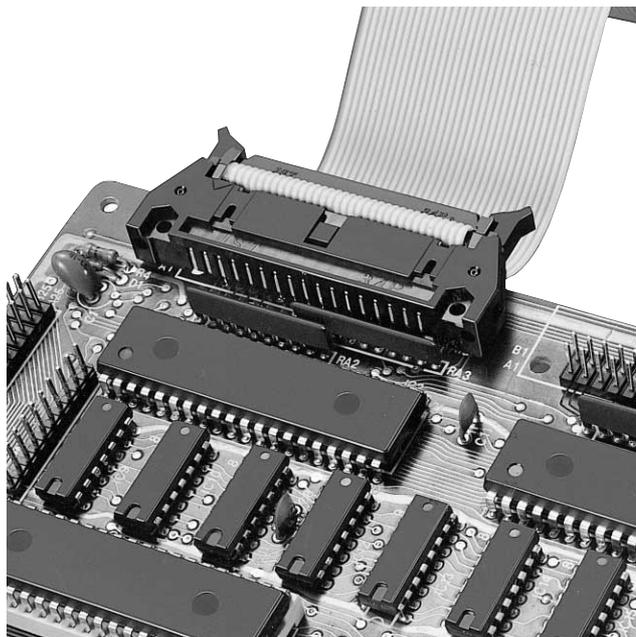
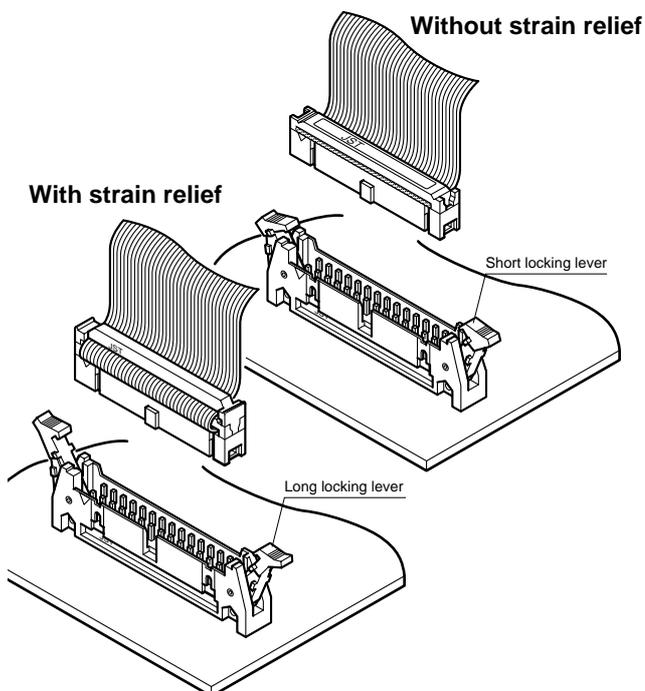


# RX CONNECTOR

Disconnectable Insulation displacement connectors for 1.27mm pitch ribbon cables



**Contemporary needs require that electronic equipment be high in density, modular in construction and multi-functional. In addition, the costs of such connection systems must be reduced. To meet these needs, particularly in the video and audio fields, we offer JST's highly reliable and cost-efficient RX connectors. These connectors reflect displacement connection technology as well as its advanced production techniques.**



## Features

### • **Conforms to MIL Standards**

JST's RX connectors conform to MIL standards (MIL-C-83503) and are compatible with its RA connectors.

### • **Secure locking mechanism**

The locking levers are engaged by inserting the receptacle into the header. This ensures a firm connection that's highly resistant to impact and vibration. To save space, JST has also made available short locking levers which provides a firm connection even when the receptacle has no strain relief.

### • **Cost-efficient**

To reduce costs, only the mating sections of the receptacle contacts and header posts are gold-plated. JST's wealth of mass-production technology allows it to produce connectors that are extremely reliable and cost-efficient.

### • **Post suited for high-density patterns**

The mating section of the header post is 0.64mm square. The printed circuit board solder section of the post is 0.60mm in diameter. This small size greatly facilitates high-density design of printed circuit boards.

