

Product Specification (For External Use)

Rev.	Description	Written/Date	Checked/Date	Approved/Date
A	NEW RELEASE	Maggie 01-20-2020	Jason 01-20-2020	Jason 01-20-2020
B	ADD 34 PIN	Maggie 08-08-2020	Jason 08-08-2020	Jason 08-08-2020
C	ADD 10、 24、 30、 50 PIN	Maggie 03-05-2021	Jason 03-05-2021	Jason 03-05-2021
D	Update specifications	Maggie 11-04-2021	Jason 11-04-2021	Jason 11-04-2021
E	Update drawing	Tyler 11-15-2021	Jason 11-15-2021	Jason 11-15-2021
F	Update drawing General tolerance: ± 0.10	Tyler 07-12-2022	Jason 07-12-2022	Jason 07-12-2022

**0.35mm Pitch,0.80mm Height,Board-to-Board/Board-to-FPC Connectors
(BB39L Series)**

Rating	Rated current signal pin: 0.3A /PIN HOLD DOWN:5A/PIN Rated voltage 50V AC	Operating temperature range : -40°C to +85°C Operating humidity range : 20% to 80%	Storage temperature range: -10°C to +45°C Storage humidity range : 20% to 80%
	Item	Specification	Conditions
	1.Insulation resistance	1000 MΩ min.	250V DC /one minute
	2.Withstanding voltage	No flashover or insulation breakdown.	250V AC /one minute
3.Contact resistance	Signal pin: 50 mΩ max hold down: 30 mΩ max	Subject mated contacts assembled in housing to 20mV maximum open circuit at 1mA max	
4.Temperature rise test	Test conditions: ambient temperature 25 ° C , no air convection Test time: 2H or heat balance reached (no change in temperature within 10 minutes)	The rated current temperature rise does not exceed 30° C .	
5.Vibration	No momentary disconnections of 1 micro-sec/min. And meet	Frequency :10Hz to 50Hz Half amplitude of 0.75mm 10 cycles in each of 3 axis directions for 5 minutes/cycle	
6.Humidity	No physical damage and meet 1. (Insulation Resistance) 2. (Dielectric Withstanding Voltage) 3. (Contact Resistance)	Mated Connector and apply the following test condition. Temperature: +40±2° C Duration: 240 Hours	
7.Humidity Cycling	No physical damage and meet 1. (Insulation Resistance) 2. (Dielectric Withstanding Voltage) 3. (Contact Resistance)	Mated Connector and apply the following test condition. Cycle: 10 cycles Temperature : +25 (-10) ~ 65° C Humidity : 90~98RH	
8. High and low temperature storage	The duration was 24 hours at a temperature of (-40 ±2) ° C . The duration was 24 hours at (70 ±2) ° C .	The surface should not be peeled or oxidized, rust is allowed, the rated voltage and current should reach the pre-test level, the contact resistance should be increased to 2 times of the pre-test level, the insulation resistance should be reduced to 1/2 of the pre-test level, and the voltage resistance should be reduced to 1/2 of the pre-test level.	

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9.Steady damp-heat	Constant damp heat (temperature (+55 ±2)° C , humidity (+95 ±3)%RH, 48 hours)	The surface should not be peeled or oxidized, rust is allowed, the rated voltage and current should reach the pre-test level, the contact resistance should be increased to 2 times of the pre-test level, the insulation resistance should be reduced to 1/2 of the pre-test level, and the voltage resistance should be reduced to 1/2 of the pre-test level.
10.Temperature shock	-40 /+70 ° C , temperature alternation time < 3 min; 22 cycles, 44H in total, 1 cycle = 1H low temperature + 1H high temperature	The surface should not be peeled or oxidized, rust is allowed, the rated voltage and current should reach the level before the test, the contact resistance should not be specified, but the circuit should not be disconnected, the voltage resistance should be reduced to 1/2 before the test, and the insulation resistance should be reduced to 1/10 before the test. The tin fog part rusts for 48 hours if no rust passes within 24 hours
11.Durability	No physical damage and meet 3. (Contact Resistance)	30 cycles
12.Resistance to soldering heat	No deformation of components affecting performance.	Reflow: At the recommended temperature profile Manual soldering: 350±10° C for 5±1 s Application : 3 times
13.Salt water spray	No physical damage and meet 3. (Contact Resistance)	Mated Connector and apply the following test condition. Temperature: +35±2° C Salt water density : 5±1% Duration: 48 Hours
14.Mating&Unmating Force	Mating force : 1.00N / pin max. Unmating force : 0.20N / pin min.	Operation Speed: 25 ± 3 mm Durability Cycles: 30 Cycles.

