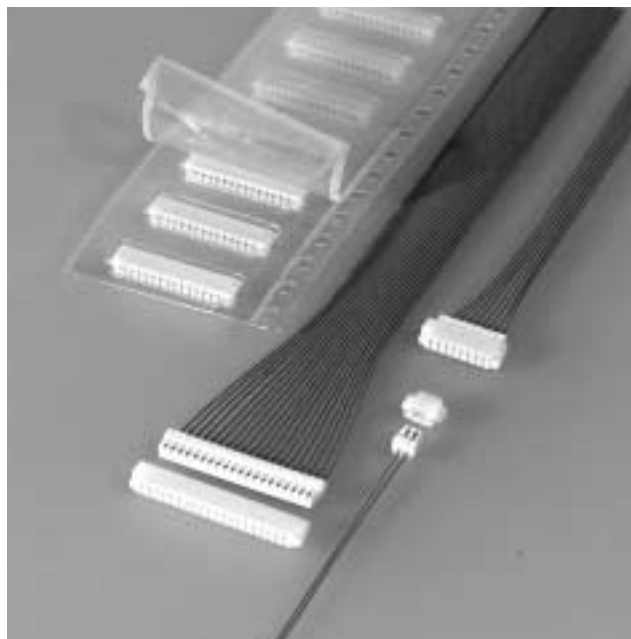


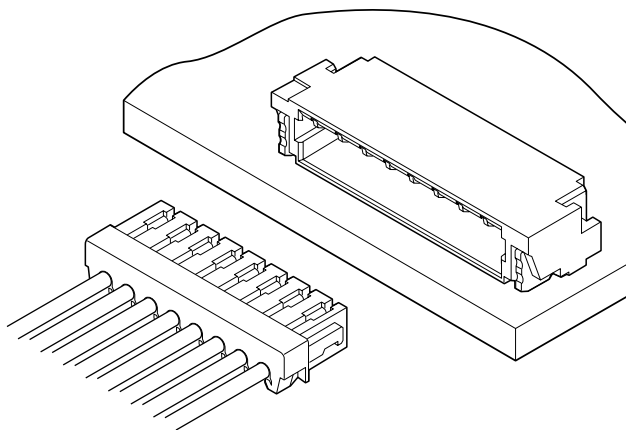
# SUR CONNECTOR



Disconnectable Insulation displacement connectors



**The world's first 0.8mm (.031") pitch wire-to-board insulation displacement connector. Only 3.9mm (.154") depth and 1.75mm (.069") height after mounting on the PC board. Compared to the conventional 1.0mm (.039") pitch SSR connector, occupation space on the board is reduced by 34%.**



## Features

### • 3-point grip construction

The 3-point insulation grip feature and the strain relief ensure a firm grip on terminated wires and protection of the insulation displacement connection from possible damage.

### • Super fine wires are applicable

Applicable wire is of AWG #32 with only 0.38mm (.015") O.D. With this super fine wire, routing of wires is easy.

### • Shrouded header

The header is fully shrouded, but remains thin.

### • Twin U-slot insulation displacement section

The insulation displacement section connected to each wire consists of two tin-plated slots (twin U-slots), which ensures reliable connection.