\* RoHS compliant products are published.

\* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.

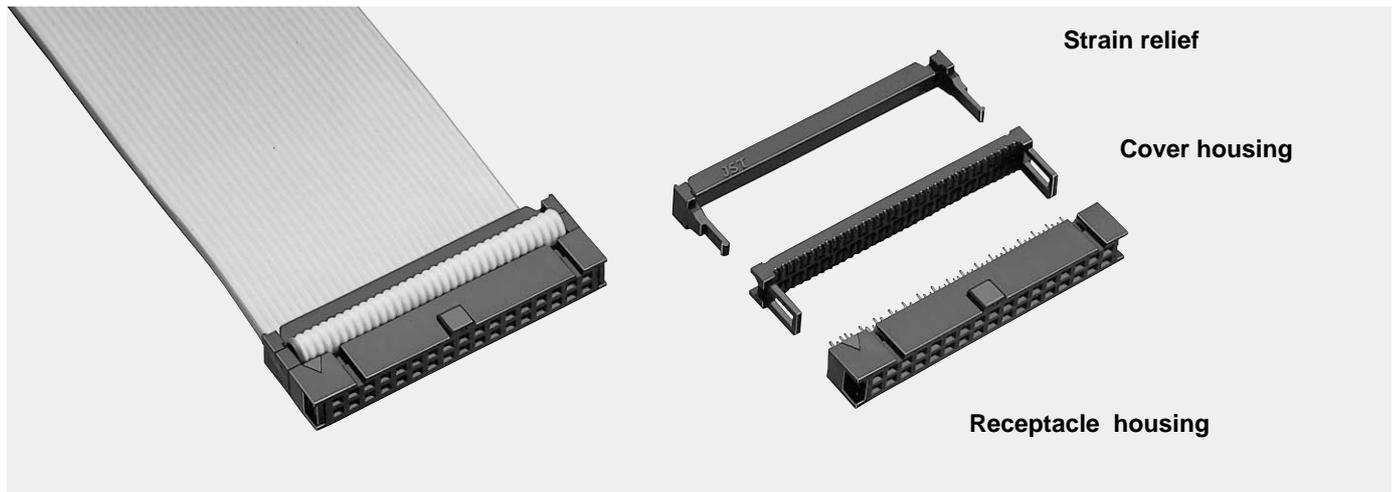
\* Contact JST for details.

## Standards

Recognized E60389

Certified LR20812

## Receptacle



## Specifications

### Characteristics

Current rating	1.0A AC, DC
Voltage rating	300V AC, DC
Temperature range	(including temperature rise in applying electrical current) -55°C to +125°C (gold-plated) -55°C to +85°C (tin-plated)
Contact resistance	Initial value: 20mΩ max. After environmental testing: 30mΩ max.
Insulation resistance	5,000MΩ min.
Withstanding voltage	500V AC/5 seconds
Applicable wire	AWG #28, 1.27mm pitch ribbon cables

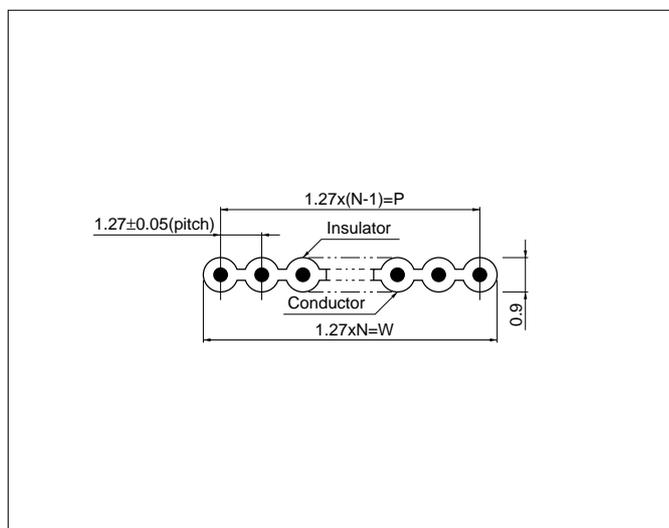
### Materials

Contact	Phosphor bronze • Nickel-undercoated Mating part: gold-plated Insulation displacement part: tin-plated (reflow treatment) • Copper-undercoated, tin-plated (reflow treatment)
Receptacle housing	Glass-filled PBT, UL94V-0, black
Cover housing	Glass-filled PA 66, UL94V-0, black
Strain relief	Glass-filled PA 66, UL94V-0, black

\*Contact JST details.