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Materials and Finishes

Connectors	Component	Material	Finish		Remarks
Socket	Insulator	LCP	Color : Black		UL94V-0
	Contacts	Phosphor bronze	plating	Contact area:Au 5u” Min,Ni 80-150u”	
				Solder area:gold flash”Min,Ni 80-150u”	
Plug	Insulator	LCP	Color : Black		UL94V-0
	Contacts	Phosphor bronze	plating	Contact area:Au 5u” Min,Ni 80-150u”	
				Solder area:gold flash,Ni 80-150u”	

Ordering information (Socket)

YXT-BB 39L- XX S 1 5 A 0 (LC)

1 2 3 4 5 6 7 8 9

1.BB: Board to Board
2.Series name: 39L W=1.98 Connectors
3.Number of positions: 10、24、30、34、40、50 PIN
4.Type:S -Socket
5.Packing: 1 (10K/R)
6.Plating: 5 (Contact area Au 5u" min Ni 80-150u" Min)
7.Hold Down: A (With hold down power)
8.Serial number: 0
9.Customer: LC

Ordering information (Plug)

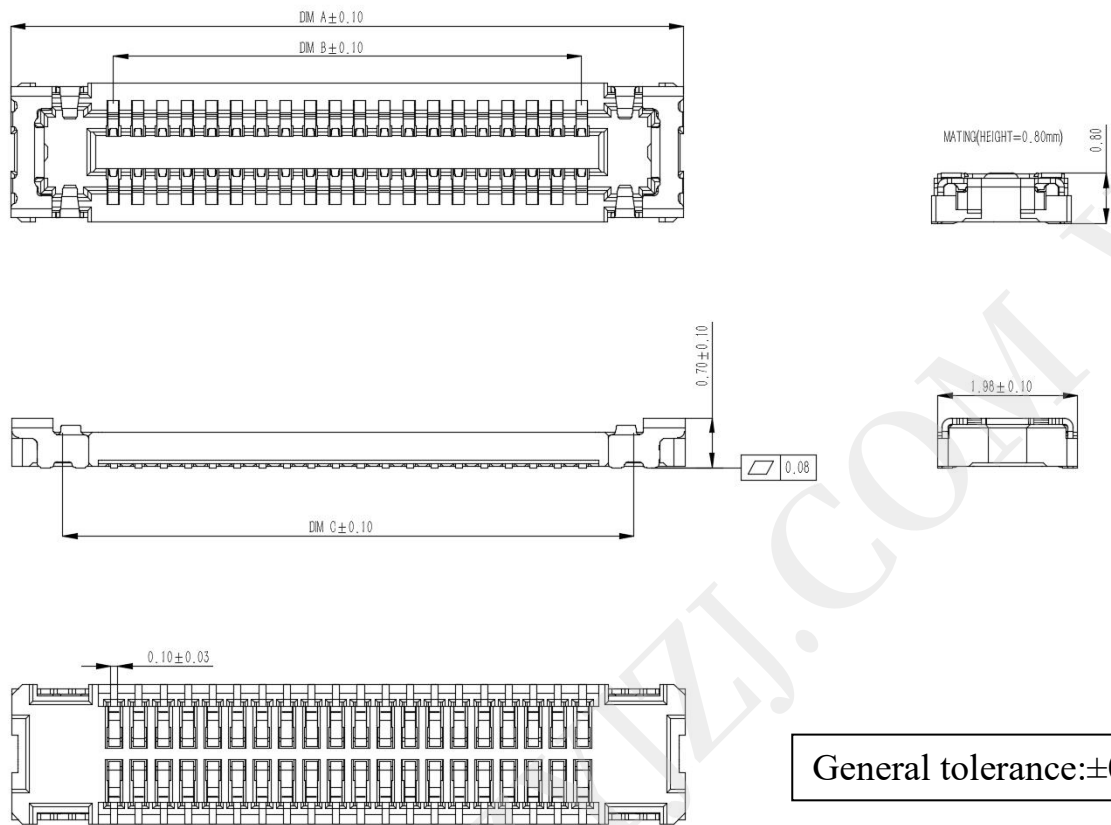
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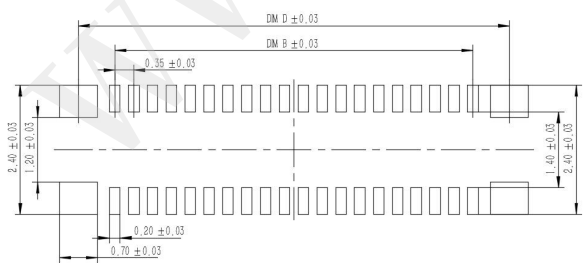
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Socket (CAD Data)



