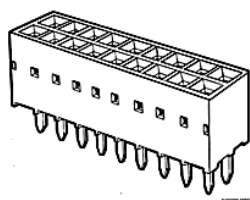


**68683-305LF - DUBOX™ : 10  
Position PCB Mounted  
Receptacle, Through Mount,  
Top Entry, Double Row**



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### Mating Half

▷ 77313-101-10LF

▷ 95278-101-10LF

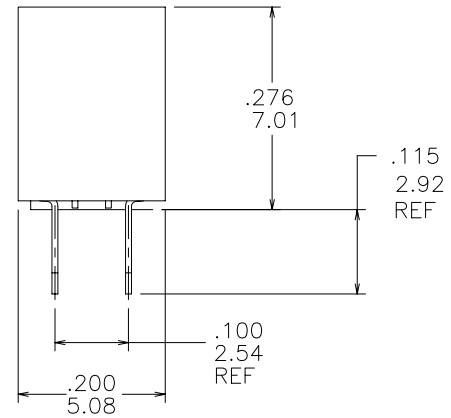
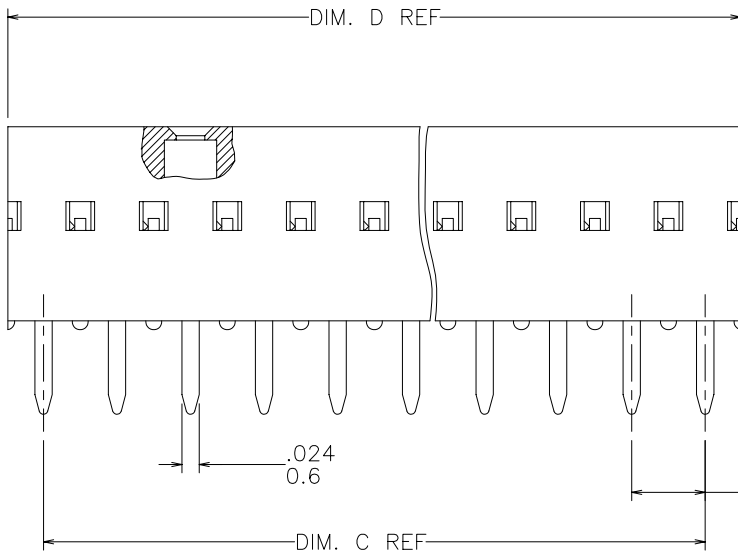
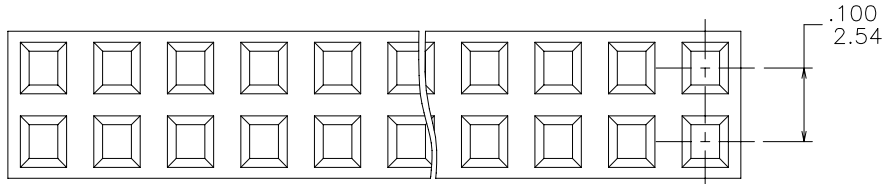
### Specifications

<b>General</b>	
Hold Down Style	No Locating Pegs
Number of contacts (per row)	5
Number of contacts (Total)	10
Number of rows	2
Orientation	Vertical
Packaging	Tube
Mating half	Mates with 0.64 mm (0.025 in.) Square pins.
Series Number	68683
<b>Dimensional</b>	
Thickness (Board)	1.6 mm (0.062 in.) or 2.36 mm (0.093 in.)
Footprint (Board)	2.54 mm x 2.54 mm (0.1 in. x 0.1 in.)
<b>Electrical</b>	
Current rating	3A max. per Contact/2A max. per Contact for Full Load
Resistance (Contact)	15 milli ohms Initial, 20 milli ohms After test
Resistance (Insulation)	1000 M-ohms
Voltage rating	1000V rms
<b>Mechanical</b>	
Insertion force	1.31N (145 gf) max. per Contact
Withdrawal Force	0.3N (30 gf) min. per Contact
<b>Mounting</b>	
Solder process	Wave IR Vapor - Phase
<b>Physical</b>	
Color (Housing)	Black
Material (Contact)	Phosphor Bronze

