

REFERENCE SPECIFICATIONS

-NFC 93425 (in compliance with HE 507)

PHYSICAL CHARACTERISTICS

- INSULATOR MATERIAL: THERMOPLASTIC UL94V0
- CONTACT MATERIAL: BRASS (SIGNAL CONTACT)
BRASS (POWERS CONTACT)
- ACCESSORIES: BRASS
- SHELLS: STEEL

ELECTRICAL CHARACTERISTICS

- NOMINAL CURRENT: 7.5A (SIGNAL CONTACT)
30A or 40A (POWER CONTACT)
- CONTACT RESISTANCE: ≤ 7.3 m Ohms(SIGNAL and POWER)
- CONTACT/CONTACT : ≥ 1000 V
- CONTACT/GROUND : ≥ 1200 V
- INSULATION RESISTANCE: ≥ 5000 MOhms

CLIMATIC CATEGORY: 55/125/21

TEMPERATURE RANGE -55°C TO +125°C
DAMP HEAT STEADY STATE 21 DAYS
SALT SPRAY 48 HOURS

- RETENTION AGAINST TORQUE: - Threaded insert: 0.7 N.m minimum
- Female screw : 0.5 N.m minimum

NOTE RoHS INFORMATION

- The "LF" products meet european union Directives and other country regulations as described in GS-22-008.
- The housing will withstand exposure to 260°C peak temperature for 3.5 seconds in a wave solder application with a 1.6mm minimum thick circuit board. See application notes/procedures if they are available.
- Termination plating spec:
 - Signal contacts: Ni + Gold
 - Power contacts: Ni 1.27µm+Sn 2.5 to 7.5µm,pure bright
- Active area plating spec:
 - Signal and power contacts: Ni + Gold
- Shell plating :2 to 4µm Cu + Ni + 3 to 10µm Sn,pure bright
- Accessories: Sn pure bright + nickel
- Packaging spec: See GS-14-920

DBL13W3P500G30LF

Series

Shell size: **E A B C**
(see sheet 3)

Front accessory definition
(see sheet 2)

blank:without accessory

L :threaded insert M3

O :threaded insert UNC 4-40

V :female screw UNC 4-40

Layout of contacts (see sheet 3)

Contacts
P Pin

Termination type

5 Right angle/Europe standard

Plating

00 200 matings/unmatings

43 500 matings/unmatings

PCB accessories definition(see sheet 2)

A :without accessory

H :Metal brackets+harpoons for PCB 2.40mm

G :Metal brackets+harpoons for PCB 1.60mm

M :Metal brackets

Power contacts

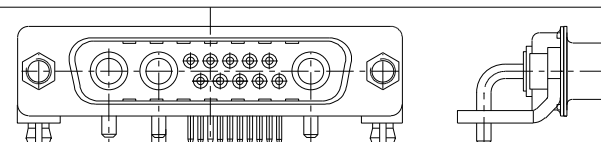
00 :Not fitted with power contact (signal contacts always fitted)

30 :Fitted with power contacts 30 Amp.

40 :Fitted with power contacts 40 Amp.

TABLE 1:PCB HOLE DIAMETERS

POWER CONTACTS			ACCESSORIES	SIGNAL CONTACT
30 A	2.00	Ø2.40	Ø3.10	Ø0.9 min
40 A	2.80	Ø3.10		
Max current power	ØA ^{+0.1} ₀	PCB HOLE ^{+/-0.1}	PCB HOLE ^{+/-0.1}	PCB HOLE



13W3 FOR EXAMPLE

www.fciconnect.com		surface	tolerance std	projection	mm
		ISO 1302	ISO 406 ISO 1101		
		TOLERANCES UNLESS OTHERWISE SPECIFIED			
Dr	M PESSON	2005-10-11	ANGULAR	0.X	±0.3
Eng	P LEGARE	2005-10-11	LINEAR	0.XX	±0.1
Chr				0.XXX	±0.05
Appr			Product family		Spec ref
				size	A2
				Scale	2:1
				ECN	F09-0092

rev	ecn no	dr	date	Dr	M PESSON	2005-10-11	surface	tolerance std	projection	mm
A	LS05-0101	MPE	2005-10-11	Eng	P LEGARE	2005-10-11	ANGULAR	0.X	±0.3	
B	LS06-0208	LGO	2006-12-12	Chr			LINEAR	0.XX	±0.1	
C	LS07-0273	MPE	2007/10/31	Appr				0.XXX	±0.05	
D	F09-0092	LSA	2009/09/16				Product family			Spec ref



