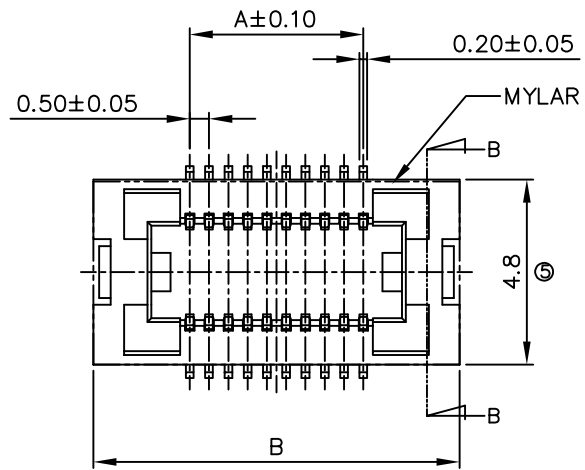
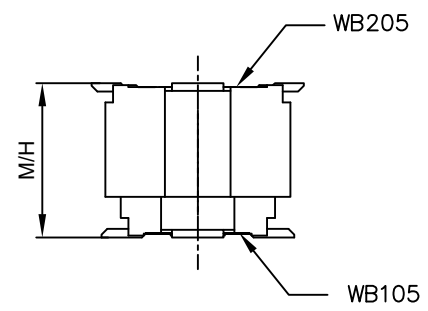
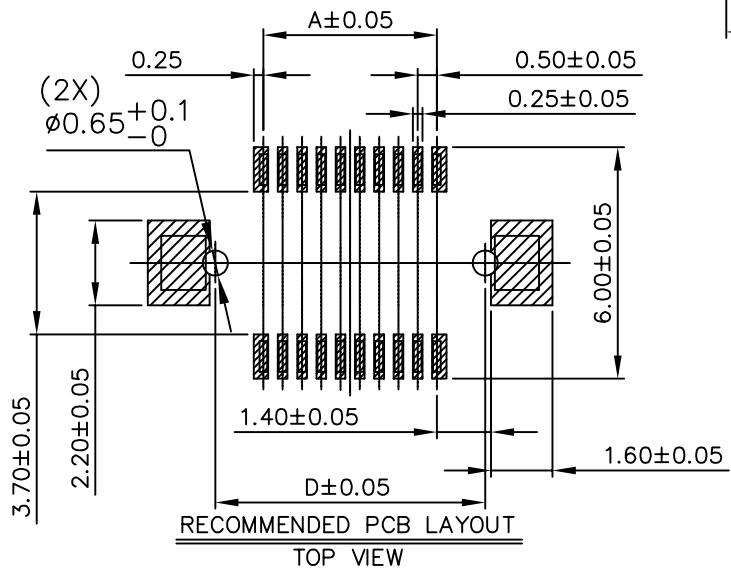
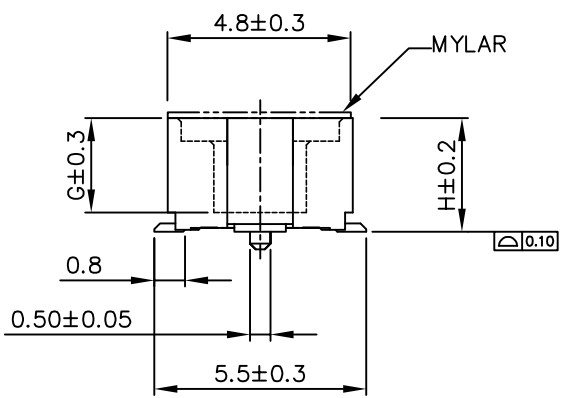
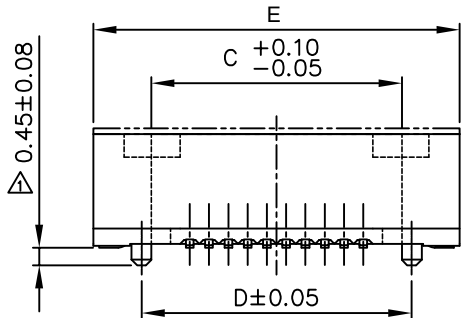




NOTES: 1.INSULATOR: HIGH-TEMP THERMOPLASTIC, UL94V-0
 COLOR: BLACK OR NATURE
 2.CONTACT: COPPER ALLOY
 PLATING: GOLD FLASH OR TIN
 3.Rated Voltage :50V AC/DC, Rated Current :0.5A AC/DC
 ORDER INFORMATION: WB205 - X XX X- 01~09 X
 PIN TYPE
 E: POST AND FITTING NAIL
 L: POST
 F: FITTING NAIL ADD MYLAR
 N: NO POST AND FITTING NAIL
 M: POST AND FITTING NAIL ADD MYLAR
 PLATING
 F: GOLD FLASH
 E: TIN
 WB205: 0.5 BOARD TO BOARD SMT V/T TYPE FEMALE
 (HALOGEN FREE)