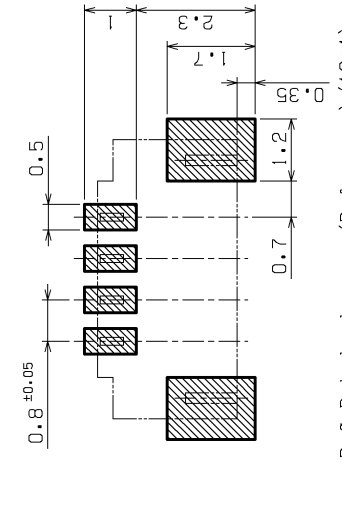
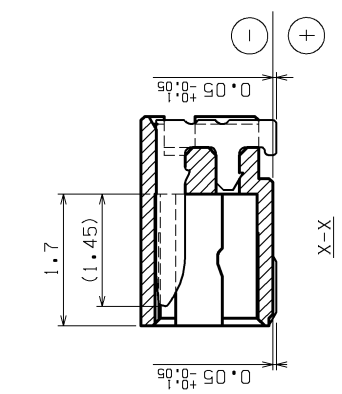
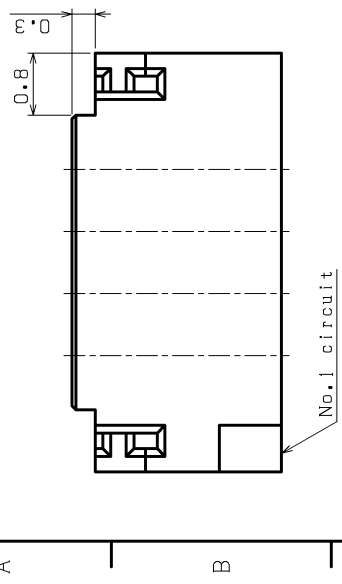
## Specifications

- Current rating: 0.5A AC, DC (AWG #32)  
0.2A AC, DC (AWG #36)
- Voltage rating: 30V DC
- Temperature range: -25°C to +85°C (including temperature rise in applying electrical current)
- Contact resistance: Initial value/20m Ω max.  
After environmental testing/40m Ω max.
- Insulation resistance: 100M Ω min.
- Withstanding voltage: 200V AC/minute
- Applicable wire: AWG #32, #36  
Conductor/7 strands,  
tin-coated copper alloy  
Insulation O.D./0.38mm (.015")
- \* Contact JST if Lead-Free product is required.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

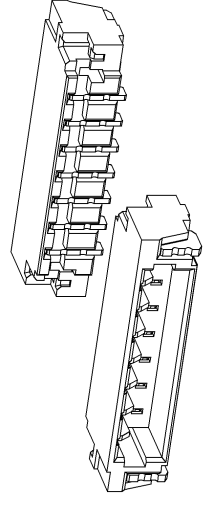
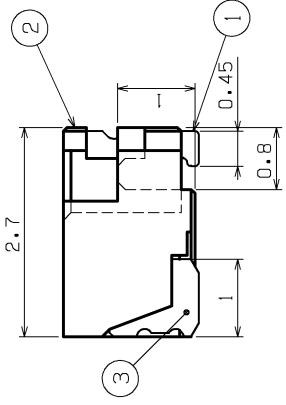
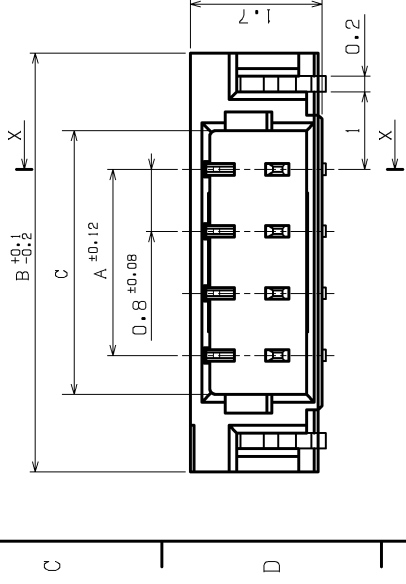
- Recognized E60389
- 1 Certified LR20812

1	2	3	4	5	6	7	8
REV.		DESCRIPTION		DATE		DESIGNED	



**NOTE**  
 1. Unless otherwise specified, tolerance are  $\pm 0.3$   
 2. Coplanarity of soldertail and solder tab shall be 0.1 max.  
 3. Tolerance of pattern pitch on PCB are not cumulative.

