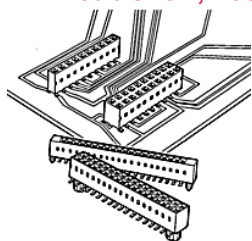


**89898-310LF - DUBOX™ : 20
Position Vertical Card
Connector, Surface Mount,
Double row, Dual entry**



www.fci.com

Mating Half

▷ 77313-101-20LF

▷ 95278-101-20LF

Specifications

General

Hold Down Style	No Locating Pegs
Number of contacts (per row)	10
Number of contacts (Total)	20
Number of rows	2
Orientation	Vertical
Packaging	Tube
Mating half	Mates with 0.64 mm (0.025 in.) Square pins.
Series Number	89898

Dimensional

Thickness (Board)	1.6 mm (0.062 in.) or 2.36 mm (0.093 in.)
Footprint (Board)	2.54 mm x 7.2 mm (0.1 in. x 0.283 in.)

Electrical

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)	100000 M-ohms
Voltage rating	1000V rms

Mechanical

Insertion force	1.50N (150 gf) per Contact
Withdrawal Force	0.3N (30 gf) min. per Contact

Mounting

Solder process	Compatible with Wave, Vapor - Phase
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Physical

Color (Housing)	Grey
Material (Contact)	Phosphor Bronze
Material (Housing)	High Temperature Thermoplastic
Plating (Contact area)	0.76 µm (30 µin.) Gold
Plating (Tail)	2.54 µm (100 µin.) Tin
Underplating (Contact)	1.27 µm (50 µin.) Nickel
Flammability rating	UL 94 V-0

Temperature (Range)	-65 °C to +125 °C
Approvals / Certifications	
UL File Number	E66906
Approvals / Certifications	UL and CSA Approved

PRODUCT NUMBER

89898-YXXZHFLF

WHEN NEEDED, SUFFIX LETTER "LF" INDICATES THE PRODUCT IS RoHS COMPATIBLE, SEE NOTE 6

OPTION LETTERS, NOTE 1b, OMIT FROM PRODUCT NUMBER IF NOT APPLICABLE

A - PRODUCT WITH PICK UP CAP IN TAPE & REEL, SEE TA856.

B - PRODUCT WITH PICK UP CAP PACKED IN TUBE.

K - PRODUCT WITHOUT PICK UP CAP IN TAPE & REEL.

NUMBER OF POSITIONS PER ROW: 02 TO 30. OVER THAN 30 POSITIONS ON SPECIAL REQUEST.

PLATING CODE

3= 0.76µm GOLD ON CONTACT AREA.
3.81µm TIN-LEAD ON TAIL.
4= 5µm TIN-LEAD ON CONTACT AREA.

3.81µm TIN-LEAD ON TAIL.

WHEN SUFFIX "LF" IS REQUIRED, 2µm MIN MATTE TIN OVER 1.27 MIN Ni IS SUPPLIED INSTEAD OF SnPb.

NOTES:

- 1a- HOUSING & PICK UP CAP MAT'L: THERMOPLASTIC GLASS FILLED FLAME RETARDANT PER UL 94 V-0 COLOR: GREY.
- b- HIGH TEMPERATURE PLASTIC 30% GLASS REINFORCED NON HALOGEN FLAME RETARDED MOLDING COMPOUND COLOR BLACK.
- 2 - TERMINAL MATERIAL: PHOSPHOR BRONZE.
- 3 - PACKAGING:
2 UP TO 4 POSITIONS PRODUCT PACKED IN PLASTIC BOX.
5 UP TO 30 POSITIONS PRODUCT PACKED IN TUBE.
WHOLE 89898-304B PACKED IN TUBE.
- 4 - TO DETERMINE DIMENSIONS:
N = NUMBER OF POSITIONS PER ROW
EXAMPLE: 8 POS: (N x 2.54) - 0.08 = 20.24 mm.
- 5 - RECOMMENDED IR PROFILE PER TA842.
- 6 - RoHS COMPATIBLE PRODUCT SPECIFICATIONS

a - PLATING:

- "LF" MEANS THE PRODUCT IS LEAD-FREE, 2µm MINIMUM MATTE TIN OVER 1.27µm MINIMUM NICKEL UNDERPLATE.

