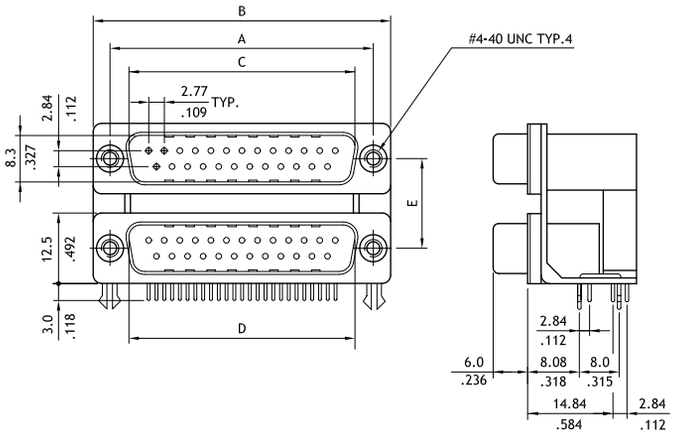
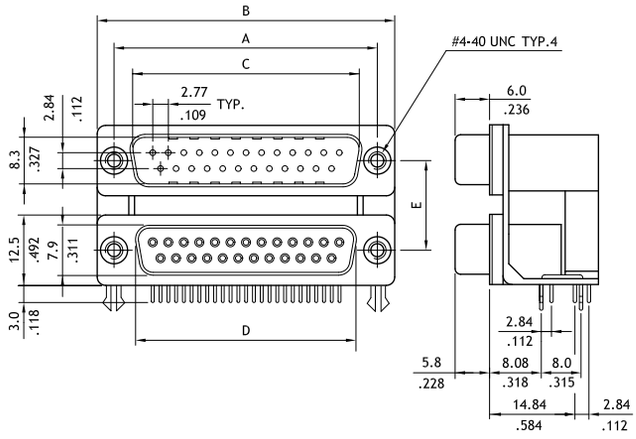
CD81 Series Stacked Right Angle DIP Solder D-Sub

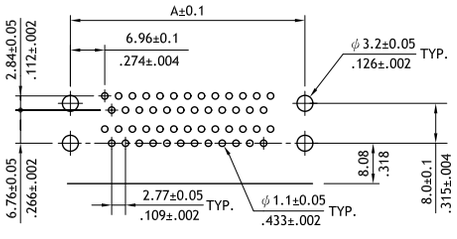
◎ Intermateable with standard D-Sub
◎ Metal shell and with solder tails
◎ Option row spacing and position available
◎ In various pin configuration

:E159616





CVILUX P/N	Dimension				
	A	B	C	D	E
CD81V1P**A*	25.0(.984)	30.8(1.213)	16.92(.666)	16.3(.642)	15.88(.625)
CD81V2P**A*	33.32(1.312)	39.2(1.543)	25.25(.994)	24.6(.969)	
CD81V3P**A*	47.04(1.852)	53.1(2.091)	38.96(1.534)	38.3(1.508)	
CD81V7P**A*	63.5(2.500)	69.4(2.732)	55.42(2.182)	54.8(2.157)	
CD81V1P**B*	25.0(.984)	30.8(1.213)	16.92(.666)	16.3(.642)	19.05(.750)
CD81V2P**B*	33.32(1.312)	39.2(1.543)	25.25(.994)	24.6(.969)	
CD81V3P**B*	47.04(1.852)	53.1(2.091)	38.96(1.534)	38.3(1.508)	
CD81V7P**B*	63.5(2.500)	69.4(2.732)	55.42(2.182)	54.8(2.157)	
CD81V1P**C*	25.0(.984)	30.8(1.213)	16.92(.666)	16.3(.642)	22.86(.900)
CD81V2P**C*	33.32(1.312)	39.2(1.543)	25.25(.994)	24.6(.969)	
CD81V3P**C*	47.04(1.852)	53.1(2.091)	38.96(1.534)	38.30(1.508)	
CD81V7P**C*	63.5(2.500)	69.4(2.732)	55.42(2.182)	54.8(2.157)	