P.C.B hole layout (Reference) (10:1)  
 (Viewing from connector mounted side)



Cir- cuits	Dimensions			Cir- cuits	Dimensions		
	A	B	C		A	B	C
2	0.8	3.8	1.8	20	15.2	18.2	16.2
3	1.6	4.6	2.6	22	16.8	19.8	17.8
4	2.4	5.4	3.4				
5	3.2	6.2	4.2				
6	4.0	7.0	5.0				
8	5.6	8.6	6.6				
10	7.2	10.2	8.2				

3	SOLDER TAB	BRASS	COPPER-UNDERPLATED TIN-PLATED	t0.2
2	WAFER	POLYAMIDE	COPPER-UNDERPLATED TIN-PLATED	UL-94V-0, NATURAL t0.15
1	BASE CONTACT	COPPER ALLOY	COPPER-UNDERPLATED TIN-PLATED	
Nd.	PART NAME	MATERIAL	SURFACE FINISH	REMARKS
SIZE	UNIT	SCALE	PROJECTION	DATE
A3	METRIC	15:1	1	MAY. 9.2005
APPROVED	CHECKED	DESIGNED	DRAWN	
S.S	T.T	M.H	M.Y	
SERIES NAME		SUR CONNECTOR		
PART No.		SM ( ) B-SURS (LF) (SN)		
DRAWING No.		KRD-36946		
		RO		

**JST** J.S.T.MFG.CO., LTD.

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO J.S.T.  
 AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.

