

Product Information

1. Rubber Connector for LCD

What's to take into consideration for Rubber Connector?

Rubber Connector consists of a conductive and a non-conductive silicone-caoutchouc-layer.

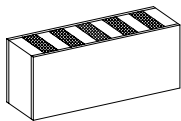
1.1 Types of Rubber Connector

AD-LL



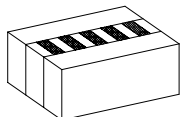
AD-LL Type is intend for LC-Module with non-conductive housing because conductive layers are exposed on all four sides of the connector.

AD-II



Is like AD-LL Type, but two sides are coated with thin silicone materials in order to prevent them from being exposed to unnecessary conductive parts.

AD-SS

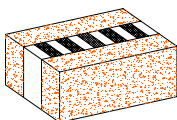


If size of Rubber Connector is getting bigger, hardness (shore) of insulation should be reduced. AD-SS Type is being suggested. Two sides are covered with a softer, non-conductive silicone rubber that's conductor width is relatively small compared to the over all width.

AD-SS-W

AD-SS Type is also available in white color that is being suggested for modules with backlight because the emitted light will be reflected better.

AD-PG



If size of Rubber Connector is getting even bigger, AD-PG Type is being preferred because it's two side covered with silicone sponge.

1.2 Selection Guide

Contact Area

< 120 mm²

> 120 mm²

Type

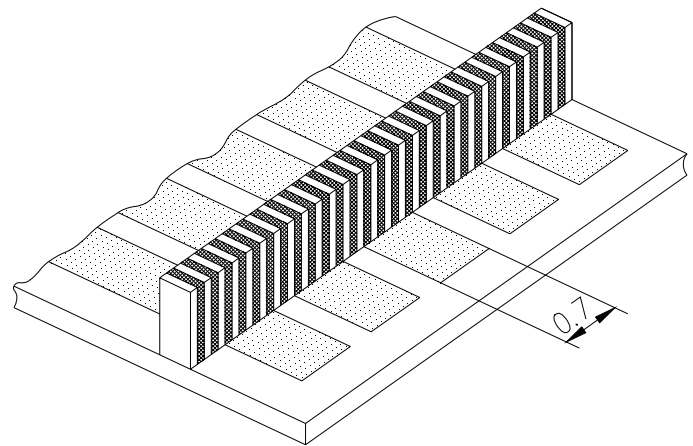
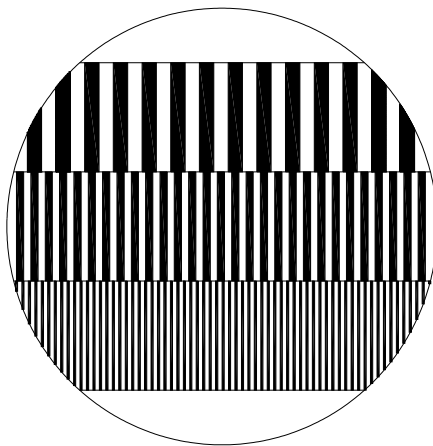
AD-LL or **AD-II**

AD-SS or **AD-PG**

1.3 Compression and Pitch

To achieve good electrical contact between PCB and LCD, there should be added c. 15 % to the height's nominal value.

Pitch should be selected this way that four or more conductive layers will contact each contact pad of PCB.



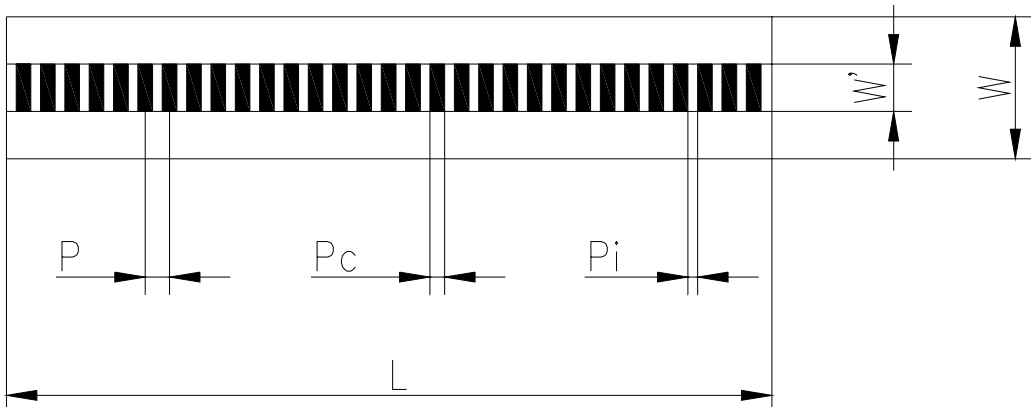
Kindly contact us for any further questions.

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1.4 Tolerance List

Item		Unit	0.10P	0.18P	0.25P
Pitch	P	mm	0.1 ±0.07	0.18 ±0.07	0.25 ±0.08
Length	L	mm	1.0~10 ±0.1	10.1~30 ±0.2	30.1~60 ±0.3
			60.1~120 ±0.4	120.1~180 ±0.6	über 180 ±0.8
Height	H	mm	0.5 ~ 5 ±0.1 - 5.1 ~ 10 ±0.15		
Width	W	mm	±0.1		
Conductor Width	Pc	mm	0.06 ±0.05	0.12 ±0.05	0.15 ±0.07
Insulator Width	Pi	mm	0.04	0.06	0.1
Standard	W'	mm	0.4 ±0.1		



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1.5 Physical Properties

Parameter Type AD-	Units			Insulator			Conductor			Side Insulator	
	LL	SS	PG	LL	SS	PG	LL	SS	PG	SS	PG
Volume Resistivity	Ohm.cm			1x10 ¹⁴			3 ~ 6			1x10 ¹¹	8x10 ¹³
Dielectric Strength	KV/mm			23~27						23~27	
Specific Gravity	g/mm ³			1.2			1.25			1.16	1.1
Hardness	Shore A			55 ±5			65 ±5			25 ±5	20 ±5
Tensile Strength	N/mm ²			7.0~8.5			5.0~6.0			7.5~9.0	3.0~4.0
Elongation	%			180~250			150~200			250~350	400~500
Insulat. Resistan. 500VDC	Ohm			10 ¹⁴						10 ¹⁴	
Temperature Range	°C			-20~100			-20~100			-20~100	
Skew	°						0°~max3°				
Current Density at 25°C	mA/mm						1				

1.6 Custom design

AD-..

YF	YH	YZ	YC
YSL	YPL	YO	Y-STICK