b - MANUFACTURING PROCESS COMPATIBILITY

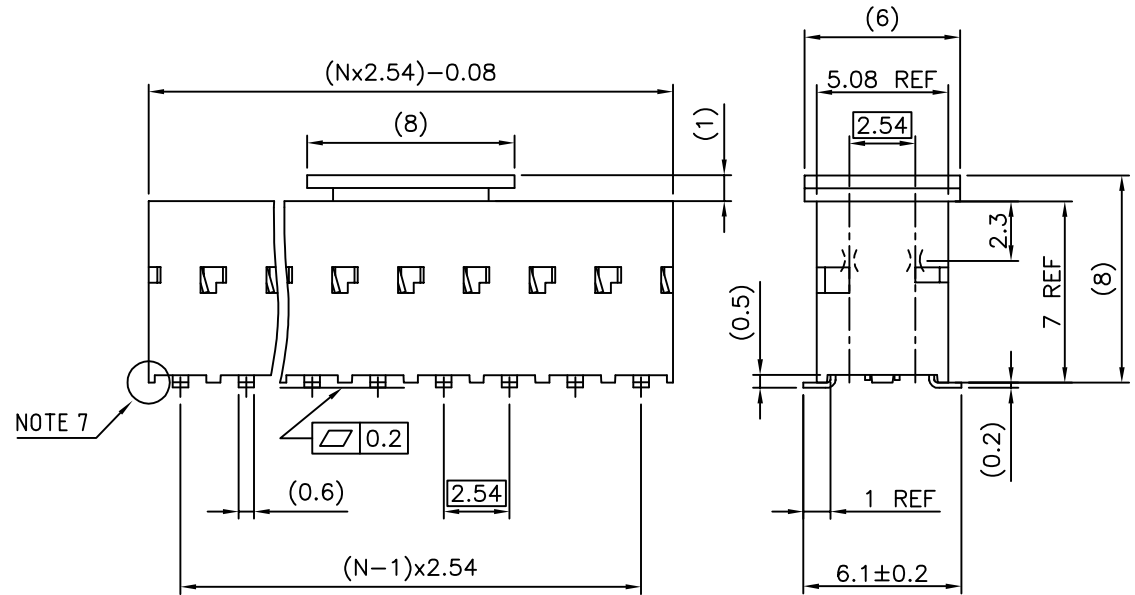
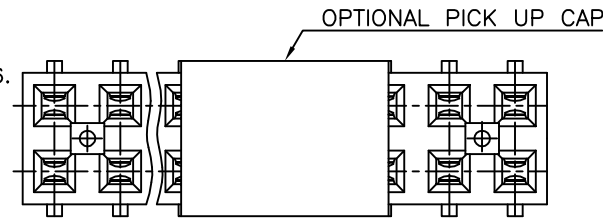
- THE HOUSING WILL WITHSTAND EXPOSURE TO 260°C PEAK TEMPERATURE FOR 30 SECONDS MAX IN A CONVECTION INFRA-RED OR VAPOR PHASE OR REFLOW OVEN.

c - LABELING:

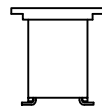
- MEETS PACKAGING SPECS AS PER GS-14-920