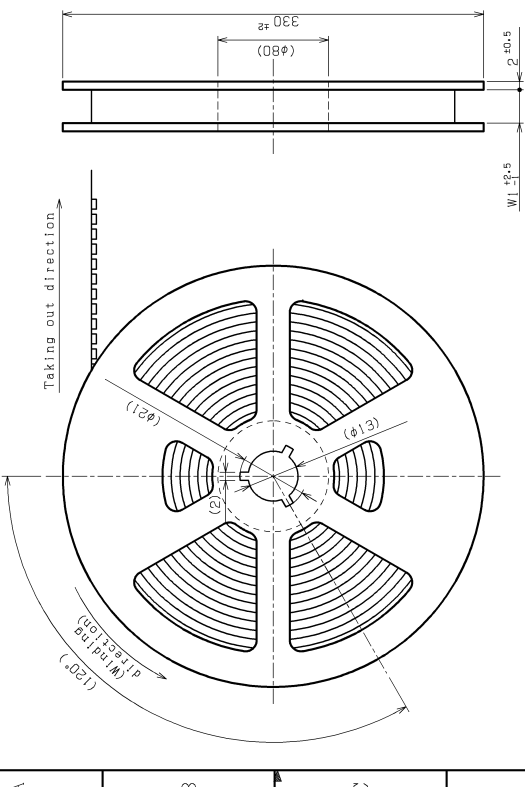
EC4109-2

REV.	DESCRIPTION	DATE	DESIGNED
△			

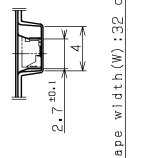
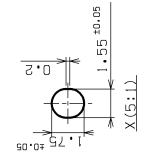
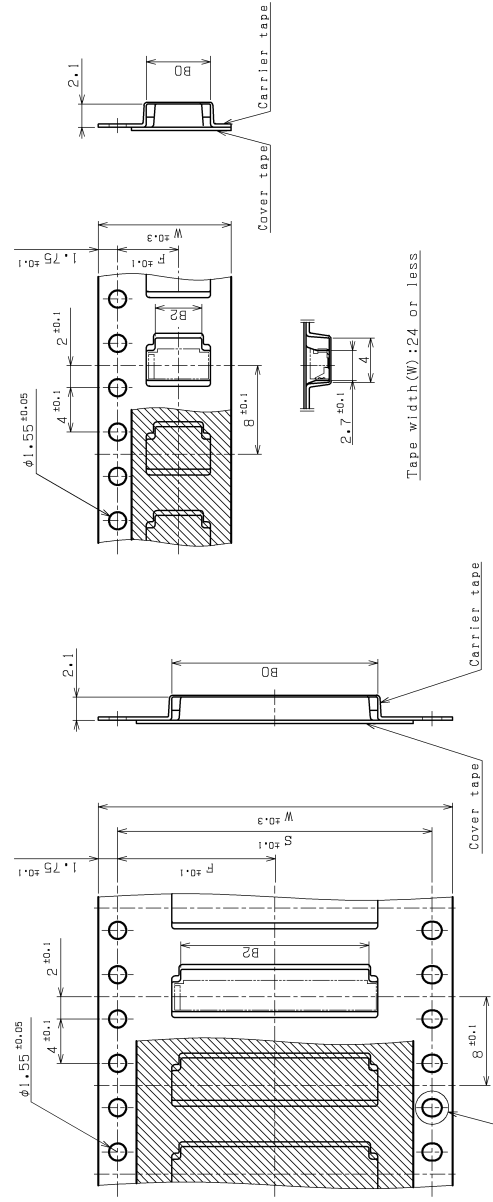
Circuit	Dimensions				Circuit	Dimensions					
	B0	F	S	W		B0	F	S	W		
2	4.2	2.6	5.5	12	13.5	14	13.8	12.2	11.5	24	25.5
3	5.0	3.4	5.5	12	13.5	15	14.6	13.0	11.5	24	25.5
4	5.8	4.2	5.5	12	13.5	16	15.4	13.8	11.5	24	25.5
5	6.6	5.0	7.5	16	17.5	17	16.2	14.6	11.5	24	25.5
6	7.4	5.8	7.5	16	17.5						
8	9.0	7.4	7.5	16	17.5	20	18.6	17.0	14.2	28.4	33.5
10	10.6	9.0	11.5	24	25.5	22	20.2	18.6	14.2	28.4	33.5
12	12.2	10.6	11.5	24	25.5						

PART No.	Color
SM ( ) B-SURS-TF (LF) (SN)	NATURAL
SM ( ) B-SURL-TF (LF) (SN)	LEMON YELLOW
SM ( ) B-SURO-TF (LF) (SN)	ORANGE
SM ( ) B-SURPK-TF (LF) (SN)	PINK
SM ( ) B-SURLB-TF (LF) (SN)	LIGHT BLUE
SM ( ) B-SURLG-TF (LF) (SN)	LIGHT GREEN
SM ( ) B-SURLP-TF (LF) (SN)	LIGHT PURPLE

**NOTE**  
 1. Unless otherwise specified, tolerances are  $\pm 0.3$ .  
 2. Connector part: See the DWG. of the SUR connector.  
 3. Quantity to be packaged: 3500pcs/roll  
 4. Leading tape length.  
 CARRIER TAPE  
 TAKING OUT DIRECTION  
 COVER TAPE LEADER  
 LEADER PART  
 MIN 100mm  
 MIN 400mm  
 THE END PART CONNECTOR MOUNTING PART  
 5. Cover tape peel strength: 0.1~1N (Peel speed: 300mm/minute)

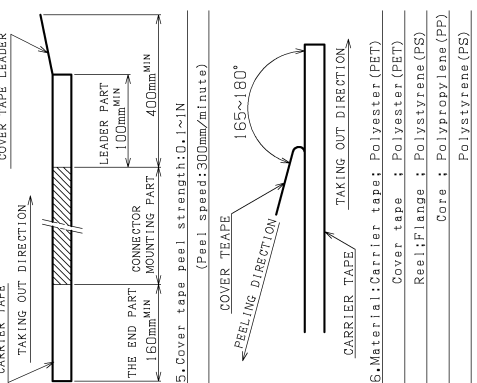


Taking out direction



Tape width (W): 32 or more

Tape width (W): 24 or less



No.	PART NAME	MATERIAL	SURFACE FINISH	REMARKS
SIZE	UNIT	SCALE	PRODUCTION DATE	CUSTOMER
A2	METRIC	2:1	MAR. 8, 2004	
APPROVED	CHECKED	DESIGNED	DRAWN	SUR CONNECTOR
T.N	S.S	M.H		PART No.
				SM ( ) B-SUR ( ) -TF (LF) (SN)
				DRAWING No.
				KRD-31654-1
				RO

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