



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Economical, Manually Operated Card Reader

- Compact, rugged design
- Wide operating temperature range
- Stable operation with card swipe speed within a range of 10 to 150 cm/second
- Choose enclosed or open housing to match application
- Single and double track configurations
- 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	—	—	—	—	No	TTL	Yes	Yes	Black	3S4YR-HSR3
R	—	—	—	—	No	TTL	No	Yes	Black	3S4YR-HSR3-01
—	R	—	—	—	No	TTL	Yes	Yes	Black	3S4YR-HSR4
—	R	—	—	—	No	TTL	No	Yes	Black	3S4YR-HSR4-01
—	—	R	—	—	No	TTL	Yes	Yes	Black	3S4YR-HSR5
—	—	R	—	—	No	TTL	No	Yes	Black	3S4YR-HSR5-01
R	R	—	—	—	No	TTL	Yes	Yes	Black	3S4YR-HSR6
R	R	—	—	—	No	TTL	No	Yes	Black	3S4YR-HSR6-001
—	R	R	—	—	No	TTL	Yes	Yes	Black	3S4YR-HSR7
—	R	R	—	—	No	TTL	No	Yes	Black	3S4YR-HSR7-001

■ TYPICAL APPLICATIONS

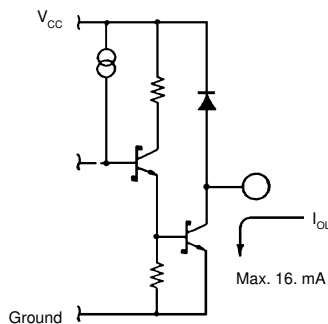
- Remote Terminals for Computers
- Credit Card Readers
- ID Card Checkers
- Electronic Locks
- Automatic Gate Machines
- Point-of-Sale Systems (POS)

Specifications

Part number		3S4YR-HSR
Recommended card type		ISO 7810, 7811/1-5, 7812, 7813
Recording method		FM decoding (F2F)
Card feeding speed		10 to 150 cm/sec (4 to 59 in/sec)
Service life	Single track	300,000 passes min.
	Double track	600,000 passes min.
Operating power supply		5 VDC \pm 10%
Current consumption	Single track	25 mA
	Double track	50 mA
Mounting location		Anywhere not directly subject to water or sunlight
Ambient temperature	Operation	-10° to 55°C (14° to 131°F) without condensation
	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 ² (30 G) in each of X, Y, and Z directions
Dimensions	With cover	100L x 32.5W x 32H mm (3.94L x 1.28W x 1.26H in)
	Without cover	100L x 27W x 29.5H mm (3.94L x 1.06W x 1.16H in)
Weight		Approx. 90 g (3.2 oz) enclosed; 60 g (2.1 oz) open

Engineering Data

■ OUTPUT CIRCUIT DIAGRAM



Output signal levels:

- Output high current
V_{CC} = 5.5 V
I_{OH} = 200 μ A max.
- Output sink current
V_{OL} = 0.4 V
I_{OL} = 16 mA max.

■ I/O INFORMATION

Single Track Connector

5-pin JAE connector part number IL-5S-S3L-N. Shipped with JAE angle pin header, part number IL-5P-S3FP2-N attached.

Pin #	Signal	Input/Output	Description
1	\overline{RDP}	Output	Read data
2	\overline{RCP}	Output	Read clock
3	\overline{CLS}	Output	Card load
4	DC5	—	+5 VDC
5	GND	—	Ground

Double Track Connector

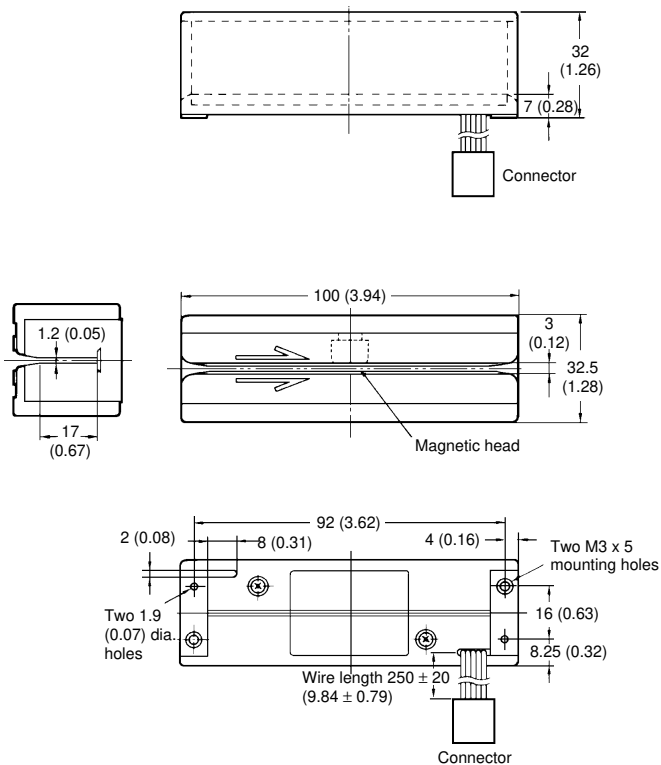
9-pin JAE connector part number IL-9S-S3L-N. Shipped with JAE angle pin header, part number IL-9P-S3FP2-N attached.

Pin #	Signal	Input/Output	Description
1	$\overline{RDP1}$	Output	Read data, track 1 or 3
2	$\overline{RCP1}$	Output	Read clock, track 1 or 3
3	$\overline{CLS1}$	Output	Card load, track 1 or 3
4	$\overline{RDP2}$	Output	Read data, track 2
5	$\overline{RCP2}$	Output	Read clock, track 2
6	$\overline{CLS2}$	Output	Card load, track 2
7	—	—	Not used, no connection
8	DC5	—	+5 VDC
9	GND	—	Ground

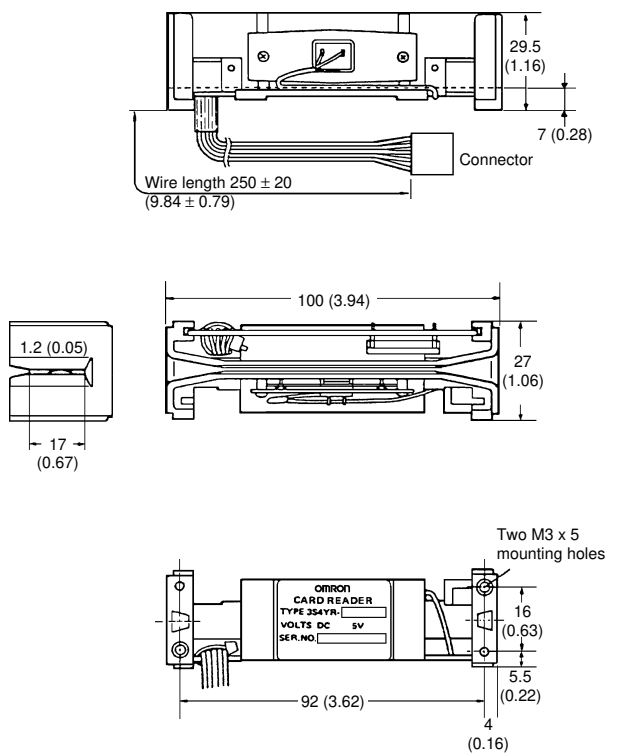
Dimensions

Unit: mm (inch)

■ 3S4YR-HSR ENCLOSED MODELS



■ 3S4YR-HSR OPEN MODELS



Note: Unless otherwise specified, tolerance is ± 0.3 .

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

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