

## 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: $\pm 0.10$	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 )**

<b>Rating</b>	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%
<b>Item</b>	<b>Specification</b>	<b>Conditions</b>	
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 : 90~98%RH	
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**

**1 2 3 4 5 6 7 8**

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

### Ordering information (Plug)

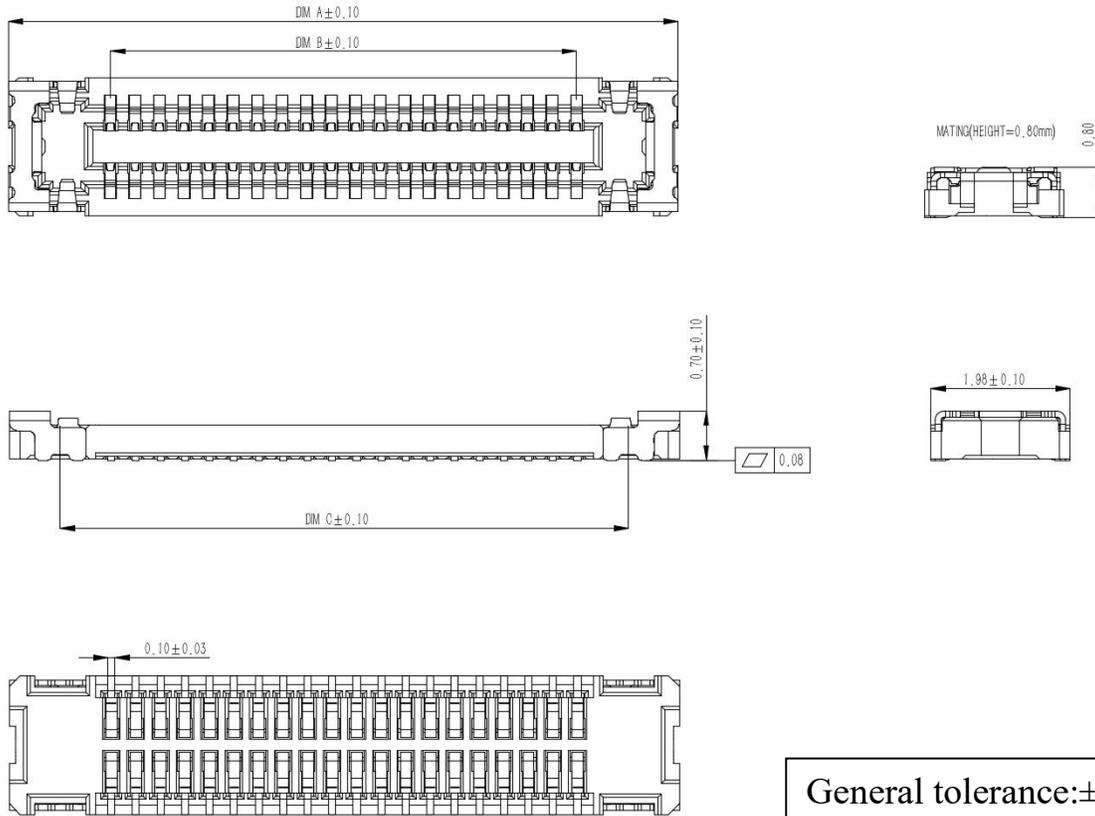
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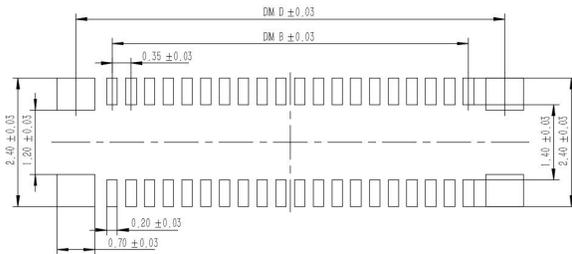
# 0.35mm Pitch,0.80mm Height,Board-to-Board/Board-to-FPC Connectors (BB39L Series)