Recommended P.C. Board Layout

Ordering Code

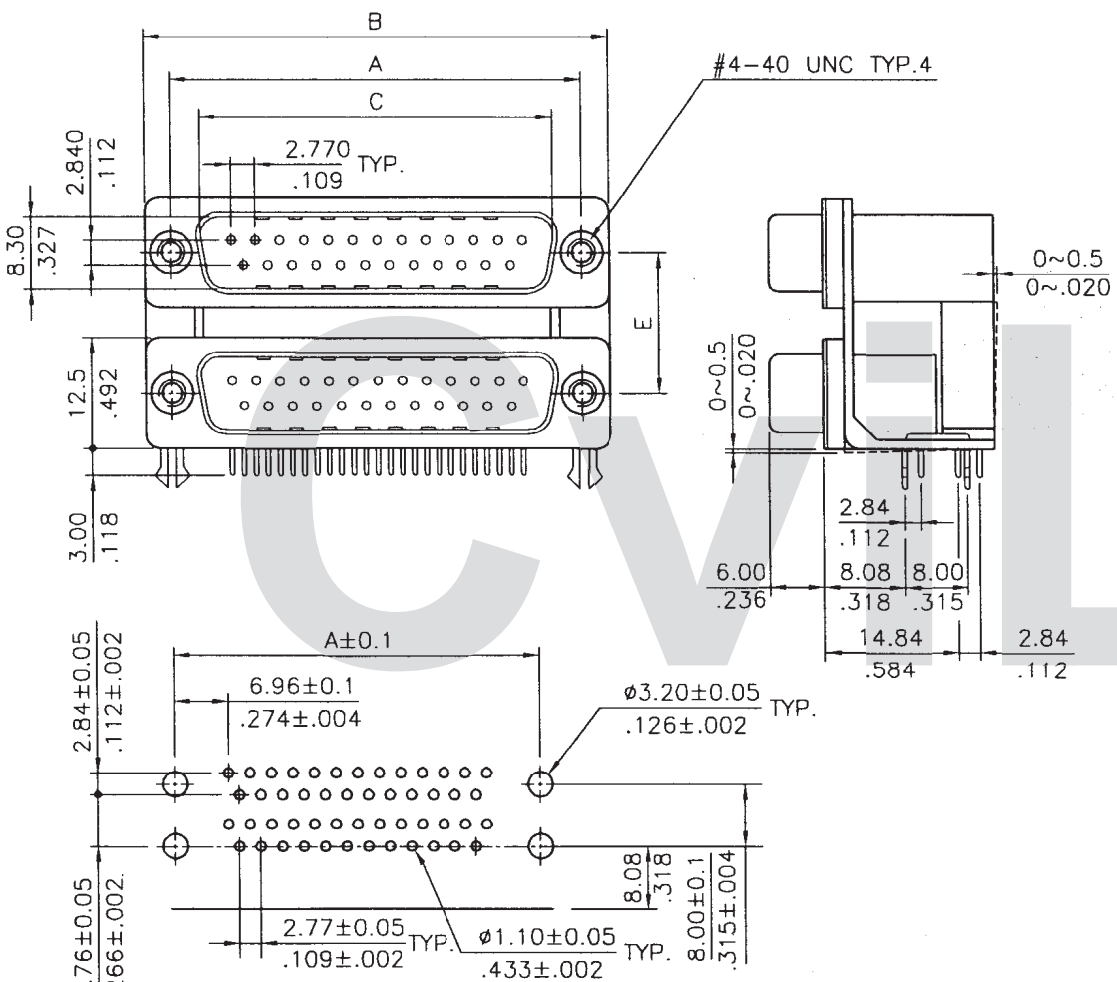
❶ ❷ ❸ ❹ ❺ ❻

CD81 V1 PP A A C

❶ Series No.
❷ Contacts configuration:
V1= 9 to 9, V2= 15 to 15,
V3=25 to 25, V4= 9 to 25
V5=25 to 9, V6=25 to 15
V7=37 to 37
❸ Connector type:
PP= Plug to plug
PS= Plug to receptacle
❹ Plating code:
A= Selective Gold flash over Nickel plated
*Optional plating available but MOQ requested
❺ Row spacing:
A=Dim.E(15.88mm)
B=Dim.E(19.05mm)
C=Dim.E(22.86mm)
❻ Other options:
C= Riveted ground hooks
with #4-40 UNC open (Standard)
S= Riveted ground hooks
pre-loaded #4-40 UNC
Hex screws
*Special options Consult manufacturer

Material:

* Insulator: Glass filled Polyester UL 94V-0
* Contacts: Copper alloy
* Shell: Steel, Tin plated as standard



Recommended P.C. Board Layout

Ordering Code:

CD81 V1 PP A A C
① ② ③ ④ ⑤ ⑥

① Series No.

