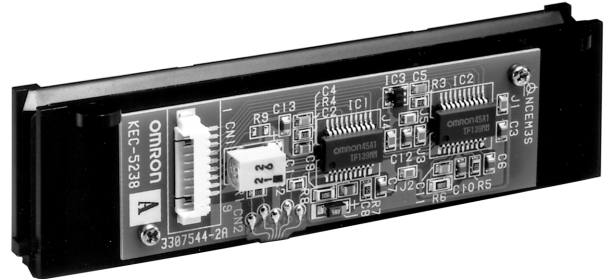


Low Power, Ultra-Compact, Manually Operated Card Reader

- Ideal for embedded keyboards
- Lightweight and ultra-compact
- Low power through use of CMOS technology
- Current save mode
- Stable operation with card swipe speeds from 10 to 120 cm/second
- TTL-compatible interface (clock & data)



## Ordering Information

Magnetic Tracks Supported (R, R/W)					IC Contact	Interface	Cover	Cable	Color	Part Number
1	2	3	Center	JIS II						
R	R	—	—	—	No	TTL	No	No	Black	<b>3S4YR-HZR6-01</b>
—	R	R	—	—	No	TTL	No	No	Black	<b>3S4YR-HZR7-01</b>

### ■ ACCESSORIES

Description	Part Number
HZR1 cable harness	<b>CABLE KTI-628</b>
HZR6/7 cable harness	<b>CABLE KTI-240</b>

### ■ TYPICAL APPLICATIONS

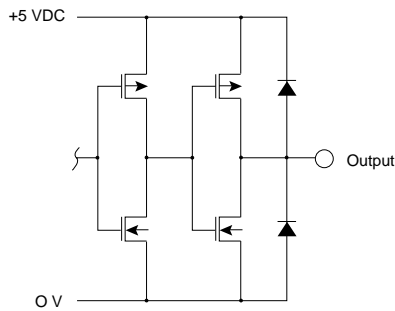
- Custom Keyboards
- Hand-held Terminals
- Point-of-Sale Systems (POS)

# Specifications

Part number	3S4YR-HZR	
Recommended card type	ISO 7810, 7811/1-5, 7812, 7813	
Recording method	FM decoding (F2F)	
Card feeding speed	10 to 120 cm/sec (4 to 47 in/sec)	
Service life	300,000 passes min.	
Operating power supply	5 VDC ± 10%	
Current consumption	Operation	6.0 mA typ., 10 mA max.
	Current save mode	2.0 mA typ., 3 mA max.
Mounting location	Anywhere not directly subject to water or 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
Vibration	10 to 55 Hz, 2 mm double amplitude, for 30 minutes in X, Y, and Z directions.	
Shock	300 m/sec <sup>2</sup> (30 G) in each of X, Y, and Z directions	
Dimensions	25.2L x 98.2W x 23.3H mm (0.99L x 3.87W x 0.92H in)	
Weight	Approx. 26 g (0.92 oz)	

# Engineering Data

## ■ OUTPUT CIRCUIT DIAGRAM



### Output signal levels:

$$V_{OL} = 0.4 \text{ V at } 4 \text{ mA}$$

$$V_{OH} = 3.5 \text{ V at } 1 \text{ mA}$$

## I/O INFORMATION

### Double Track Connector

9-pin Molex connector part number 53261-0990.