<b>Material (Housing)</b>	High Temperature Thermoplastic
<b>Plating (Contact area)</b>	0.76 µm (30 µin.) Gold
<b>Plating (Tail)</b>	2.54 µm (100 µin.) Tin
<b>Underplating (Contact)</b>	1.27 µm (50 µin.) Nickel
<b>Flammability rating</b>	UL 94 V-0
<b>Temperature (Range)</b>	-65 °C to +125 °C
<b>Approvals / Certifications</b>	
<b>UL File Number</b>	E66906
<b>CSA File Number</b>	LR46923
<b>Approvals / Certifications</b>	UL and CSA Approved

PRODUCT NO.  
SEE TABLE

68683 - XXX - LF  
 LEAD FREE OPTION  
 PACKAGING OPTIONS .OMIT IF NOT REQUIRED.  
 NO. OF POSITIONS PER ROW  
 PLATING CODE  
 BASE PART NUMBER



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mat'l. code		surface		tolerance		projection		product family	
-		ISO 1302 ✓		ISO 406 ISO 1101		⊕		DUBOX	
ltr	ecn	no	dr	date		tolerances unless otherwise specified		title	
K	V10122	GIP	01/08/02	angles		.xx ±.01/.3		DUBOX DBL. ROW VERT.	
L	V11677	GIP	01/22/02	linear		.xxx ±.005/.13		CARD CONNECTOR ASS'Y.	
M	V03-0309	HTB	04/29/03	0°±2'		.xxxx ±.0020/.051		scale 4:1	
N	V05-0463	DPU	06/28/05	dr		J. SHREINER 02/05/91		dwg no	
P	M06-0237	MN	06/19/06	enfr		M. HAHN 02/05/91		sheet 1 of 4 size	
R	M06-0433	AGS	10/31/06	chr		M. HAHN 02/05/91		68683 A3	
S	M07-0203	MHT	5/01/07	appd		M. HAHN 02/05/91		type Product Customer Drawing	
sheet	revision	S	S	S	S	S	S	S	S
index	sheet	1	2	3	4				

form: A3

PRODUCT NO NOTE 8	PLATING CONTACT AREA	PLATING SOLDER TAIL	
68683-2XX	15u"/.38u Au MIN OVER 50u"/1.27u Ni MIN	100μ"/160μ" 2.54μ/4.06μ <sup>SN</sup>	SEE NOTE 11
68683-3XX	30u"/.76u Au MIN OVER 50u"/1.27u Ni MIN	100μ"/160μ" 2.54μ/4.06μ <sup>SN</sup>	SEE NOTE 11
68683-4XX	100μ"/160μ" 2.54μ/4.06μ <sup>SN</sup>	100μ"/160μ" 2.54μ/4.06μ <sup>SN</sup>	
68683-6XX	30u"/.76u Au MIN OVER 50u"/1.27u Ni MIN	100μ"/160μ" 2.54μ/4.06μ <sup>SN</sup>	SEE NOTE 11
68683-8XX	30u"/.76u Au MIN OVER 50u"/1.27u Ni MIN	100μ"/160μ" 2.54μ/4.06μ <sup>SN</sup>	OBSOLETE

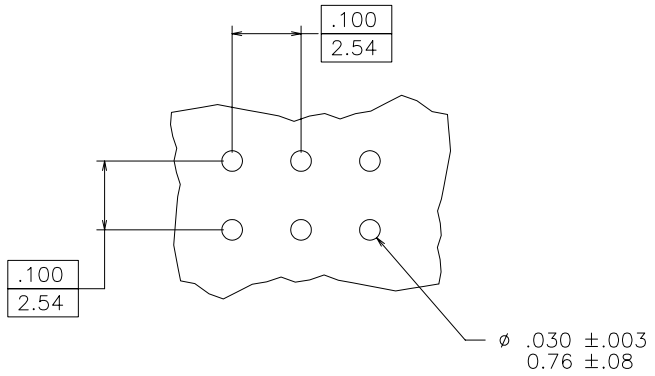


FIGURE A

NOTES:

- MATERIAL TERMINAL: PHOSPHOR BRONZE,
- RECOMMENDED APPLICATION DATA:
  - RECOMMENDED HOLE PATTERN IS SHOWN IN FIGURE A.
  - ALL MATING PINS TO BE .025/.64 SQUARE ON TRUE CENTER OF GIVEN TERMINAL SPACINGS WITHIN .015/.38 DIA.
  - SUGGESTED MATING PIN LENGTH .210±.020/5.33±.51
  - RECOMMENDED PC BOARD THICKNESS: .062/1.58
- MATERIAL HOUSING P.P.S. FILLED, COLOR BLACK, FLAME RETARDANT PER UL 94V-0  
THIS PART WILL WITHSTAND EXPOSURES TO 260°C PEAK TEMPERATURE FOR 20 SECONDS IN WAVE SOLDER, INFRA-RED OR VAPOR PHASE SOLDER PROCESS.
- FCI, FCI FINAL PART NUMBER AND DATE CODE TO BE MARKED ON TUBE LABEL.
- PREPLATED, STAMPED TERMINALS.
- PART NUMBER WITH SUFFIX "U" IS FOR SAWING PURPOSES ONLY.
- STANDARD TUBE PACKAGE PER BUS-14-097/3.
- ADD LF SUFFIX AT THE END OF PART NUMBER FOR LEAD FREE OPTION.
- THESE PRODUCTS MEETS EUROPEAN UNION DIRECTIVES AND OTHER COUNTRY REGULATION AS DESCRIBED IN GS-22-008.
- "THIS PRODUCT HAS 100% TIN PLATING IN THE INTERFACE AND HAS NOT BEEN TESTED FOR WHISKER GROWTH IN ALL INTERCONNECT ENVIRONMENT".
- PLATING OPTIONS:  
MAY BE EITHER GOLD OR GXT PLATED AT MANUFACTURER'S OPTION.

mat'l. code		surface		tolerance		projection		product family	
-		ISO 1302 ✓		ISO 406 ISO 1101		⊕		DUBOX	
ltr		ecn		no		dr		date	
S									
angles		linear		.xx ±.01/.3		INCH/MM		title	
0°±2'				.xxx ±.005/.13		scale 4:1		DUBOX DBL. ROW VERT. CARD CONNECTOR ASS'Y.	
dr		J. SHREINER		02/05/91		FCI		dwg no	
enr		M. HAHN		02/05/91				sheet 2 of 4 size	
chr		M. HAHN		02/05/91				68683 A3	
appd		M. HAHN		02/05/91				type Product Customer Drawing	
sheet index		revision sheet							

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PRODUCT NUMBER	NO. OF POSITION	C DIM	D DIM	LF OPTION
68683-Y02	2 X 2	.100/2.54	.217/5.51	NOTE 8
-Y03	2 X 3	.200/5.08	.317/8.05	
-Y04	2 X 4	.300/7.62	.417/10.59	
-Y05	2 X 5	.400/10.16	.517/13.13	
-Y06	2 X 6	.500/12.70	.617/15.67	
-Y07	2 X 7	.600/15.24	.717/18.21	
-Y08	2 X 8	.700/17.78	.817/20.75	
-Y09	2 X 9	.800/20.32	.917/23.29	
-Y10	2 X 10	.900/22.86	1.017/25.83	
-Y11	2 X 11	1.000/25.40	1.117/28.37	
-Y12	2 X 12	1.100/27.94	1.217/30.91	
-Y13	2 X 13	1.200/30.48	1.317/33.45	
-Y14	2 X 14	1.300/33.02	1.417/35.99	
-Y15	2 X 15	1.400/35.56	1.517/38.53	
-Y16	2 X 16	1.500/38.10	1.617/41.07	
-Y17	2 X 17	1.600/40.64	1.717/43.61	
-Y18	2 X 18	1.700/43.18	1.817/46.15	
-Y19	2 X 19	1.800/45.72	1.917/48.69	
-Y20	2 X 20	1.900/48.26	2.017/51.23	
-Y21	2 X 21	2.000/50.80	2.117/53.77	
-Y22	2 X 22	2.100/53.34	2.217/56.31	
-Y23	2 X 23	2.200/55.88	2.317/58.85	
-Y24	2 X 24	2.300/58.42	2.417/61.39	
68683-Y25	2 X 25	2.400/60.96	2.517/63.93	