SUB MALE DW EUROPE foot print
mixed power right angled solder

cat no C01-8639-2304
CUSTOMER sheet 1 of 7

PDM: Rev:D

STATUS Released

Printed: Oct 01, 2010

	1	2	3	4	5	6	7	8
A								
B								
C	FRONT ACCESSORY	Blank Without	L insert M3 O insert UNC 4.40	V insert UNC 4.40	Blank Without	L insert M3 O insert UNC 4.40	V insert UNC 4.40	V insert UNC 4.40
	PCB ACCESSORIES	A Without	A Without	A Without	M Metal brackets	M Metal brackets	M Metal bracket	
D								
E								
F	FRONT ACCESSORY	Blank Without	L insert M3 O insert UNC 4.40	V insert UNC 4.40	Blank Without	L insert M3 O insert UNC 4.40	V insert UNC 4.40	V insert UNC 4.40
	PCB ACCESSORIES	G Metal brackets + harpoons for PCB 1.60mm	G Metal brackets + harpoons for PCB 1.60mm	G Metal brackets + harpoons for PCB 1.60mm	H Metal brackets + harpoons for PCB 2.40mm	H Metal brackets + harpoons for PCB 2.40mm	H Metal brackets + harpoons for PCB 2.40mm	H Metal brackets + harpoons for PCB 2.40mm

SCALE: 4

www.fciconnect.com		surface ISO 1302	tolerance std ISO 406 ISO 1101	projection mm		
		TOLERANCES UNLESS OTHERWISE SPECIFIED		size	Scale	
Dr	M PESSON	2005-10-11	ANGULAR	0.X	±0.3	2:1
Eng	P LEGARE	2005-10-11	LINEAR	0.XX	±0.1	
Chr			0° ±2°	0.XXX	±0.05	
Appr			Product family	ECN	F09-0092	
		Spec ref				
FCI		SUB MALE DW EUROPE foot print mixed power right angled solder		eng no	C01-8639-2304	Rev. D
		CUSTOMER		sheet 2 of 7		

PDM: Rev:D

STATUS: Released

Printed: Oct 01, 2010

PART NUMBER	AMPS	MATINGS/ UNMATINGS	FRONT ACCESSORY	PCB ACCESSORIES
D*xWxP500A30LF	30	200	without	without
D*LxWxP500A30LF	30	200	insert M3	without
D*OxWxP500A30LF	30	200	insert UNC 4.40	without
D*VxWxP500A30LF	30	200	female screw UNC 4.40	without
D*xWxP500H30LF	30	200	without	metal bracket+harpoon PCB 2.40mm
D*LxWxP500H30LF	30	200	insert M3	metal bracket+harpoon PCB 2.40mm
D*OxWxP500H30LF	30	200	insert UNC 4.40	metal bracket+harpoon PCB 2.40mm
D*VxWxP500H30LF	30	200	female screw UNC 4.40	metal bracket+harpoon PCB 2.40mm
D*xWxP500G30LF	30	200	without	metal bracket+harpoon PCB 1.60mm
D*LxWxP500G30LF	30	200	insert M3	metal bracket+harpoon PCB 1.60mm
D*OxWxP500G30LF	30	200	insert UNC 4.40	metal bracket+harpoon PCB 1.60mm
D*VxWxP500G30LF	30	200	female screw UNC 4.40	metal bracket+harpoon PCB 1.60mm
D*xWxP500M30LF	30	200	without	metal bracket
D*LxWxP500M30LF	30	200	insert M3	metal bracket
D*OxWxP500M30LF	30	200	insert UNC 4.40	metal bracket
D*VxWxP500M30LF	30	200	female screw UNC 4.40	metal bracket