② Configuration: V1= 9 To 9 ; V2= 15 To 15
V3= 25 To 25 ; V7= 37 To 37

③ Concact type: PP= Plug to Plug

④ Plating option:
A= Selective Gold flash plated over 1.27μm(50μ) Nickel
B= Selective 0.38μm(15μ") Gold plated over 1.27μm(50μ") Nickel
C= Selective 0.76μm(30μ") Gold plated over 1.27μm(50μ") Nickel

⑤ Row spacing: A= Dim. E 15.88mm
B= Dim. E 19.05mm
C= Dim. E 22.86mm

⑥ Other Option:
C= Riveted ground hooks with #4-40UNC open
S= Riveted ground hooks Pre-Loaded #4-40UNC Hex screws

CVILUX P/N	Dimension			
	A	B	C	E
CD81V1PP*A*	25.00(.984)	30.8(1.213)	16.92(.666)	15.88(.625)
CD81V2PP*A*	33.32(1.312)	39.2(1.543)	25.25(.994)	
CD81V3PP*A*	47.04(1.852)	53.1(2.091)	38.96(1.534)	
CD81V7PP*A*	63.50(2.500)	69.4(2.732)	55.42(2.182)	
CD81V1PP*B*	25.00(.984)	30.8(1.213)	16.92(.666)	19.05(.750)
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CD81V7PP*C*	63.50(2.500)	69.4(2.732)	55.42(2.182)	

RoHS Compliant

SYM	NAME	DATE	REVISIONS
4			
3			
2			
1	Sun	12/30/04	ECN04519

CVILUX CORP. ENGINEERING JAN 04 2005 ISSUED

DRAWN BY: Sun 12/30-04'
ENGINEER: Tisley 12/31-04'
CHECKED BY: 12/31-05'
APPROVED BY:

UNIT: mm / inch

TOLERANCE UNLESS OTHERWISE SPECIFIED	
.X ± 0.30/.012	X° ± 1°
.XX ± 0.20/.010	.X° ±
.XXX ± 0.10/0.04	.XX° ±

TITLE: STACKED SIDE ENTRY BOARD MOUNT D-SUB

MATERIAL:

FINISH:

瀚荃股份有限公司
CviLux Corporation

DRAWING NO.	CD8102SF	PART NO.	CD81V*PP***
SCALE	2 / 1	SHEET 1 OF 1	

瀚荃股份有限公司
CviLux Corporation

RELIABILITY TEST REPORT

TEST ITEM : 1.ELECTRICAL
2.MECHANICAL
3.ENVIRONMENTAL

SERIES NO. : CD81 Series

TEST EQUIPMENT : 1.INSERTION & REMOVAL APPARATUS
2.ELECTRONIC MEASURING APPARATUS
3.ENV IRONMENTAL APPARATUS

DATE OF TESTING : 02/17/ 05

TEST DEPART : QC TESTER :Scott.Lien

CONTAINT : ATTACHED

REVIEWED : Jackal APPROVED : Rita VERIFIED : Scott.Lien .

1.ELECTRICAL PERFORMANCE :

	ITEM	TEST CONDITION	REQUIREMENT	TEST RESULT	
1-1	Contact resistance	Dry circuit of DC 20 mV max.,100 mA max.	Less than 25 mΩ	Sample	25 mΩ max.
				1	19.14 mΩ
				2	19.16 mΩ
				3	19.25 mΩ
				4	19.20 mΩ
				5	19.18 mΩ
1-2	Dielectric strength	When applied AC 1000 V 1 minute between adjacent terminal	No change	Sample	1000 V 1 minute
				1	Pass
				2	Pass
				3	Pass
				4	Pass
				5	Pass
1-3	Insulation resistance	When applied DC 500 V between adjacent terminal or ground	More than 5000 MΩ	Sample	5000 MΩ min.
				1	∞
				2	∞
				3	∞
				4	∞
				5	∞