MYLAR OPTION	
E	PIN NO.
6.0	10~18 PN
8.8	20~G 0 PN

M A I	MALE	FEMAI	G	H	PIN NO.	A	B	C	D
2.0	01	01	1.2	1.50	10	2.0	7.0	4.0	4.5
2.5	X2	X2	1.5	2.00	12	2.5	7.5	4.5	5.0
3.0		03	2.0	2.50	14	3.0	8.0	5.0	5.5
3.5	04	03	2	2.50	16	3.5	8.5	5.5	6.0
4.0		04	2.5	3.00	18	4.0	9.0	6.0	6.5
5.0		05	3.5	4.00	20	4.5	9.5	6.5	7.0
6.0		06		5.00	22	5.0	10.0	7.0	7.5
7.0		07		6.00	24	5.5	10.5	7.5	8.0
8.0		08		7.00	26	6.0	11.0	8.0	8.5
9.0		09		8.00	28	6.5	11.5	8.5	9.0
4.5	05	04	2.5	3.00	30	7.0	12.0	9.0	9.5
5.5		05	3.5	4.00	32	7.5	12.5	9.5	10.0
6.5		06		5.00	34	8.0	13.0	10.0	10.5
7.5		07		6.00	36	8.5	13.5	10.5	11.0
8.5		08		7.00	38	9.0	14.0	11.0	11.5
9.5	06	09		8.00	40	9.5	14.5	11.5	12.0
12.0		06	3.5	5.00	42	10.0	15.0	12.0	12.5
13.0		07		6.00	44	10.5	15.5	12.5	13.0
14.0	07	08		7.00	46	11.0	16.0	13.0	13.5
15.0		09		8.00	48	11.5	16.5	13.5	14.0
12.5	07	06	3.5	5.00	50	12.0	17.0	14.0	14.5
13.5		07		6.00	52	12.5	17.5	14.5	15.0
14.5		08		7.00	54	13.0	18.0	15.0	15.5
15.5	09	09		8.00	56	13.5	18.5	15.5	16.0
					58	14.0	19.0	16.0	16.5
					60	14.5	19.5	16.5	17.0
	G				62	15.0	20.0	17.0	17.5
					64	15.5	20.5	17.5	18.0
					66	16.0	21.0	18.0	18.5
	H				68	16.5	21.5	18.5	19.0
					70	17.0	22.0	19.0	19.5
					80	19.5	24.5	21.5	22.0

CUSTOMER
 GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED
 X.X ±0.10
 X.XX ±0.05
 X.XXX ANG. ±0°30'

DRAWN
Nelly Feb-22-2020
 CHECKED
 APPROVED
 SHEET 1/1

PART NO.
 5001-WB205-F80M-00-B
 TITLE?
 0.5 BOARD TO BOARD SMT V/T TYPE FEMALE

东莞市文章济美电子有限公司
 06/27/20'

REN2020062702
 REVISIONS
 Leo
 CHK
 DATE

UNIT MM
 SCALE 5?
 SIZE A4
 REV B

GROUP AND TEST SEQUENCE

[illegible]

PRODUCT SPECIFICATION

1. SCOPE :

This specification covers the 0.5 mm pitch board To board SMT type connector series.

2. PRODUCT NAME AND PART NUMBER :

Product Name	WIT Part Number
0.50mm Board To Board Connector, V/T, SMT Type Female (Lead Free)	WB205-XXXX-XXX

3. RATINGS :

Item	Standard	
Rated Voltage (MAX.)	50 V	AC/DC
Rated Current (MAX.)	0.5A	
Operating and Non-operating Temperature Range	-40 ⁰ C ~ +85 ⁰ C*	
Storage Temperature Range	-10 ⁰ C ~ +50 ⁰ C*	

*Including terminal temperature rise

4.PERFORMANCE :

4- 1 Electrical Performance

Item		Test Condition	Requirement
4-1-1	Contact Resistance	Test Current: 100 mA Max. Test Voltage: 20mV Max Test Method: MIL-STD-202F, Method 303	50 mΩ MAX.
4-1-2	Insulation Resistance	Test Voltage: 100VAC. Test Duration: 1 minutes. Test Method: MIL-STD-202, method 302	Initial: 500 MΩ Min Final: 100 MΩ Min.
4-1-3	Dielectric Strength	Test Voltage: 200V AC. Test Time: 60 sec. Test Method: MIL-STD-202, Method 301.	No Breakdown