Recommended PCB mounting pattern

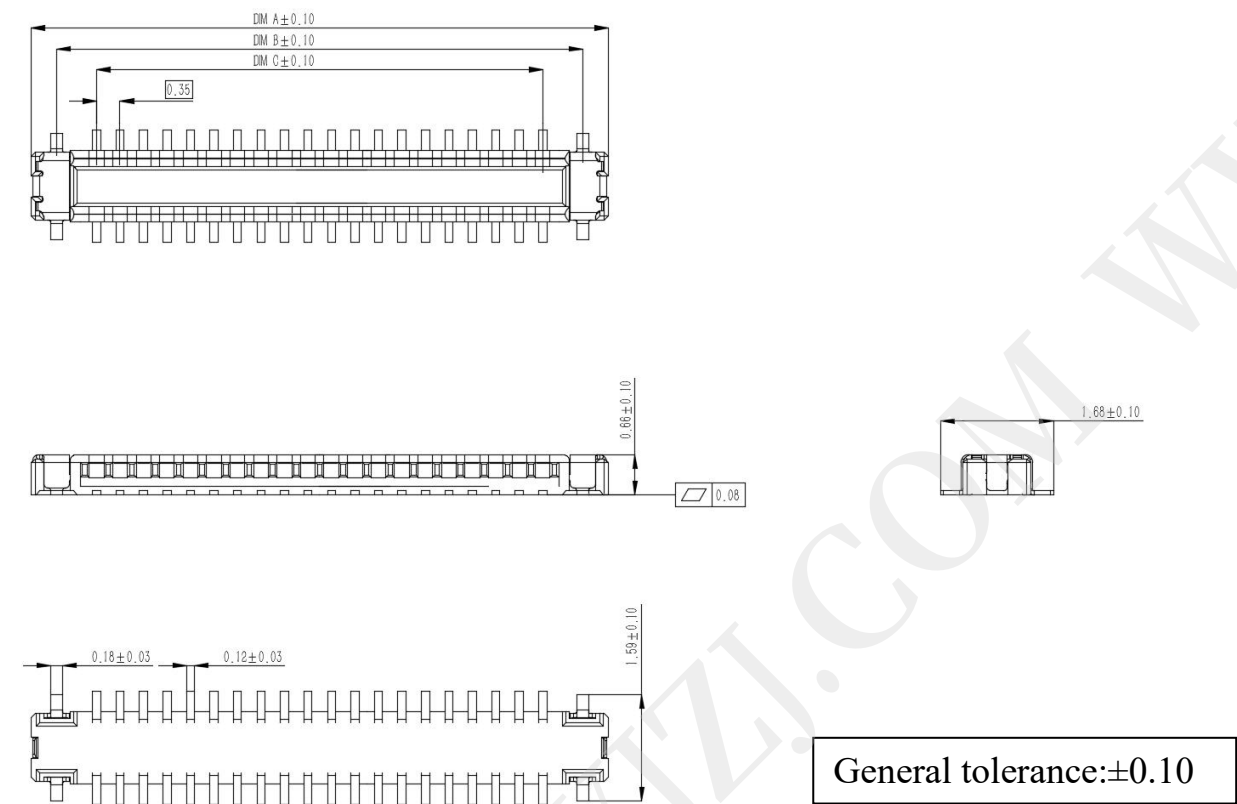
Dimension table (Unit: mm)



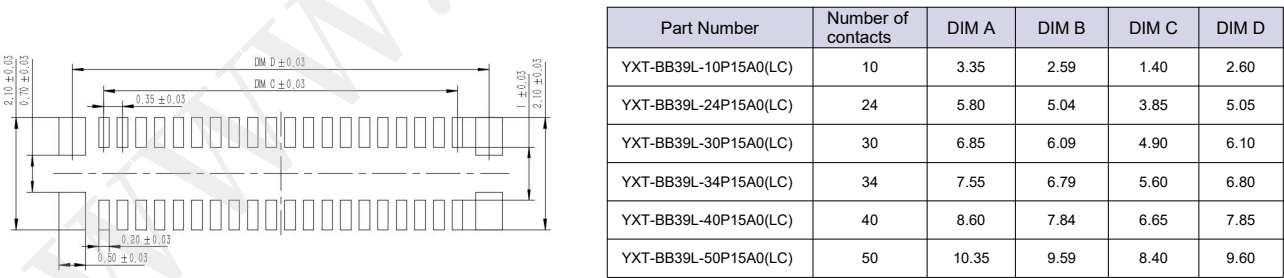
Part Number	Number of contacts	DIM A	DIM B	DIM C	DIM D
YXT-BB39L-10S15A0(LC)	10	4.30	1.40	2.86	2.75
YXT-BB39L-24S15A0(LC)	24	6.75	3.85	5.31	5.20
YXT-BB39L-30S15A0(LC)	30	7.80	4.90	6.36	6.25
YXT-BB39L-34S15A0(LC)	34	8.50	5.60	7.06	6.95
YXT-BB39L-40S15A0(LC)	40	9.55	6.65	8.11	8.00
YXT-BB39L-50S15A0(LC)	50	11.30	8.40	9.86	9.75