## Socket (CAD Data)



## Recommended PCB mounting pattern

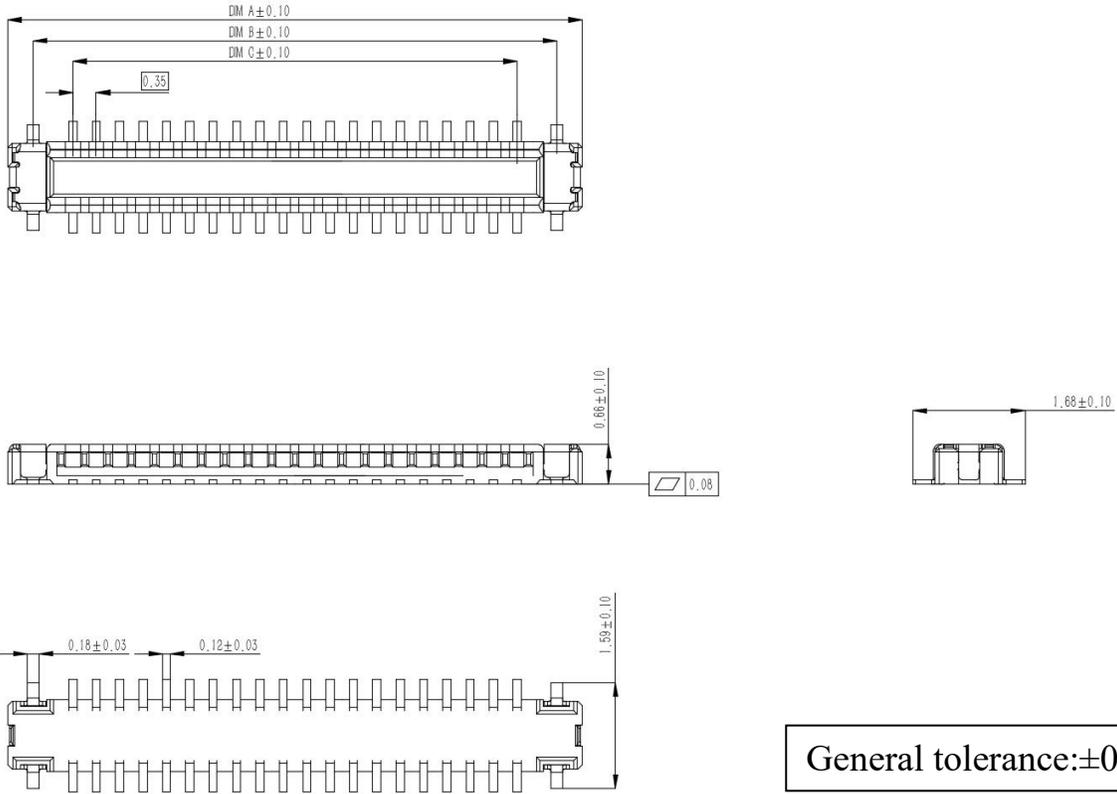
## Dimension table (Unit: mm)



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

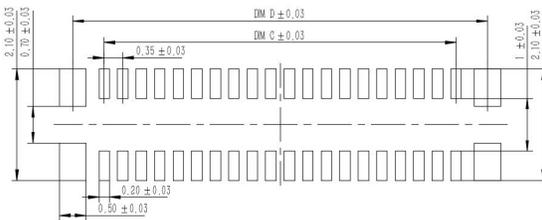
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## Plug (CAD Data)



General tolerance: ±0.10

## Recommended PCB mounting pattern Dimension table (Unit: mm)

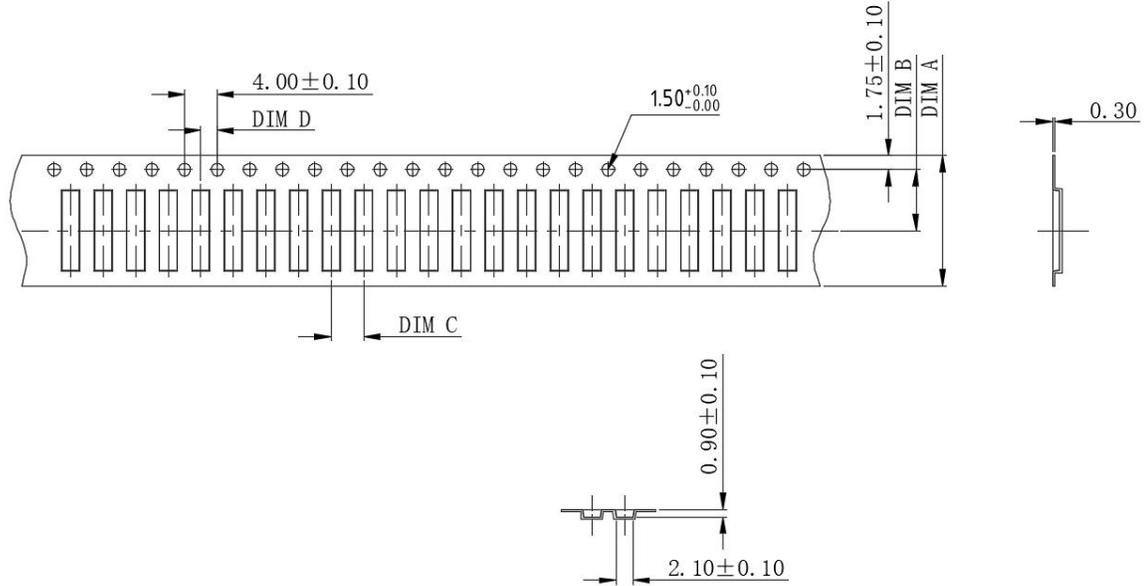


Part Number	Number of contacts	DIM A	DIM B	DIM C	DIM D
YXT-BB39L-10P15A0	10	3.35	2.59	1.40	2.60
YXT-BB39L-24P15A0	24	5.80	5.04	3.85	5.05
YXT-BB39L-30P15A0	30	6.85	6.09	4.90	6.10
YXT-BB39L-34P15A0	34	7.55	6.79	5.60	6.80
YXT-BB39L-40P15A0	40	8.60	7.84	6.65	7.85
YXT-BB39L-50P15A0	50	10.35	9.59	8.40	9.60