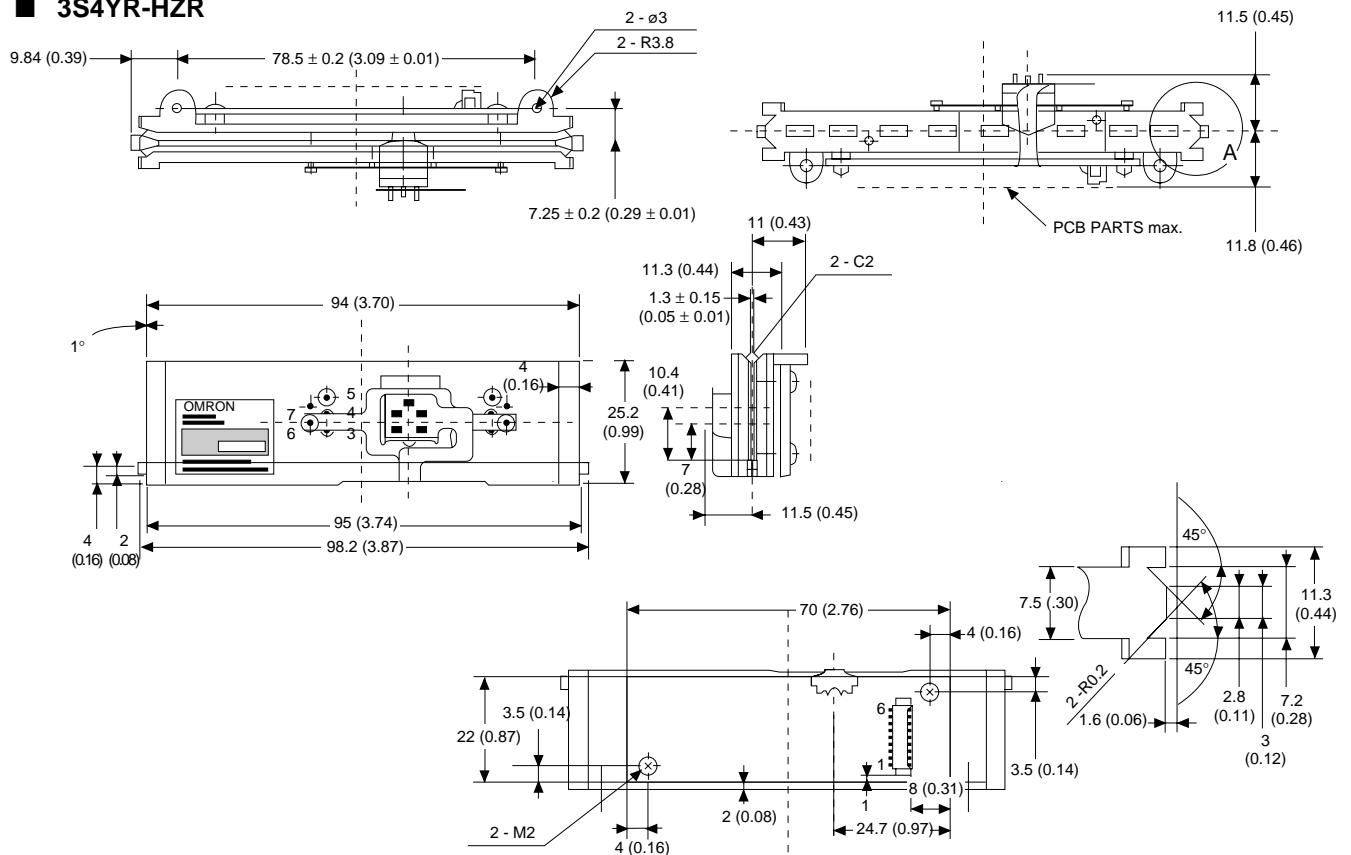
Applicable Molex socket housing part number 51021-0900.

HZR6-01, HZR7-01			
Pin #	Signal	Input/Output	Description
1	$\overline{\text{RCP1}}$ (track 1 or 3)	Output	Read clock, track 1
2	$\overline{\text{RDP1}}$ (track 1 or 3)	Output	Read data, track 1
3	$\overline{\text{CLS}}$	Output	Card load
4	$\overline{\text{RCP2}}$ (track 2)	Output	Read clock, track 2
5	$\overline{\text{RDP2}}$ (track 2)	Output	Read data, track 2
6	$\overline{\text{CSV}}$	Input	Current save
7	+5VDC	—	5 VDC
8	0V	—	—
9	+5VDC	—	5 VDC

## Dimensions

Unit: mm (inch)

### 3S4YR-HZR



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

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