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Plug (CAD Data)



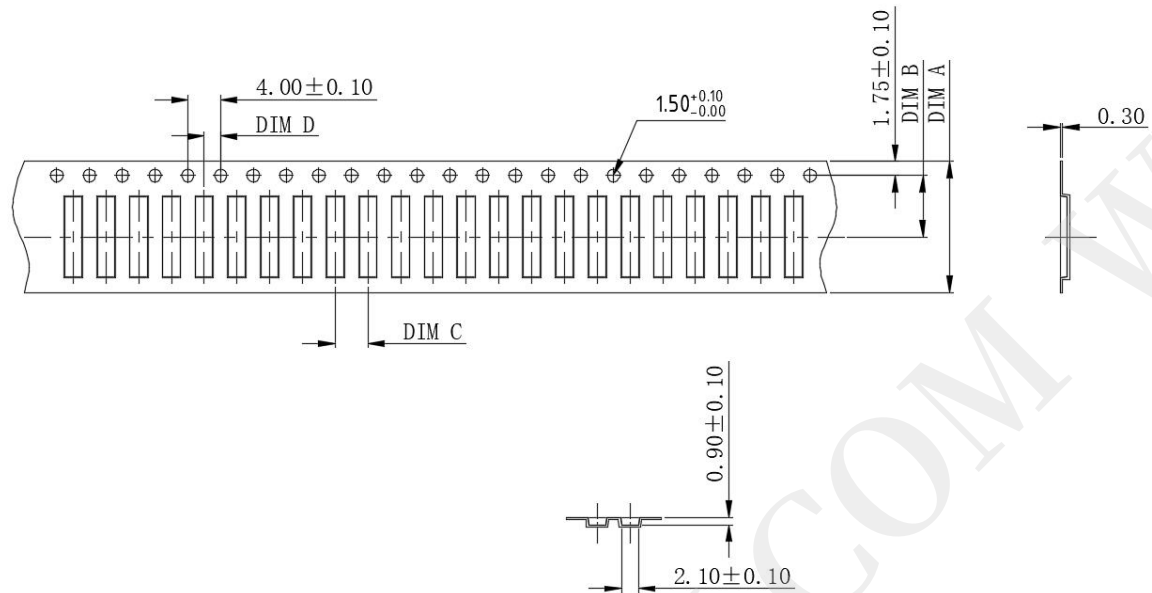
Recommended PCB mounting pattern Dimention table (Unit: mm)



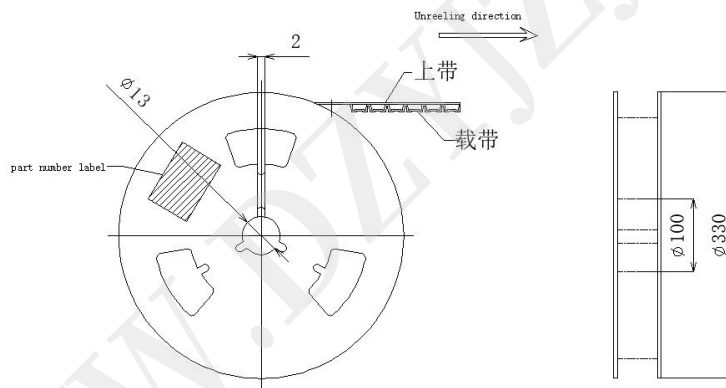
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Packing Specification

Embossed Carrier Tape Dimensions-Socket



Reel Dimensions--Socket



Dimention table (Unit: mm)

Part Number	A	B	C	D	Quantity(PC/REEL)
YXT-BB39L-10S15A0(LC)	12	5.5	4	2	10000
YXT-BB39L-24S15A0(LC)	16	7.5	4	2	10000
YXT-BB39L-30S15A0(LC)	16	7.5	4	2	10000
YXT-BB39L-34S15A0(LC)	16	7.5	4	2	10000
YXT-BB39L-40S15A0(LC)	16	7.5	4	2	10000
YXT-BB39L-50S15A0(LC)	24	11.5	4	2	10000

Instruction of application to usage