PART NUMBER	AMPS	MATINGS/ UNMATINGS	FRONT ACCESSORY	PCB ACCESSORIES
D*xWxP500A40LF	40	200	without	without
D*LxWxP500A40LF	40	200	insert M3	without
D*OxWxP500A40LF	40	200	insert UNC 4.40	without
D*VxWxP500A40LF	40	200	female screw UNC 4.40	without
D*xWxP500H40LF	40	200	without	metal bracket+harpoon PCB 2.40mm
D*LxWxP500H40LF	40	200	insert M3	metal bracket+harpoon PCB 2.40mm
D*OxWxP500H40LF	40	200	insert UNC 4.40	metal bracket+harpoon PCB 2.40mm
D*VxWxP500H40LF	40	200	female screw UNC 4.40	metal bracket+harpoon PCB 2.40mm
D*xWxP500G40LF	40	200	without	metal bracket+harpoon PCB 1.60mm
D*LxWxP500G40LF	40	200	insert M3	metal bracket+harpoon PCB 1.60mm
D*OxWxP500G40LF	40	200	insert UNC 4.40	metal bracket+harpoon PCB 1.60mm
D*VxWxP500G40LF	40	200	female screw UNC 4.40	metal bracket+harpoon PCB 1.60mm
D*xWxP500M40LF	40	200	without	metal bracket
D*LxWxP500M40LF	40	200	insert M3	metal bracket
D*OxWxP500M40LF	40	200	insert UNC 4.40	metal bracket
D*VxWxP500M40LF	40	200	female screw UNC 4.40	metal bracket

shell size LAYOUTS
* xWxE 5W1
A 11W1
A 7W2
B 21W1
B 17W2
B 13W3
B 9W4
C 25W3
C 21WA4
C 27W2

PART NUMBER	AMPS	MATINGS/ UNMATINGS	FRONT ACCESSORY	PCB ACCESSORIES
D*xWxP543A30LF	30	500	without	without
D*LxWxP543A30LF	30	500	insert M3	without
D*OxWxP543A30LF	30	500	insert UNC 4.40	without
D*VxWxP543A30LF	30	500	female screw UNC 4.40	without
D*xWxP543H30LF	30	500	without	metal bracket+harpoon PCB 2.40mm
D*LxWxP543H30LF	30	500	insert M3	metal bracket+harpoon PCB 2.40mm
D*OxWxP543H30LF	30	500	insert UNC 4.40	metal bracket+harpoon PCB 2.40mm
D*VxWxP543H30LF	30	500	female screw UNC 4.40	metal bracket+harpoon PCB 2.40mm
D*xWxP543G30LF	30	500	without	metal bracket+harpoon PCB 1.60mm
D*LxWxP543G30LF	30	500	insert M3	metal bracket+harpoon PCB 1.60mm
D*OxWxP543G30LF	30	500	insert UNC 4.40	metal bracket+harpoon PCB 1.60mm
D*VxWxP543G30LF	30	500	female screw UNC 4.40	metal bracket+harpoon PCB 1.60mm
D*xWxP543M30LF	30	500	without	metal bracket
D*LxWxP543M30LF	30	500	insert M3	metal bracket
D*OxWxP543M30LF	30	500	insert UNC 4.40	metal bracket
D*VxWxP543M30LF	30	500	female screw UNC 4.40	metal bracket

