

GENERAL INFORMATION

MSR200 swipe card readers have a TTL-level interface and are designed for use in retail, access control, and time and attendance environments.

MSR200 magnetic stripe card readers conform to industry specifications, including ANS/ISO Standards 7810, 7811 1/5, 7812 and 7813.

I/O INFORMATION

DATA

The DATA signal is valid while the STROBE is low. If the DATA signal is high, the bit is a zero. If the DATA signal is low, the bit is a one.

STROBE

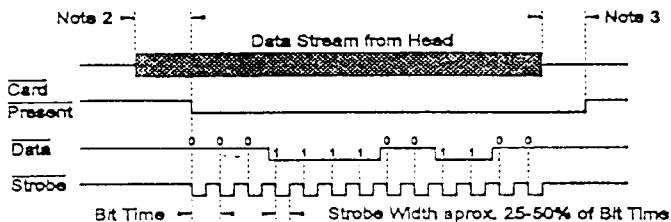
The STROBE signal indicates when DATA is valid. It is recommended that DATA be loaded by the user with the leading negative edge of the STROBE.

CARD PRESENT

CARD PRESENT will go low after 14-15 flux reversals from the head. It will return high if Reset or about 150 milliseconds after the last flux reversal. The CARD PRESENT signal can be tied together with other card present signals from more than one IC, however use only one pull-up resistor (R4). E.g., if this is a 3 track reader, all 3 CARD PRESENTS would be tied together using a single 10K resistor.

When no card is being moved through the unit, the DATA, STROBE, and CARD PRESENT signals are high.

Signal Timing Diagram



Notes:

1. Card Present, Data, and Strobe are negative true logic.
2. Card Present goes low after 14-15 head flux reversals.
3. Card Present returns to high level approximately 150mS after the last flux transition.
4. Data is valid 1.0µS (min.) before the leading negative edge of strobe and remains valid until approximately 1.0µS before the next STROBE.

The signal timing diagram shown above represents the data along with other signals that are generated during the reading process.

SPECIFICATION

Recording Method

Two-frequency coherent phase (F2F)

Speed

Card speed through the unit may vary from

3 -- 125 ips at 75 BPI

3 -- 50 ips at 210 BPI

Power Requirements

Single Track: +5Vdc ± 5 % 5 mA

Dual Track: +5Vdc ± 5 % 10 mA

Three Track: +5Vdc ± 5 % 15 mA

Output Signal Levels

V_{ol} = 0.4V at 2mA

V_{oh} = 4.5V at -0.2mA

Operating Temperature

-30 °C to +70 °C

Operating Humidity Range

10% to 90% relative humidity

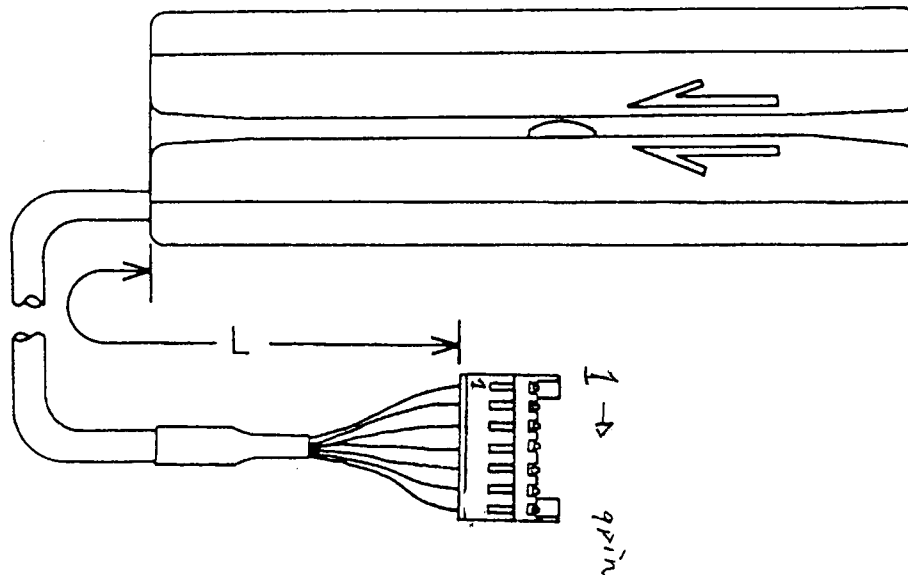
Life

300,000 passes

Синтек Информэйшн

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(46257-00)