2. MECHANICAL PERFORMANCE :

	ITEM	TEST CONDITION	REQUIREMENT	TEST RESULT	
2-1	Contact retaining force in insulator	Retention speed 25±3 mm per minute from housing	More than 2.5 Kgf	Sample	2.5 Kgf min.
				1	6.21 Kgf
				2	6.31 Kgf
				3	6.22 Kgf
				4	6.13 Kgf
				5	6.12 Kgf
2-2	Single contact insertion force	Measure force to insertion using ψ1.04 mm test pin at speed 25±3 mm per minute	340 gram max. Per contact	Sample	340 gram max.
				1	226 gram
				2	224 gram
				3	220 gram
				4	206 gram
				5	215 gram
2-3	Single contact withdrawal force	Measure force to withdrawal using ψ0.99 mm test pin at speed 25±3 mm per minute	28 gram min.	Sample	28 gram min.
				1	96 gram
				2	94 gram
				3	98 gram
				4	97 gram
				5	98 gram

2-4	Mating and unmating Force	Speed 25±3 mm per minute	9pin Unit: Kgf Mating force initial 4.6 max. Unmating force initial 3.5 max.	Sample	Mating	unmating
				1	2.2	1.6
				2	2.1	1.7
				3	2.2	1.7
				4	2.3	1.8
				5	2.0	1.7
			15pin Mating force initial 8.1 max. Unmating force initial 6.4 max.	Sample	Mating	unmating
				1	2.9	2.2
				2	3.1	2.4
				3	3.4	2.6
				4	3.0	2.5
				5	2.9	2.4
			25pin Mating force initial 10.5 max. Unmating force initial 7.7 max.	Sample	Mating	unmating
				1	4.9	3.7
				2	4.6	3.8
				3	5.6	4.7
				4	5.4	4.7
				5	5.6	4.9
2-5	Durability	Connector shall be subjected to 100 cycles of insertion and withdrawal	Contact resistance: Less than twice of initial.	Sample	< twice of initial	
				1	19.22 mΩ	
				2	19.25 mΩ	
				3	19.26 mΩ	
				4	19.22 mΩ	
				5	19.18 mΩ	

3. ENVIRONMENTAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT	TEST RESULT	
3-1	Temperature rise	Then carried the rated current	30 ℃ max	Sample	30 ℃ max.
3-2	Vibration	1.5 mm 10-55-10 HZ/minute each 2.hours for X, Y and Z directions	Appearance: No damage	Sample	No damage
			Discontinuity: 1micro second max.	Sample	1 micro second max.
3-3	Solder ability	Soldering time:5 ±0.5 sec. Soldering pot:230±5℃	Minimum: 90% of immersed area	Sample	90% of Immersed area
				1	Pass
				2	Pass
				3	Pass
				4	Pass
				5	Pass

3-4	Resistance to soldering heat	Soldering time: 5 ±0.5 sec. Soldering pot:260±5°C	Appearance: No damage	Sample	No damage
				1	Pass
				2	Pass
				3	Pass
				4	Pass
				5	Pass
3-5	Heat aging	105±2°C , 96 hours	Appearance: No damage	Sample	No damage
				1	Pass
				2	Pass
				3	Pass
				4	Pass
				5	Pass
3-6	Humidity	40±2°C, 90-95%RH, 96 hours measurement must be taken within 30 min. after tested	Appearance: No damage	Sample	No damage
				1	Pass
				2	Pass
				3	Pass
				4	Pass
				5	Pass
			Contact resistance: Less than twice of initial	Sample	< twice of initial
				1	19.25 mΩ
				2	19.26 mΩ
				3	19.23 mΩ
				4	19.23 mΩ
				5	19.27 mΩ
			Dielectric strength: To pass pare1-2	Sample	Pass para 1-2
				1	Pass
				2	Pass
				3	Pass
				4	Pass
				5	Pass
3-7	Temperature cycling	One cycle consists of: 1. -55^{+0}_{-3} °C, 30 min 2. Room temp. 10-15 min 3. 85^{+3}_{-0}°C, 30 min 4. Room temp. 10-15 min	Appearance: No damage	Sample	No damage
				1	Pass
				2	Pass
				3	Pass
				4	Pass
				5	Pass
			Contact resistance: Less than twice of initial	Sample	< twice of initial
				1	19.25 mΩ
				2	19.26 mΩ
				3	19.28 mΩ
				4	19.26 mΩ
				5	19.27 mΩ