## Applicable cables

Ribbon cables conforming to the following specifications can be used with RX connector receptacles. Contact JST for details.



Note: N --- Number of circuits

Conductor	AWG #28 stranded wire Construction: 7/0.127mm dia. Material: Tin-plated annealed copper wire
	AWG #28 solid wire Construction: 0.32mm dia. Material: Tin-plated annealed copper wire
Insulator	Soft vinyl chloride

Number of conductors (n)	Dimensional tolerance (mm)	
	P	W
10 to 14	±0.18	±0.3
16 to 26	±0.28	±0.3
34 to 60	±0.38	±0.3

# RX CONNECTOR

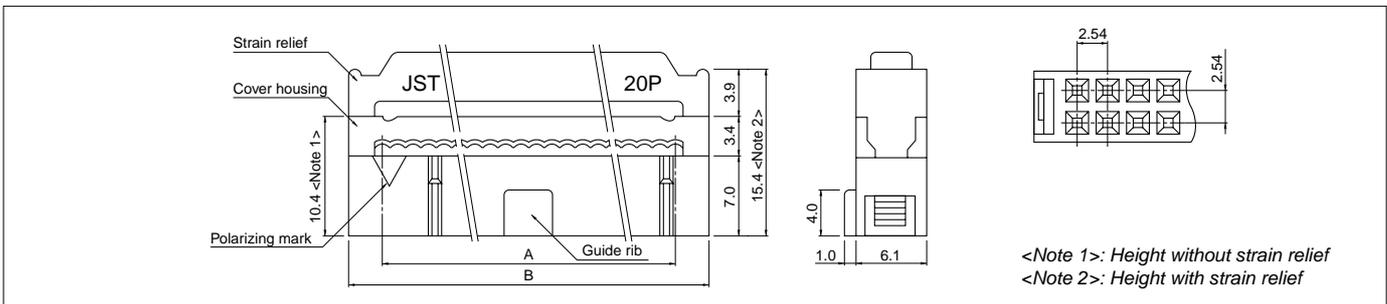
## Model number identification

• Series name	RX	—	S	50	1	S	1	3	10
• Product name: Receptacle									
• Number of circuits: 20, 26, 34, 40, 50, 60									
• Number of guide grooves: 1 ... 20 to 60 circuits									
• Connection method: S ... Short locking, through type									
• With or without strain relief	without: 0 with: 1								
• Material of contact: 3 ... Phosphor bronze for spring									
• Surface finish									
10... Gold flash									
12... 0.2micron(8micro-inch)gold-plated									
13... 0.4micron(16micro-inch)gold-plated									
14... 0.76micron(30micro-inch)gold-plated									
90... Tin-plated (reflow treatment)									

Note:

The standard gold-plated type is identified by the suffix number [-1310] but this suffix number is usually omitted. Other types must be identified by the full code number.