	MSR251A-10	MSR252A-10	MSR253A-10	MSR254A-10	MSR256A-10	MSR257A-10
Description	Reader TK1	Reader TK2	Reader TK1 & 2	Reader TK3	Reader TK2 & 3	Reader TK1, 2 & 3
Pin Numbers	5	5	7	5	7	9
Cable Length	304±20 mm	304±20 mm	290±20 mm	304±20 mm	290±20 mm	304±20 mm
PIN#						
1	Ground	Ground	Ground	Ground	Ground	Ground
2	+5V	+5V	+5V	+5V	+5V	+5V
3	Card Present	Card Present	Card Present	Card Present	Card Present	Card Present
4	Strobe TK1	Strobe TK2	Strobe TK2	Strobe TK3	Strobe TK2	Strobe TK2
5	Data TK1	Data TK2	Data TK2	Data TK3	Data TK2	Data TK2
6			Strobe TK1		Strobe TK3	Strobe TK1
7			Data TK1		Data TK3	Data TK1
8						Strobe TK3
9						Data TK3

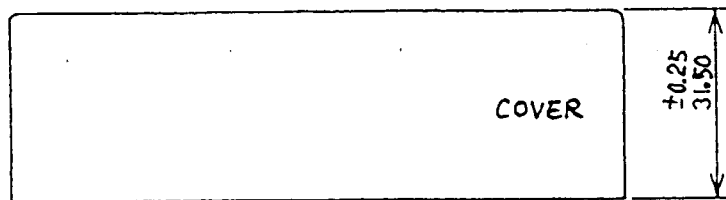
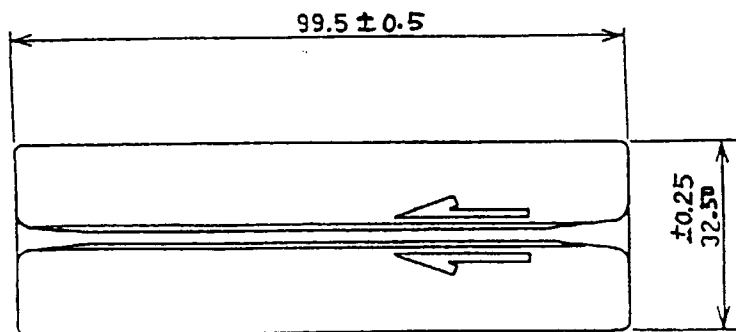
Note:

Cable: UL2833 26AWG X Conductors

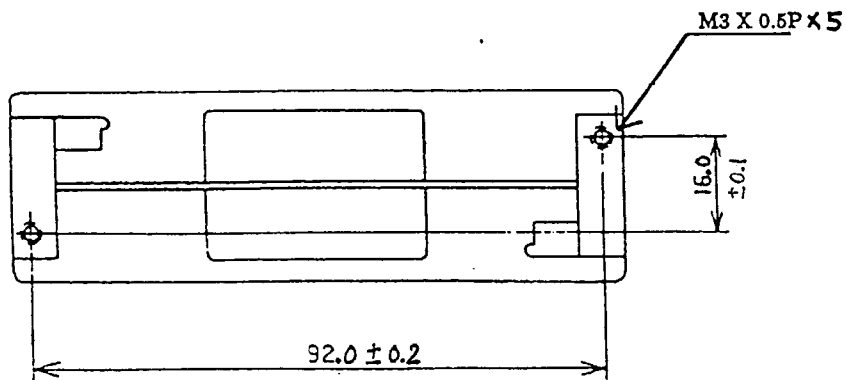
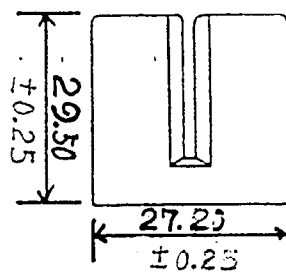
Socket Housing: J.A.E. IL-G-XS-S3C2 or Equivalent