3-8	Salt spray	Temperature:35±3°C Solution:5±1% Spray time:48±4 hours Measurement must be taken after water rinse	Appearance: No damage	Sample	No damage
				1	Pass
				2	Pass
				3	Pass
				4	Pass
				5	Pass
			Contact resistance: Less than twice of initial	Sample	< twice of initial
				1	3.27 mΩ
				2	3.28 mΩ
				3	3.29 mΩ
				4	3.28 mΩ
				5	3.28 mΩ

4. AMBIENT TEMPERATURE RANGE: -40 to +150°C

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ENGINEERING DEPT.	PRODUCT SPECIFICATION For Stacked Right Angle Dip D-Sub Connector	SPEC.NO.: SPCD009E PAGE: 1 / 3

1. SCOPE:
This specification contains the test requirement of subject connectors when tested under the condition and below standards base on CviLux test procedure

2. APPLICABLE STANDARDS:
MIL - STD - 202 Methods for test of connectors for electronic equipment
MIL - STD - 1344 Test methods for electrical connectors

3.APPLICABLE SERIES NO.: CD81 Series

4. SHAPE, CONSTRUCTION AND DIMENSIONS
See attached drawings

5. MATERIALS
See attached drawings

6. ACCOMMODATED P.C.BOARD
6.1 Thickness: 1.6 mm (.063")
6.2 P.C. Board Layout: See attached drawings

CVILUX CORP. ENGINEERING
DEC 14 2001
ISSUED

REVIEWED : 12/13-01 APPROVED : David 12/12-01 VERIFIED : 12/12-01

ENGINEERING DEPT.	PRODUCT SPECIFICATION For Stacked Right Angle Dip D-Sub Connector	SPEC.NO.: SPCD009E PAGE: 2 / 3

7. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
7.1	Rated current and voltage		3A 250V AC (r.m.s.)
7.2	Contact resistance	Dry circuit of DC 20 mV max. , 100 mA max.	Less than 25 mΩ
7.3	Dielectric strength	When applied AC 1000 V 1 minute between adjacent terminal	No change
7.4	Insulation resistance	When applied DC 500 V between adjacent terminal or ground	More than 5000 MΩ

8. MECHANICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
8.1	Contact retaining force in insulator	Retention speed 25± 3 mm per minute from housing	More than 2.5 Kgf
8.2	Single contact insertion force	Measure force to insertion using ∅ 1.04 mm test pin at speed 25± 3 mm per minute	340 gram max.
8.3	Single contact withdrawal force	Measure force to withdrawal using ∅ 0.99 mm test pin at speed 25± 3 mm per minute	28 gram min.
8.4	Durability	Connector shall be subjected to 100 cycles of insertion and withdrawal	Contact resistance: Less than twice of initial

9. ENVIRONMENTAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
9.1	Temperature rise	Then carried the rated current	30°C max.
9.2	Vibration	1.5 mm 10-55-10 HZ / minute each 2 hours for X , Y and Z directions	Appearance: No damage Discontinuity: 1 micro second max.
9.3	Solder ability	Soldering time: 5 ± 0.5 second Soldering pot: 230 ± 5°C	Minimum: 90% of immersed area
9.4	Resistance to soldering heat	Soldering time: 5 ± 0.5 second Soldering pot: 260 ± 5°C	No damage
9.5	Heat aging	105 ± 2°C , 96 hours	No damage

ENGINEERING DEPT.	PRODUCT SPECIFICATION For Stacked Right Angle Dip D-Sub Connector	SPEC.NO.: SPCD009E PAGE: 3 / 3