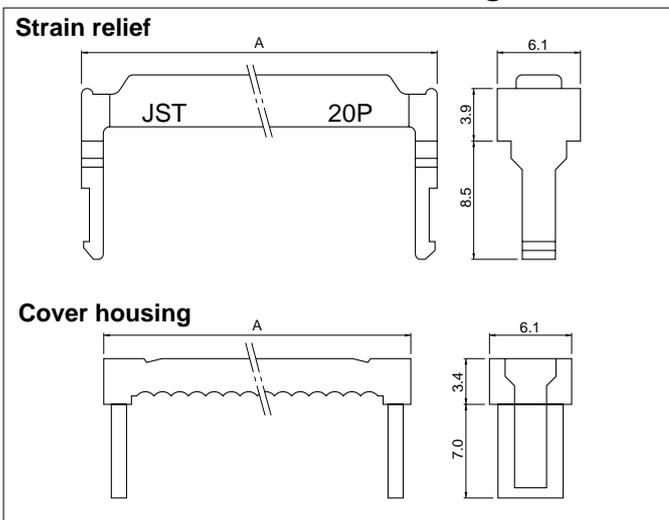
## Receptacle



Circuits	Model No.				Guide ribs	Dimensions (mm)		Qty / box
	Gold-plated receptacle		Tin-plated-receptacle			A	B	
	With strain relief	Without strain relief	With strain relief	Without strain relief				
20	RX-S201S	RX-S201S-0310	RX-S201S-1390	RX-S201S-0390	1	22.86	30.00	150
26	—	RX-S261S-0310	—	RX-S261S-0390	1	30.48	37.62	150
34	RX-S341S	RX-S341S-0310	RX-S341S-1390	RX-S341S-0390	1	40.64	47.78	100
40	RX-S401S	RX-S401S-0310	RX-S401S-1390	RX-S401S-0390	1	48.26	55.40	100
50	RX-S501S	RX-S501S-0310	RX-S501S-1390	RX-S501S-0390	1	60.96	68.10	75
60	RX-S601S	RX-S601S-0310	RX-S601S-1390	RX-S601S-0390	1	73.66	80.80	75

RoHS compliance This product displays (LF)(SN) on a label.

## Strain relief and cover housing

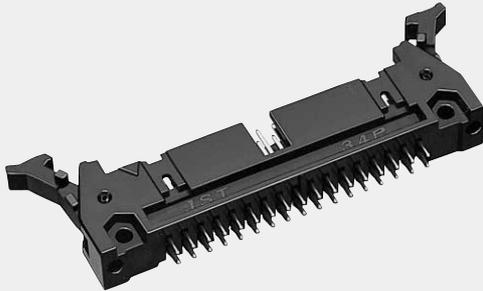


Circuits	Model No.		Dimension A (mm)
	Strain relief	Cover housing	
20	RX-SR20T	RX-CH20S	30.00
26	—	RX-CH26S	37.62
34	RX-SR34T	RX-CH34S	47.78
40	RX-SR40T	RX-CH40S	55.40
50	RX-SR50T	RX-CH50S	68.10
60	RX-SR60T	RX-CH60S	80.85

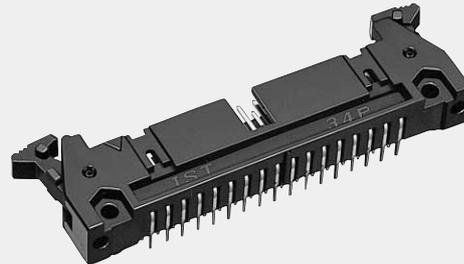
RoHS compliance

## Shrouded header

Top entry type  
with long locking lever



Side entry type  
with short locking lever



## Specifications

### Characteristics

Current rating	1.0A AC, DC
Voltage rating	300V AC, DC
Temperature range	(including temperature rise in applying electrical current) -55°C to +125°C (gold-plated) -55°C to +85°C (tin-plated)
Insulation resistance	5,000MΩ min.
Withstanding voltage	500V AC/5 seconds
Applicable PC board thickness	1.6mm