Right Angle Pin Header: J.A.E. IL-G-XP-S3L2 or Equivalent

where "X" is pin numbers.



BODY



GENERAL INFORMATION

MSR200A swipe card readers have a TTL- level interface and are designed for use in retail, access control, and time and attendance environments.

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I/O INFORMATION

DATA

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STROBE

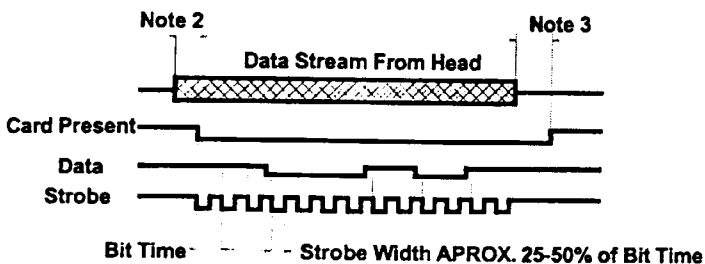
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CARD PRESENT

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When no card is being moved through the DATA, STROBE and CARD PRESENT signals are high.

Signal Timing Diagram



Notes:

1. Card Present, Data, and Strobe are negative true logic.
2. Card Present goes low after 14-15 head flux reversals.
3. Card Present returns to high level approximately 150ms after the last flux transition.
4. Data is valid $1.0 \mu S$ before the leading negative edge of strobe and remains valid until approximately $1.0 \mu S$ before the next STROBE.

The signal-timing diagram shown above represents the data Along with other signals the are generated during the reading process .

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Output Signal Levels

Vol = 0.4V at 2mA

Voh = 4.5V at -0.2 mA

Operating Temperature

-30°C to +70°C

Operating Humidity Range

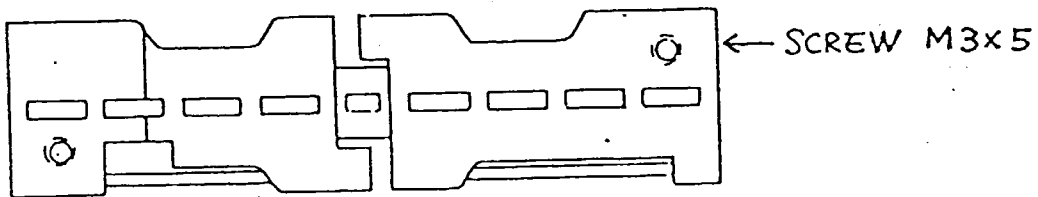
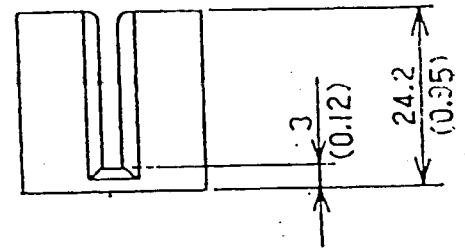
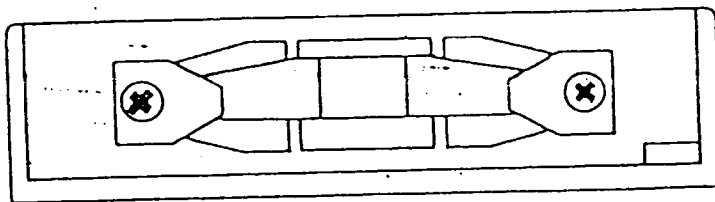
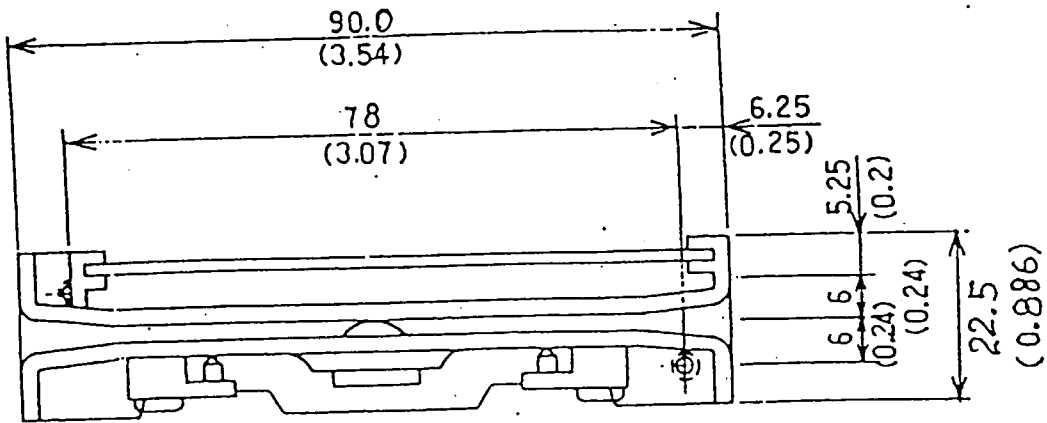
10% to 90% relative humidity