	ITEM	TEST CONDITION	REQUIREMENT
9.6	Humidity	40 ± 2°C , 90-95% RH , 96 hours measurement must be taken within 30 min. after tested	Appearance: No damage Contact resistance: Less than twice of initial Dielectric strength: To pass para 7-3
9.7	Temperature cycling	One cycle consists of : (1) -55 $^{+0}_{-3}$ °C , 30 min. (2)Room temp. 10-15 min. (3) 85 $^{+3}_{-0}$ °C , 30 min. (4)Room temp. 10-15 min.	Appearance: No damage Contact resistance: Less than twice of initial
9.8	Salt spray	Temperature: 35 ± 3°C Solution: 5 ± 1% Spray time: 48 ± 4 hours Measurement must be taken after water rinse	Appearance: No damage Contact resistance: Less than twice of initial

10. AMBIENT TEMPERATURE RANGE: -40 to + 105°C

11. MATING FORCE AND UNMATING FORCE:

Unit: Kgf

No. of Circuits	Mating Force (Initial max.)	Unmating Force (Initial max.)
9	4.6	3.5
15	8.1	6.4
25	10.5	7.7

文件編號：：V00203D811

版　　別：1

瀚荃股份有限公司
CviLux Corporation

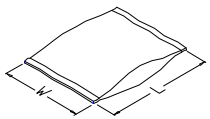
PACKING STANDARD

製訂日期： 2002/05/20

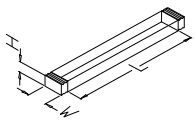
SERIES OR P/N	CIRCUITS	PACKING METHOD CODE	INNER PACKING NO.	INNER PACKING SIZE (CM) L/D	W	H	INNER PACKING Q'TY	INSIDE CARTON NO.	INSIDE CARTON SIZE (CM) L	W	H	PCS／INSIDE CARTON	CARTON NO.	CARTON SIZE (CM) L	W	H	PCS／CARTON	G.W REF. (KG)
CD81V1***A*	9-9	C					45										630	
CD81V2***A*	15-15	C					35										490	
CD81V3***A*	25-25	C					25										350	
CD81V4***A*	9-25	C					25										350	
CD81V5***A*	25-9	C					25										350	
CD81V6***A*	25-15	C					25										350	
CD81V7***A*	37-37	C					20										280	
CD81V1***B*	9-9	C					45										630	
CD81V2***B*	15-15	C					35										490	
CD81V3***B*	25-25	C					25										350	
CD81V4***B*	9-25	C					25										350	
CD81V5***B*	25-9	C					25										350	
CD81V6***B*	25-15	C					25										350	
CD81V7***B*	37-37	C					20										280	

PACKING METHOD (包裝方式)：

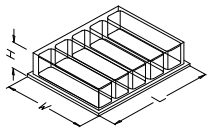
1 PVC BAG (塑膠袋) SIZE = L * W



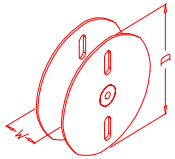
2 TUBE (塑膠管) SIZE = L * W * H



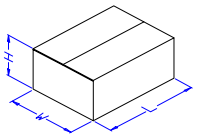
3 PVC TRAY (塑膠盒) SIZE = L * W * H



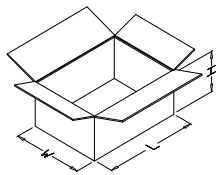
4 REEL (紙盤) SIZE = D * W



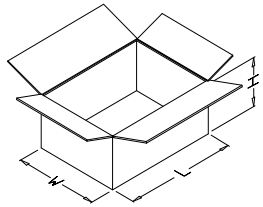
5 BOX (內紙盒) SIZE = L * W * H



6 INSIDE CARTON (內　箱) SIZE = L * W * H



7 OUTSIDE CARTON (外　箱) SIZE = L * W * H



PACKING METHOD CODE (包裝方式代碼) :

- ☐ A = 1 → 7
- ☐ B = 2 → 7
- ■C = 3 → 7
- ☐ D = 4 → 7
- ☐ E = 5 → 7
- ☐ F = 1 → 6 → 7
- ☐G = 2 → 6 → 7
- ☐ H = 3 → 6 → 7

核准：PETER　　審核：SMITH　　製訂：JACKAL