d - LEGAL STATEMENT: SEE GS-22-008

7 - END STAND-OFFS FOR 2x2 UP TO 2x5 POS
NO END STAND-OFFS FOR 2x6 UP TO 2x50 POS



NOTE 7



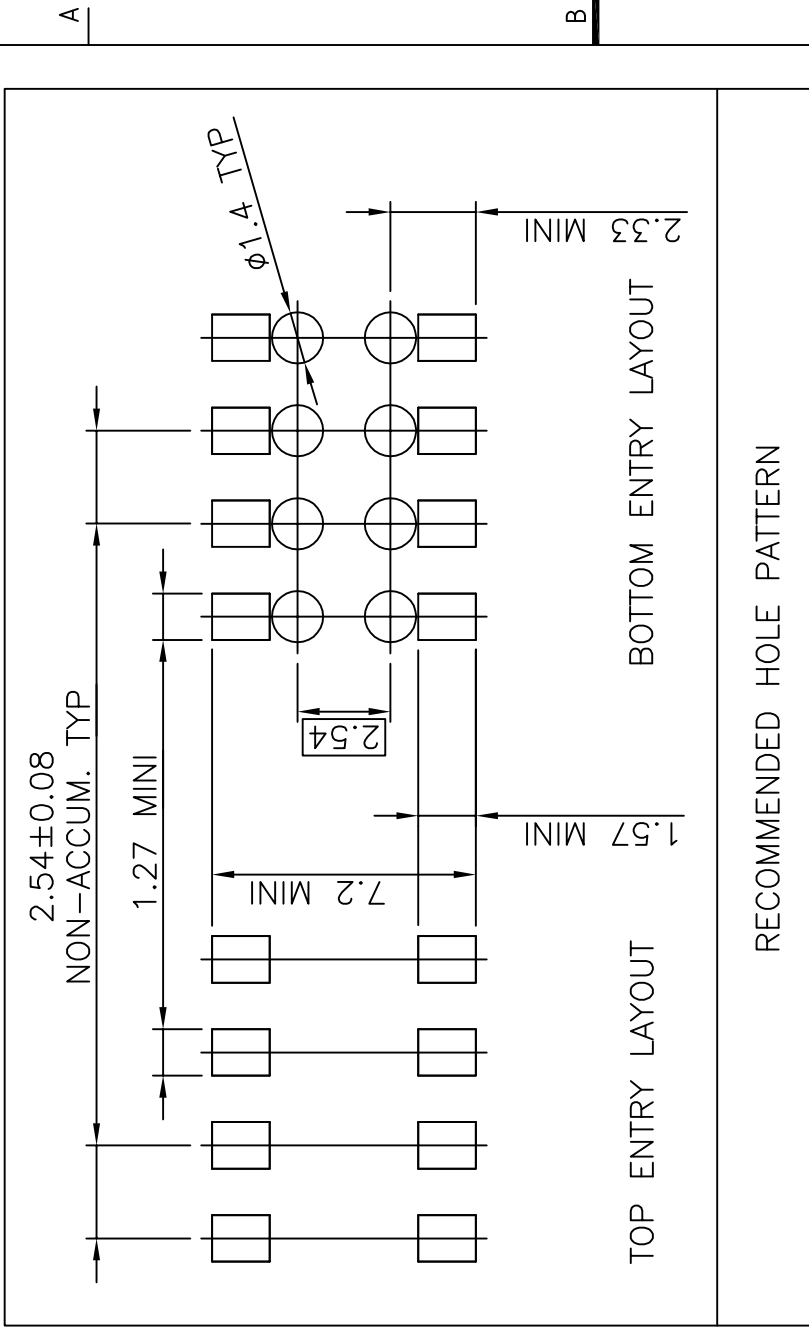
CAP ORIENTATION FOR 2x2 POSITIONS ONLY

mat'l. code		surface		tolerance		projection		product family		
SEE NOTE 1 & 2		ISO 1302		ISO 406 ISO 1101		mm		DUBOX		
ltr	ecn no	dr	date	tolerances unless otherwise specified		mm		title		
AE	F12-0047	JCO	12.07.16	angles	.x ±0.3	mm		SMT		
				linear	.xx ±0.13	scale 5:1		BtB RECEPT.		
					.xxx ±0.05			dwg no		
Y	F06-0137	DLE	06.02.27					sheet 1 of 2		
AA	F06-0204	DLE	06.06.23	dr	P.NIZZI	95.06.21			size	
AB	F09-0210	JCO	09.10.27	enfr	JM.PHAMVAN	95.06.21			A3	
AC	F11-0016	JCO	11.01.31	chr	P.NIZZI	95.06.21				
AD	F11-0043	JCO	12.02.22	appd	JM.P	95.06.21				
sheet	revision	AD	C							
index	sheet	1	2							

2



1



A

B

C

D

2

1

form: A4

Fcconnect.com



PDM: Rev:AE

STATUS: Released

Printed: Aug 02, 2012

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mat'l. code	surface	tolerance	projection	product family
SEE NOTE 1 & 2	ISO 1302 ✓	ISO 406 ISO 1101		DUBOX
lfr ecn no	dr	tolerances unless otherwise specified		title
A F04-0347	P.NIZZI	.x ±0.3	mm	SMT
B F06-0204	engr JM.PHAMVAN	.xx ±0.13	scale 5:1	BtB RECEPT.
C F11-0016	chr P.NIZZI	.xxx ±0.05		dwg no
	appd JM.P			89898
sheet	revision	95.06.21		sheet 2 of -
index	sheet	95.06.21		A4
		95.06.21		type
		95.06.21		CUSTOMER
		95.06.21		Drawing

D

C

B

A