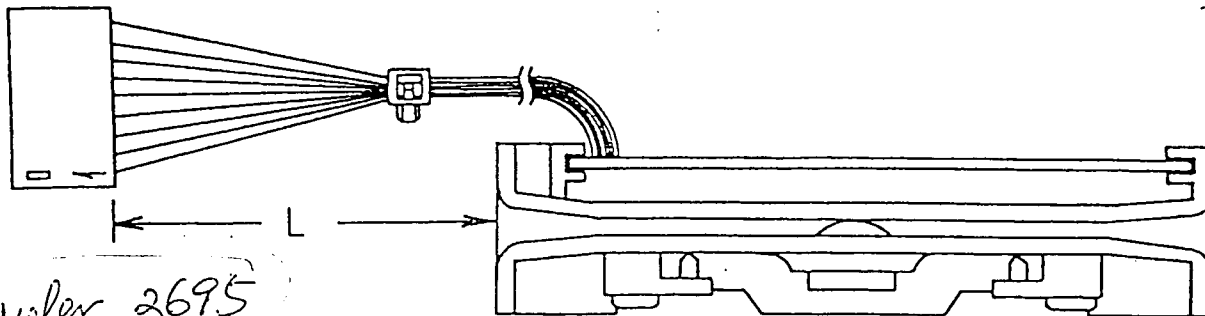
Life

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Molex 2695

(MSR22)-02

	MSR221A-10	MSR222A-10	MSR223A-10	MSR224A-10	MSR226A-10	MSR227A-10
Description	Reader TK1	Reader TK2	Reader TK1 & 2	Reader TK3	Reader TK2 & 3	Reader TK1, 2 & 3
Pin Numbers	5	5	7	5	7	9
Cable Length	146±10 mm	146±10 mm	100±10 mm	146±10 mm	100±10 mm	146±10 mm
PIN#						
1	+5V	+5V	+5V	+5V	+5V	+5V
2	Ground	Ground	Ground	Ground	Ground	Ground
3	Data TK1	Data TK2	Data TK2	Data TK3	Data TK2	Data TK2
4	Strobe TK1	Strobe TK2	Strobe TK2	Strobe TK3	Strobe TK2	Strobe TK2
5	Card Present	Card Present	Card Present	Card Present	Card Present	Card Present
6			Strobe TK1		Strobe TK3	Strobe TK1
7			Data TK1		Data TK3	Data TK1
8						Strobe TK3
9						Data TK3