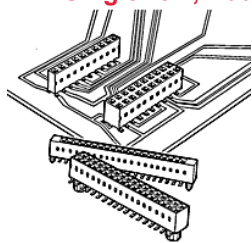


**91601-319LF - DUBOX™ : 19****Position Vertical Card  
Connector, Surface Mount,  
Single row, Dual entry**[www.fci.com](http://www.fci.com)**Mating Half**

77311-401-19LF

**Specifications****General**

<b>Hold Down Style</b>	No Locating Pegs
<b>Number of contacts (per row)</b>	19
<b>Number of contacts (Total)</b>	19
<b>Number of rows</b>	1
<b>Orientation</b>	Vertical
<b>Packaging</b>	Tube
<b>Mating half</b>	Mates with 0.64 mm (0.025 in.) Square pins.
<b>Series Number</b>	91601

**Dimensional**

<b>Thickness (Board)</b>	1.6 mm (0.062 in.) or 2.36 mm (0.093 in.)
<b>Footprint (Board)</b>	2.54 mm x 4.2 mm (0.1 in. x 0.165 in.)

**Electrical**

<b>Current rating</b>	3A max. per Contact/2A max. per Contact for Full Load
<b>Resistance (Contact)</b>	15 milli ohms Initial, 20 milli ohms After test
<b>Resistance (Insulation)</b>	100000 M-ohms
<b>Voltage rating</b>	1000V rms

**Mechanical**

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

**Mounting**

<b>Solder process</b>	Compatible with Wave, Vapor - Phase
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**Physical**

<b>Color (Housing)</b>	Grey
<b>Material (Contact)</b>	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>Approvals / Certifications</b>	UL and CSA Approved

PRODUCT NUMBER

91601-YXXZLF

INDICATES THE PRODUCT IS RoHS COMPATIBLE, NOTE 6.

A: TAPE & REEL PACKAGING, HOUSING AND PICK-UP CAP COLOUR GREY  
 G: TAPE & REEL PACKAGING, HOUSING AND PICK-UP CAP COLOUR BLACK FOR AVAILABILITY, SEE TA856.

AV: TAPE & REEL PACKAGING FOR VALEO, HOUSING AND PICK-UP CAP COLOUR GREY.

NUMBER OF POSITIONS: 02 UP TO 25.  
 MORE THAN 25 POSITIONS ON SPECIAL REQUEST.

PLATING CODE

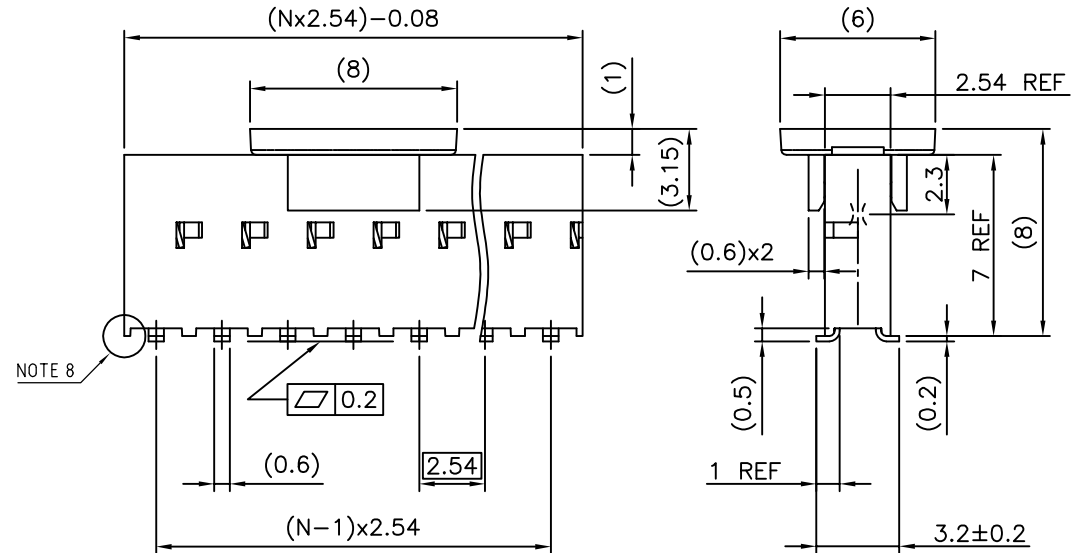
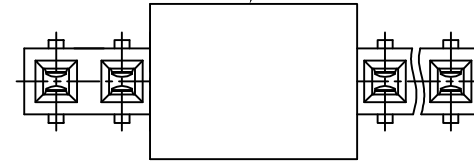
3= 0.76µm GOLD ON CONTACT AREA.  
 3.81µm TIN-LEAD ON TAIL.  
 4= 5µm TIN-LEAD ON CONTACT AREA.  
 3.81µm TIN-LEAD ON TAIL.

