



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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### Low Cost, Compact, Manual Swipe Reader

- Low power C-MOS technology
- Multiple configurations
- Same size as the Omron HSR series
- TTL-compatible interface (clock & data)
- Available with or without cover



### Ordering Information

Magnetic Tracks Supported (R, R/W)											
1	2	3	Center	JIS II	IC Contact	Interface	Cover	Cable	Color	Part Number	
R	R	R	—	—	No	TTL	Yes	Yes	Black	<b>V3B-1K</b>	
R	R	R	—	—	No	TTL	No	Yes	Black	<b>V3B-1</b>	
R	—	—	—	—	No	TTL	Yes	Yes	Black	<b>V3B-3K</b>	
R	—	—	—	—	No	TTL	No	Yes	Black	<b>V3B-3</b>	
—	R	—	—	—	No	TTL	Yes	Yes	Black	<b>V3B-4K</b>	
—	R	—	—	—	No	TTL	No	Yes	Black	<b>V3B-4</b>	
—	—	R	—	—	No	TTL	Yes	Yes	Black	<b>V3B-5K</b>	
—	—	R	—	—	No	TTL	No	Yes	Black	<b>V3B-5</b>	
R	R	—	—	—	No	TTL	Yes	Yes	Black	<b>V3B-6K</b>	
R	R	—	—	—	No	TTL	No	Yes	Black	<b>V3B-6</b>	
—	R	R	—	—	No	TTL	Yes	Yes	Black	<b>V3B-7K</b>	
—	R	R	—	—	No	TTL	No	Yes	Black	<b>V3B-7</b>	

Note: Cable harness is included with all V3B models. It is optional for V3A.

### ■ TYPICAL APPLICATIONS

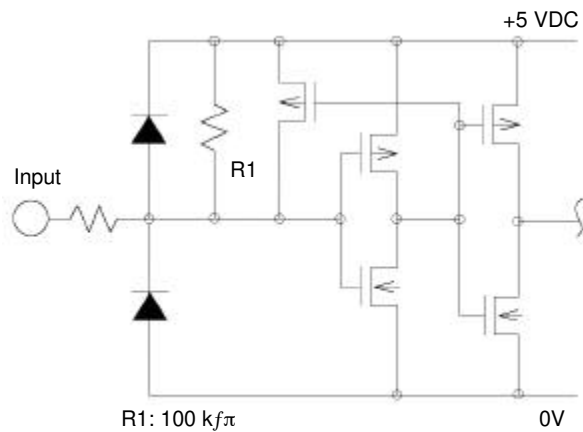
- Point-of Sale (POS) systems
- ID card checkers
- Club membership
- Access management
- Remote terminals for computers

# Specifications

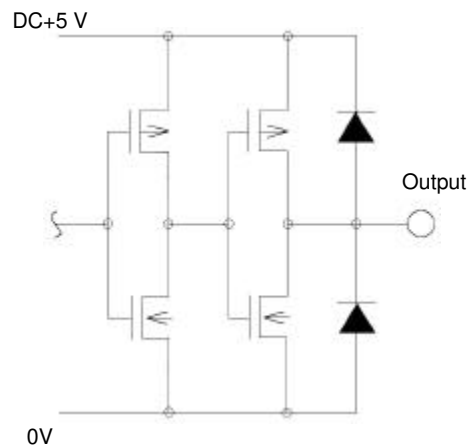
Part number		V3B-□□
Recommended card type		ISO 7810, 7811/1-6
Recording method		FM decoding (F2F)
Card feeding speed		10 to 120 cm/second (10 to 100 cm/sec triple track)
Service life of magnetic head		300,000 passes
Operating power supply		+5 VDC $\pm$ 10%
Current consumption	Single track	3 mA typical, 5 mA maximum
	Dual track	6 mA typical, 10 mA maximum
	Triple track	9 mA typical, 15 mA maximum
Mounting location		Indoors—away from direct sunlight or wet, humid environment
Ambient temperature	Operation	-10° to 55°C (14°F to 131°F)
	Storage	-30° to 70°C (-22°F to 158°F)
Ambient humidity	Operation	30% to 85% RH without condensation
	Storage	20% to 90% RH
Vibration		10 to 150 Hz, single vibration, width of 0.15 mm
Shock		Peak acceleration 19.6 m/sec <sup>2</sup>
Dimensions	With cover	100 W x 32 H x 32.5 D mm (3.94 W x 1.26 H x 1.28 D in)
	Without cover	100 W x 29.5 H x 27 D mm (3.94 W x 1.16 H x 1.06 D in)
Weight		Approx. 82 g with cover (52 g without cover)

# Engineering Data

## ■ INPUT CIRCUIT DIAGRAM



## ■ OUTPUT CIRCUIT DIAGRAM



## ■ I/O INFORMATION

### Single Track Connector Harness

5-pin Molex connector part number 51102-0500.

Pin #	Signal	Input/Output	Description
1	$\overline{RDP}$	Output	Read data
2	$\overline{RCP}$	Output	Read clock
3	$\overline{CLS}$	Output	Card loaded
4	+5 VDC	—	—
5	0 VDC	—	—

### Double Track Connector Harness

9-pin Molex connector part number 51102-0900.