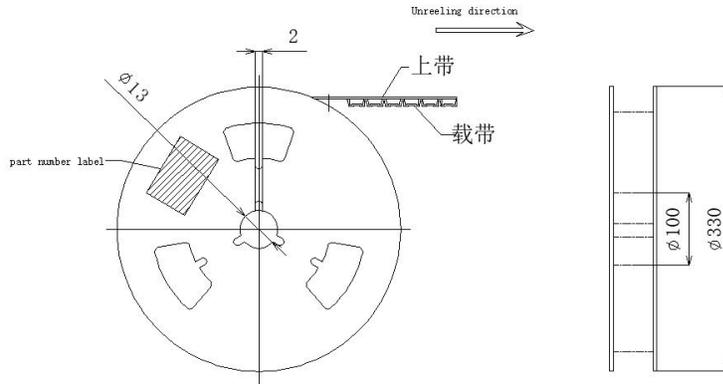
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Packing Specification

Embossed Carrier Tape Dimensions-Socket



Reel Dimensions--Socket



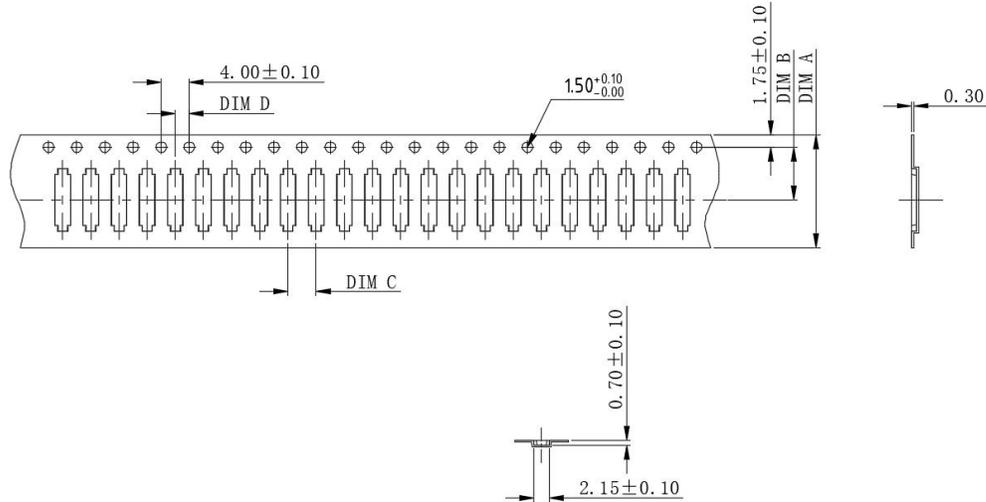
Dimension table (Unit: mm)

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

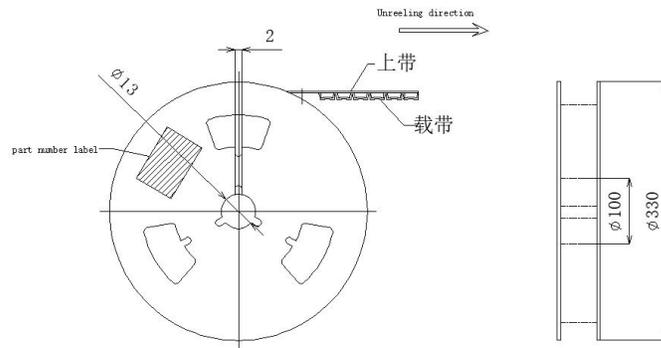
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## Packing Specification

### Embossed Carrier Tape Dimensions-Plug



### Reel Dimensions--Plug



### Dimension table (Unit: mm)

Part Number	A	B	C	D	Quantity(PC/REEL)
YXT-BB39L-10P15A0	12	5.5	4	2	10000
YXT-BB39L-24P15A0	16	7.5	4	2	10000
YXT-BB39L-30P15A0	16	7.5	4	2	10000
YXT-BB39L-34P15A0	16	7.5	4	2	10000
YXT-BB39L-40P15A0	16	7.5	4	2	10000
YXT-BB39L-50P15A0	24	11.5	4	2	10000

Instruction of application to usage