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

NOTES:

- 1 - HOUSING & PICK UP CAP MATERIAL: HIGH TEMPERATURE THERMOPLASTIC GLASS FILLED FLAME RETARDANT PER UL 94 COLOR: GREY or BLACK
- 2 - TERMINAL MATERIAL: PHOSPHOR BRONZE.
- 3 - 2 UP TO 4 POSITIONS PRODUCT PACKED IN PLASTIC BOX.  
 5 UP TO 30 POSITIONS PRODUCT PACKED IN TUBE.
- 4 - TO DETERMINE DIMENSIONS:  
 N = NUMBER OF POSITIONS  
 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 - HOUSING MADE FROM HIGH TEMPERATURE HALOGEN FREE RESIN 30% GLASSFILLED FLAME RETARDANT PER UL-94V-0 BLACK COLOUR. OMIT 'HF' FROM PRODUCT NUMBER IF HTIS OPTION IS NOT REQUIRED
- 8 - END STAND-OFFS FOR 1x2 UP TO 1x5 POS  
 NO END STAND-OFFS FOR 1x6 UP TO 1x50 POS

OPTIONAL PICK UP CAP



NOTE 8

mat'l. code		surface		tolerance		projection		product family	
SEE NOTES		ISO 1302		ISO 406		ISO 1101		DUBOX	
ltr	ecn no	dr	date	tolerances unless otherwise specified		mm		title	
AD	F10-0228	JCO	10.10.04	angles	.0±.3	mm		BtB RECEPT	
AE	F11-0093	JCO	11.08.18	linear	.00±.0x	mm		VERT SR SMT	
AF	F11-0043	LMU	12.02.23	0°±2'	.000±.00x	scale 5:1		dwg no	
AA	F07-0234	LMU	07.07.10	dr	D LEGRAND	96.10.11	sheet 1 of 2		size
AB	F07-0245	PNZ	07.08.14	engr	P NIZZI	96.10.11	91601		A3
AC	F08-0102	PNZ	08.01.18	chr	D LE	96.10.11	type		Product Customer Drawing
AF	F08-0102	PNZ	08.01.18	appd	P NZ	96.10.11			
sheet index	revision sheet	AF	B	1	2				

1

2

A

A

B

B

C

C

D

D

form: A4

1

2

Fcconnect.com

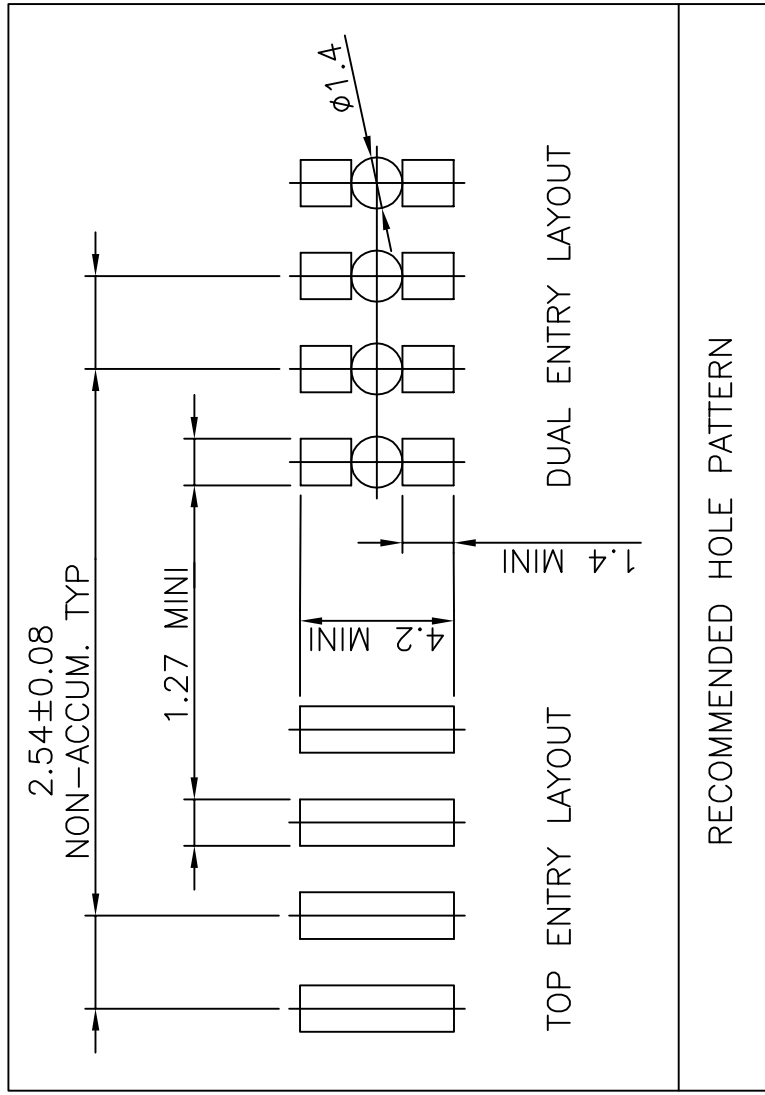


PDM: Rev:AF

STATUS: Released

Printed: Mar 20, 2012

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mat'l. code		surface		tolerance		projection		product family	
SEE NOTES		ISO 1302 ✓		ISO 406 ISO 1101				DUBOX	
ltr	ecn no	dr	tolerances unless otherwise specified		mm		title		dwg no
A	F04-0347	DLE	angles	.XX ±0.15	mm		BtB RECEPT.		sheet 2 of 2
B	F06-0204	DLE	linear	XX ±0.05	scale 1:1		VERT SR SMT		A4
				±2'			type		Product Customer Drawing
		dr	D	LEGRAND	96.10.11				
		engr	P	NIZZI	96.10.11				
		chr	D	LE	96.10.11				
		appd	P	NZ	96.10.11				
sheet	revision								
index	sheet								