Pin #	Signal	Input/Output	Description
1	$\overline{RDP1}$	Output	Read data 1/3
2	$\overline{RCP1}$	Output	Read clock 1/3
3	$\overline{CLS1}$	Output	Card loaded 1/3
4	$\overline{RDP2}$	Output	Read data 2
5	$\overline{RCP2}$	Output	Read clock 2
6	$\overline{CLS2}$	Output	Card loaded 2
7	$\overline{CSV}$	Input	Current save
8	5V	—	—
9	0V	—	—

### Triple Track Connector Harness

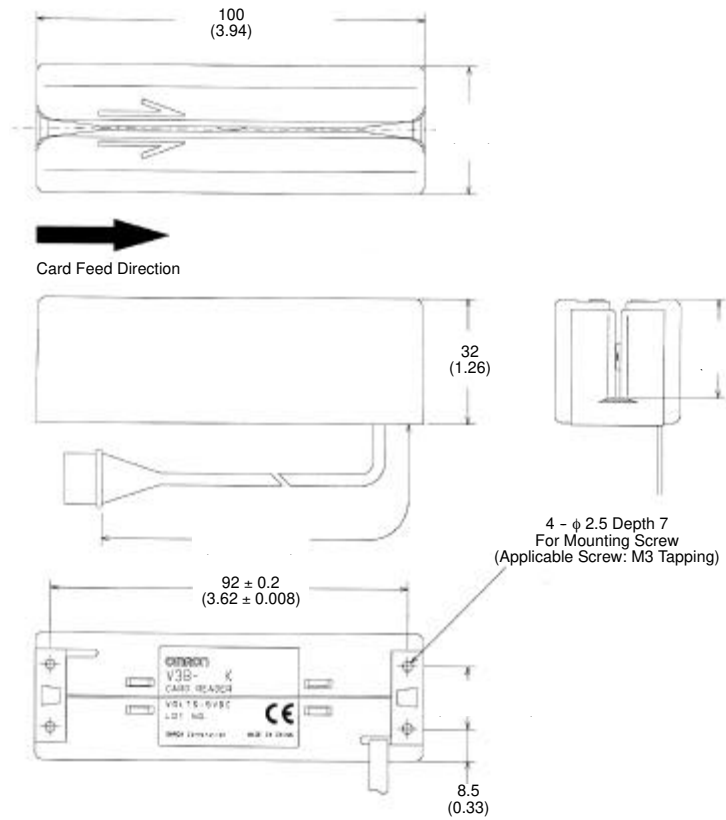
12-pin Molex connector part number 51102-1200.

Pin #	Signal	Input/Output	Description
1	$\overline{RDP1}$	Output	Read data 1
2	$\overline{RCP1}$	Output	Read clock 1
3	$\overline{CLST}$	Output	Card loaded 1
4	$\overline{RDP2}$	Output	Read data 2
5	$\overline{RCP2}$	Output	Read clock 2
6	$\overline{CLS2}$	Output	Card loaded 2
7	$\overline{RDP3}$	Output	Read data 3
8	$\overline{RCP3}$	Output	Read clock 3
9	$\overline{CLS3}$	Output	Card loaded 3
10	$\overline{CSV}$	Input	Current save
11	5V	—	—
12	0V	—	—

# Dimensions

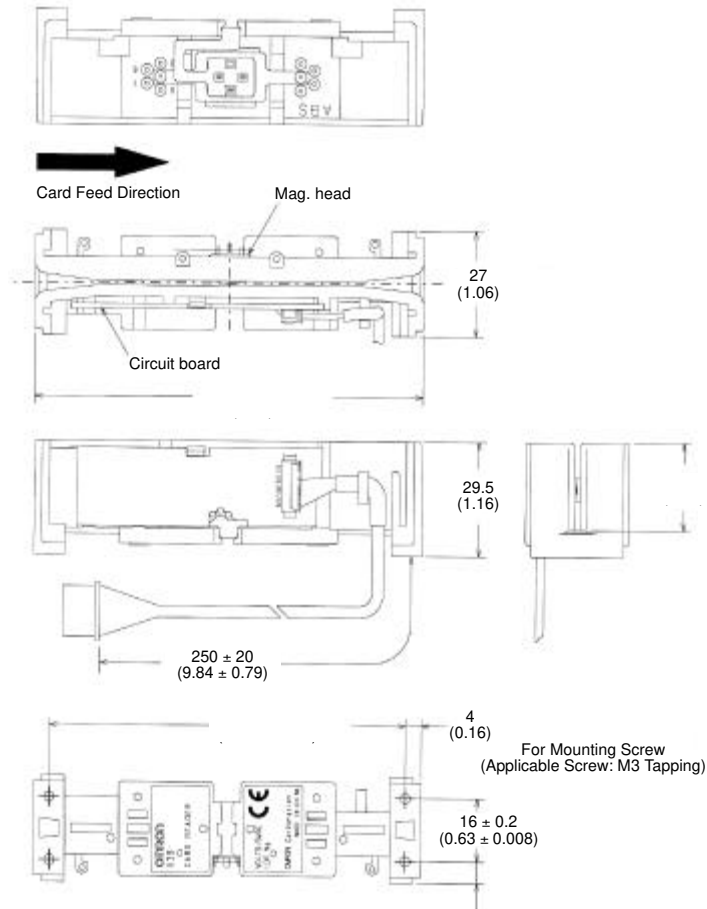
Unit: mm (inch)

## ■ V3B-□K



Note: Tolerances ±0.3mm unless specified

■ V3B-□



Note: Tolerances ±0.3mm unless specified

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

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