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mat'l. code		surface		tolerance		projection		product family	
-		ISO 1302 ✓		ISO 406 ISO 1101				DUBOX	
ltr	ecn	no	dr	date		tolerances unless otherwise specified		title	
S						angles linear .xx ±.01/.3 .xxx ±.005/.13 .xxxx ±.0020/.051			
						0'±2'		scale 4:1 	
				dr	J. SHREINER	02/05/91		title DUBOX DBL. ROW VERT. CARD CONNECTOR ASS'Y.	
				enfr	M. HAHN	02/05/91		dwg no 68683	
				chr	M. HAHN	02/05/91		sheet 3 of 4 size A3	
				appd	M. HAHN	02/05/91		type Product Customer Drawing	
sheet index	revision sheet								

PRODUCT NUMBER	NO. OF POSITION	C DIM	D DIM	LF OPTION
68683-Y26	2 X 26	2.500/63.50	2.617/66.47	NOTE 8
-Y27	2 X 27	2.600/66.04	2.717/69.01	
-Y28	2 X 28	2.700/68.58	2.817/71.55	
-Y29	2 X 29	2.800/71.12	2.917/74.09	
-Y30	2 X 30	2.900/73.66	3.017/76.63	
-Y31	2 X 31	3.000/76.20	3.117/79.17	
-Y32	2 X 32	3.100/78.74	3.217/81.71	
-Y33	2 X 33	3.200/81.28	3.317/84.25	
-Y34	2 X 34	3.300/83.82	3.417/86.79	
-Y35	2 X 35	3.400/86.36	3.517/89.33	
-Y36	2 X 36	3.500/88.90	3.617/91.87	
-Y37	2 X 37	3.600/91.44	3.717/94.41	
-Y38	2 X 38	3.700/93.98	3.817/96.95	
-Y39	2 X 39	3.800/96.52	3.917/99.49	
-Y40	2 X 40	3.900/99.06	4.017/102.03	
-Y41	2 X 41	4.000/101.60	4.117/104.57	
-Y42	2 X 42	4.100/104.14	4.217/107.11	
-Y43	2 X 43	4.200/106.68	4.317/109.65	
-Y44	2 X 44	4.300/109.22	4.417/112.19	
-Y45	2 X 45	4.400/111.76	4.517/114.73	
-Y46	2 X 46	4.500/114.30	4.617/117.27	
-Y47	2 X 47	4.600/116.84	4.717/119.81	
-Y48	2 X 48	4.700/119.38	4.817/122.35	
-Y49	2 X 49	4.800/121.92	4.917/124.89	
68683-Y50	2 X 50	4.900/124.46	5.017/127.43	
68683-Y50U	2 X 50	4.900/124.46	5.017/127.43	

SEE NOTE 6



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mat'l. code		surface		tolerance		projection		product family	
-		ISO 1302		ISO 406				DUBOX	
ltr		ecn no		date		tolerances unless otherwise specified		title	
S						angles linear .xx ±.01/.3 .xxx ±.005/.13 .xxxx ±.0020/.051		INCH/MM scale 4:1	
						dr		J. SHREINER 02/05/91	
						enr		M. HAHN 02/05/91	
						chr		M. HAHN 02/05/91	
						appd		M. HAHN 02/05/91	
sheet index		revision sheet							
								title DUBOX DBL. ROW VERT. CARD CONNECTOR ASS'Y. dwg no 68683 sheet 4 of 4 size A3 type Product Customer Drawing	

form: A3