4-2 Mechanical Performance

Item		Test Condition	Requirement	
4-2-1	Insertion Force And Withdrawal Force	Test Speed: 25±3 mm/min. Test Method: MIL-STD-1344A, Method 2016.	Insertion Force Max : 0.09kgf X total terminals	
			Withdrawal Force(Min): 0.01kgf X total terminals	
4-2-2	Terminal / Housing Retention Force	Test Speed: 25mm/min.	0.15kgf (Min)	
4-2-3	Durability	The contacts of connector shall be subject to 50 cycles of mating and unmating.	Contact Resistance	
			Initial Value	50 mΩ
			Final Value	70 mΩ

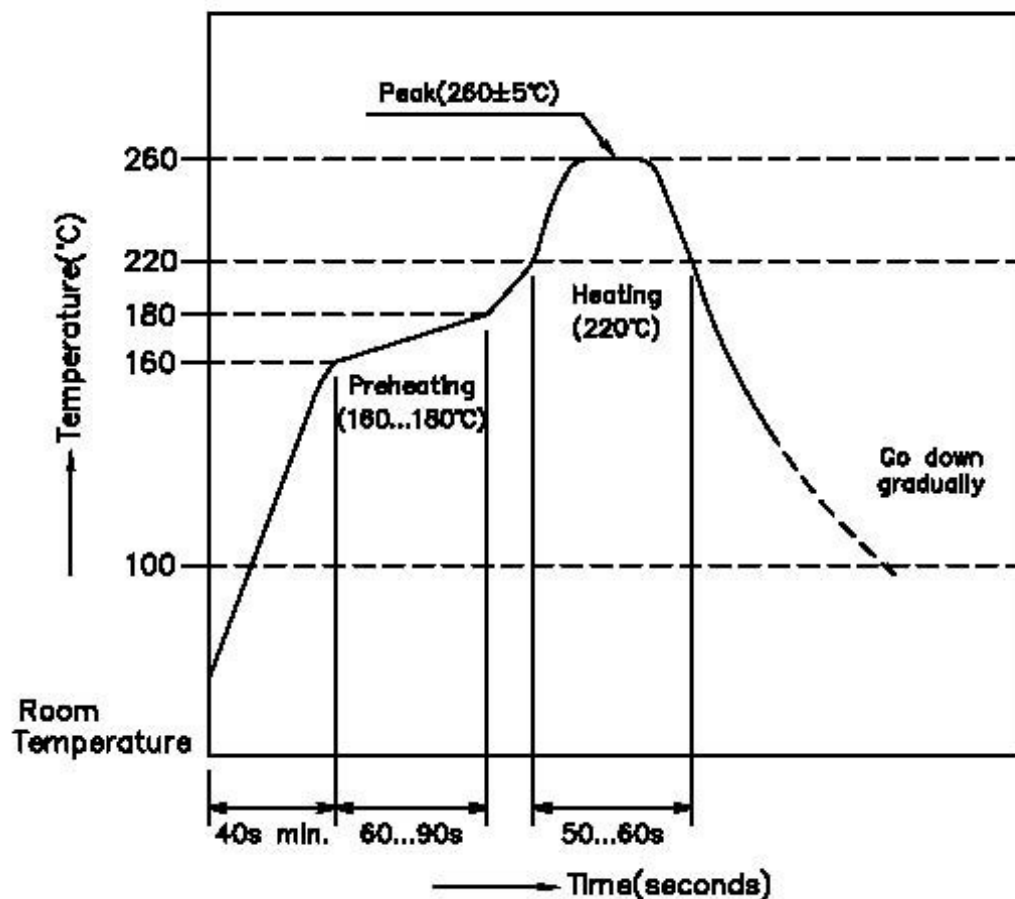
4-3 Environmental Performance and Others

Item		Test Condition	Requirement	
4-3-1	Vibration	Amplitude : 1.5 mm Frequency range: 10~55~10 Hz in 1 minute Duration: 2 hours in each X.Y.Z axes Current: 100mA. Test Method: MIL-STD-202F, Method 201	Appearance	No Damage
			Contact Resistance	70 mΩ
			Discontinuity	1μsec
4-3-2	Heat Resistance	Temperature: 85±2℃ Duration: 96 hours Test Method: MIL-STD-202, Method 108.	Appearance	No Damage
			Contact Resistance	70 mΩ
4-3-3	Cold Resistance	Temperature: -40±2℃ Duration: 96 hours Test Method: JIS C60068-2-1	Appearance	No Damage
			Contact Resistance	70 mΩ
4-3-4	Humidity	Temperature: 40±2℃ Relative Humidity: 90~95% Duration: 96 hours Test Method: MIL-STD-202F , Method 103	Appearance	No Damage
			Contact Resistance	70 mΩ
			Insulation Resistance	≥ 100MΩ
			Dielectric Strength	Must meet 4-1-3