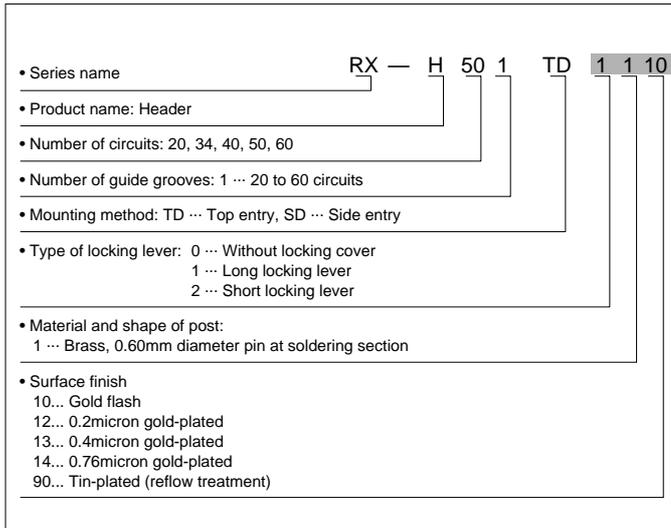
### Materials

Contact	Brass • Nickel-undercoated Mating part; gold-plated Solder tail; tin-plated (reflow treatment) • Copper-undercoated, tin-plated (reflow treatment)
Housing	Glass-filled PBT, UL94V-0, black
Locking lever	Glass-filled PBT, UL94V-0, black

Note: Contact JST for details.

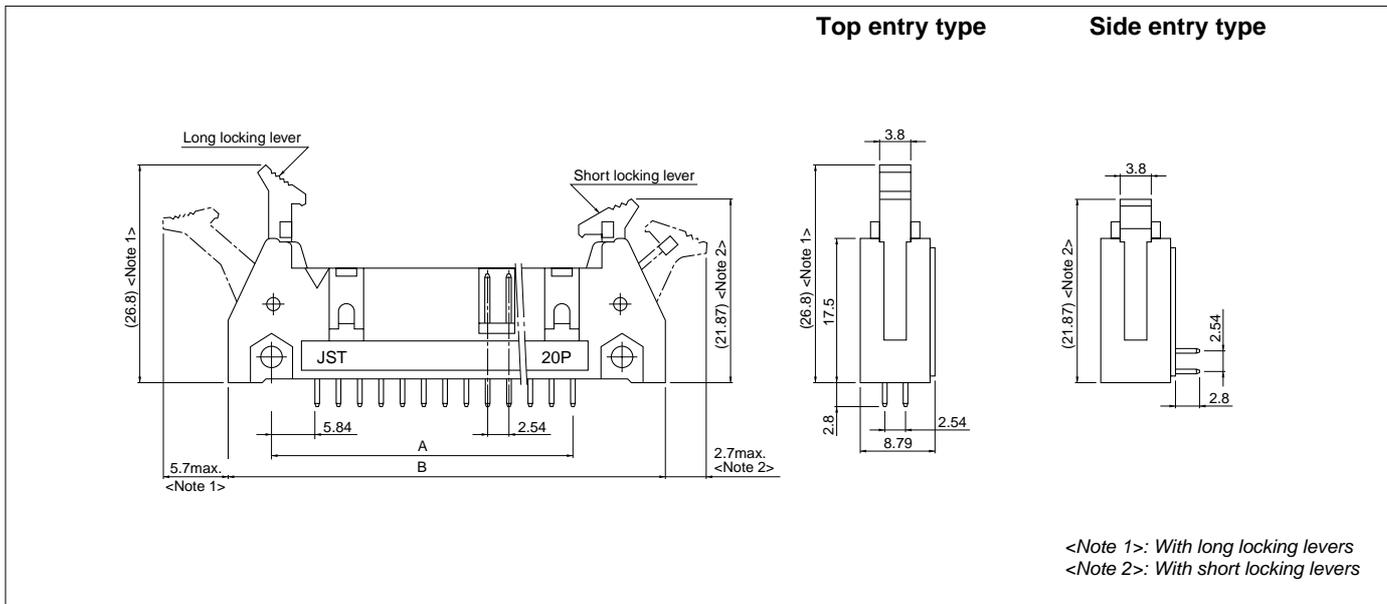
# RX CONNECTOR

## Model number identification



Note:

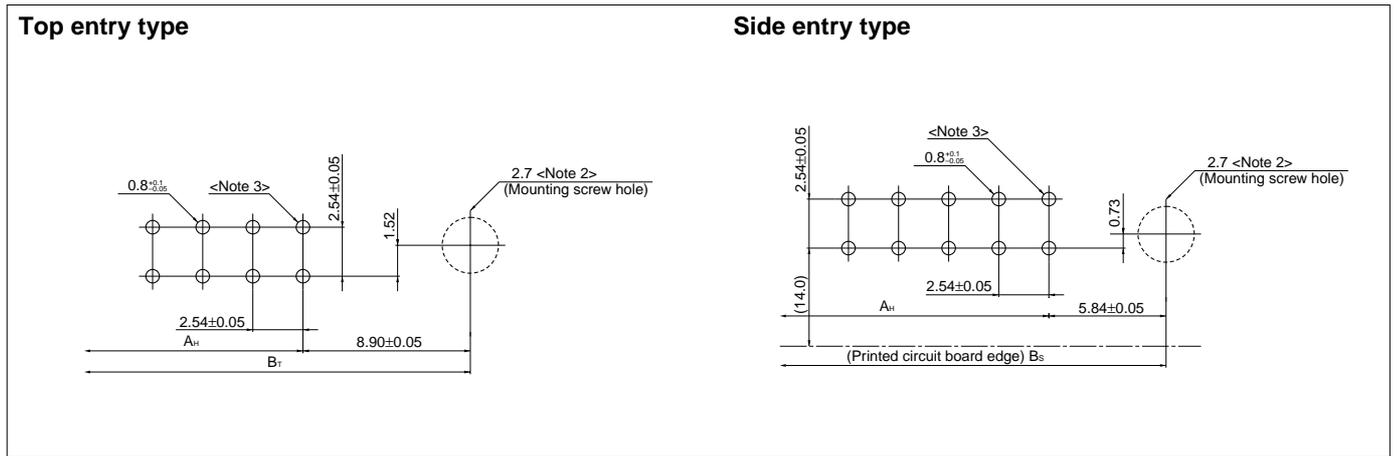
The standard gold-plated type is identified by the suffix number [-1110] but this suffix number is usually omitted. Other types must be identified by the full code number.



Circuits	Type	Model No.				Guide grooves	Dimensions (mm)		Q'ty / box
		Gold-plated header		Tin-plated-header			A	B	
		Top entry type	Side entry type	Top entry type	Side entry type				
20	Long	RX-H201TD	RX-H201SD	RX-H201TD-1190	RX-H201SD-1190	1	22.86	44.66	50
	Short	RX-H201TD-2110	RX-H201SD-2110	RX-H201TD-2190	RX-H201SD-2190	1			
34	Long	RX-H341TD	RX-H341SD	RX-H341TD-1190	RX-H341SD-1190	1	40.64	62.44	25
	Short	RX-H341TD-2110	RX-H341SD-2110	RX-H341TD-2190	RX-H341SD-2190	1			
40	Long	RX-H401TD	RX-H401SD	RX-H401TD-1190	RX-H401SD-1190	1	48.26	70.06	25
	Short	RX-H401TD-2110	RX-H401SD-2110	RX-H401TD-2190	RX-H401SD-2190	1			
50	Long	RX-H501TD	RX-H501SD	RX-H501TD-1190	RX-H501SD-1190	1	60.96	82.76	25
	Short	RX-H501TD-2110	RX-H501SD-2110	RX-H501TD-2190	RX-H501SD-2190	1			
60	Long	RX-H601TD	RX-H601SD	RX-H601TD-1190	RX-H601SD-1190	1	73.66	95.46	25
	Short	RX-H601TD-2110	RX-H601SD-2110	RX-H601TD-2190	RX-H601SD-2190	1			

**RoHS compliance** This product displays (LF)(SN) on a label.

## PC board layout (viewed from component side)



Circuits	Dimensions (mm)		
	A <sub>H</sub>	B <sub>T</sub>	B <sub>S</sub>
20	22.86	40.66	34.54
34	40.64	58.44	52.32
40	48.26	66.06	59.94
50	60.96	78.76	72.64
60	73.66	91.46	85.34

**Note:**

1. Tolerances are non-cumulative:  $\pm 0.05\text{mm}$  for all centers. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.
2. The mounting screw holes are required for mounting headers on printed circuit boards but are not required for standard header.
3. This is normally the No. 1 circuit position.