Item		Test Condition	Requirement	
4-3-5	Solder Ability	Soldering Time : 3±0.5 sec Solder Temperature : 245±5℃ Test Method: MIL-STD-202F , Method 208G	Solder Wetting	95% Of Immersed Area Must Show No Voids, Pin Holes
4-3-6	Resistance To Soldering Heat	Soldering Time : 10±0.5 sec Solder Temperature : 260±5℃ Test Method: MIL-STD-202F , Method 210A	Appearance	No Damage
4-3-7	Steam Aging	Steam Aging Temperature : 98±2℃ Duration: 8 hours Solder Temperature : 245±5℃ Soldering Time : 3±0.5 sec Test Method: MIL-STD-202F , Method 208	Appearance	No Damage
			Solder Wetting	95% Of Immersed Area Must Show No Voids, Pin Holes
4-3-8	Salt Spray	Chamber Temperature : 35±2℃ Air Tank Temperature : 47±1℃ Salt Solution : 5 ± 0.5% Duration : 48 hours Test Method: MIL-STD-202 , Method 101D	Appearance	No Damage
			Contact Resistance	70 mΩ
4-3-9	Temperature Cycling	5 cycles of : a) - 55 ±3℃ 30 minutes b) +25 ±3℃ 30 minutes c)+ 85 ±2℃ 30 minutes Test Method: JIS C0025	Appearance	No Damage
			Contact Resistance	70 mΩ
4-3-10	Temperature Rise Test	Carrying rated current load. EIA-364-70B	Temperature Rise : 30 °C (MAX)	

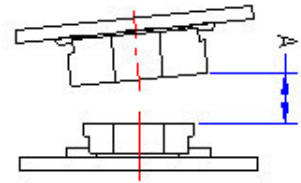
INFRARED REFLOW CONDITION

- 1) Ascending time to preheating temperature 170°C shall be 40 seconds minimum.
- 2) Preheating shall be fixed at 160...180°C for 60...90 seconds.
- 3) Heating shall be fixed at 220°C for 50...60 seconds.
- 4) At $260\pm 5^{\circ}\text{C}$ peak shall be 10 seconds maximum.



Precaution in the connector handing.

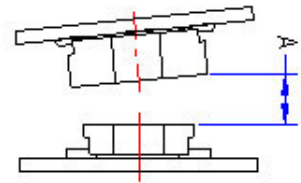
1. Please try that the connector parallel is mated is mated
Into or unmated form the counterpart connector
in parallel.



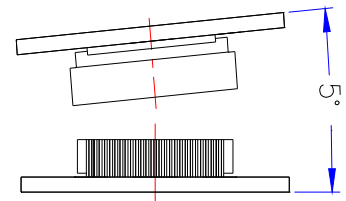
2. Mating (into the counterpart connector)

At the time of mating please do not continue to mate the
connector if there is the gap.

A to the one side, please mate the connectors when the both
guides are guided.

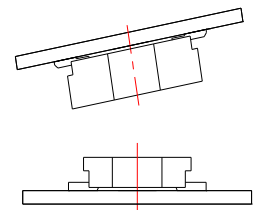


When mating plug with receptacle obliquely ,please make
mating within an angle of 5° .

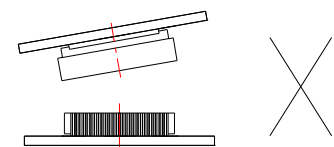


3. Unmating (from the counterpart connector)

Please do not extract the one side of the printed circuit board.
Please extract the printed circuit board in parallel with the
connector.



4. Please do not bend the printed circuit board in the arrow
direction.



5. After mating connectors , fix the PCB/PWB in order not for them to disengage.

COPPER ALLOY SPECIFIC

Article	Standard NO	Dimension & Tempe
C2680	JIS H 3100	0.2mm X 8.5mm RH

Chemocal Compositions (%)									
Element	Cu	Pb	Fe	Sn	Zn	P	Ni	Mn	Mg
Spec.	64~68	0.0500↓	0.05↓	—	REM	—	—	—	—
Actual	65.21	0.0001	0.01	—	REM	—	—	—	—

Mechanical Properties.								
Item	Grain Size	Hardness	Tension Strength	Elongation	Electrical Conductivity	Bending Test	Surface Roughness	Camber
Unit	mm	HV	Kgf/mm	%	% IACS	180 °	Ra(μm)	mm/1M
Spec.	—	160~175	52~62	8↑	—	—	—	—
Actual	—	164	53.9	16.3	—	—	—	—