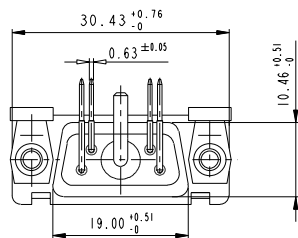
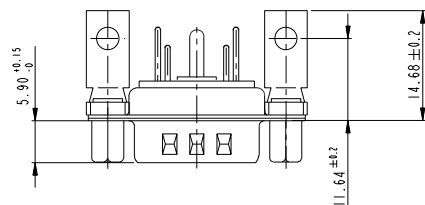
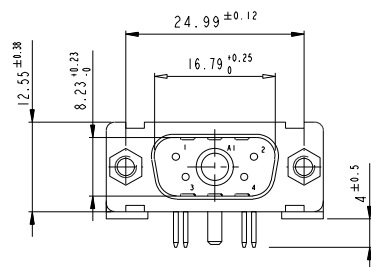
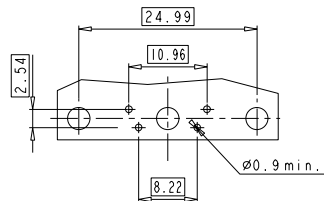
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D*LxWxP543A40LF	40	500	insert M3	without
D*OxWxP543A40LF	40	500	insert UNC 4.40	without
D*VxWxP543A40LF	40	500	female screw UNC 4.40	without
D*xWxP543H40LF	40	500	without	metal bracket+harpoon PCB 2.40mm
D*LxWxP543H40LF	40	500	insert M3	metal bracket+harpoon PCB 2.40mm
D*OxWxP543H40LF	40	500	insert UNC 4.40	metal bracket+harpoon PCB 2.40mm
D*VxWxP543H40LF	40	500	female screw UNC 4.40	metal bracket+harpoon PCB 2.40mm
D*xWxP543G40LF	40	500	without	metal bracket+harpoon PCB 1.60mm
D*LxWxP543G40LF	40	500	insert M3	metal bracket+harpoon PCB 1.60mm
D*OxWxP543G40LF	40	500	insert UNC 4.40	metal bracket+harpoon PCB 1.60mm
D*VxWxP543G40LF	40	500	female screw UNC 4.40	metal bracket+harpoon PCB 1.60mm
D*xWxP543M40LF	40	500	without	metal bracket
D*LxWxP543M40LF	40	500	insert M3	metal bracket
D*OxWxP543M40LF	40	500	insert UNC 4.40	metal bracket
D*VxWxP543M40LF	40	500	female screw UNC 4.40	metal bracket

www.fciconnect.com		surface ISO 1302	tolerance std ISO 406 ISO 1101	projection mm
		TOLERANCES UNLESS OTHERWISE SPECIFIED		
Dr	M PESSON	2005-10-11	ANGULAR	size A2
Eng	P LEGARE	2005-10-11	LINEAR	Scale 2:1
Chr			0° ±2°	ECN F09-0092
Appr			Product family	Spec ref
FCI		SUB MALE DW EUROPE foot print mixed power right angled solder		Rev. D
drawing no		C01-8639-2304		sheet 3 of 7

5W1

LAYOUT AND CONNECTOR DIMENSIONS

For PCB hole diameters see table 1 sheet 1

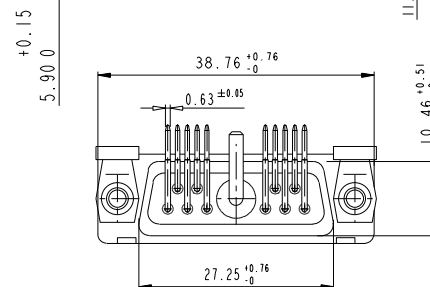
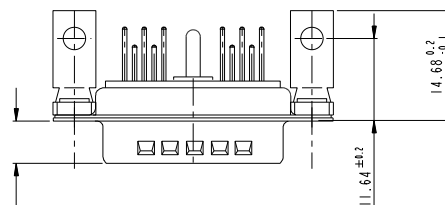
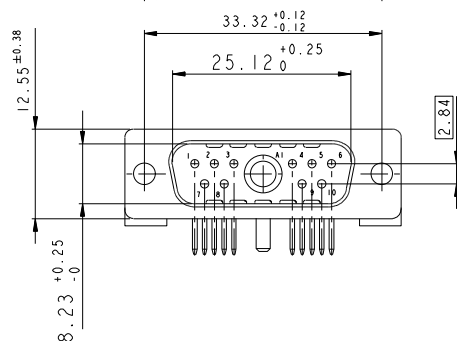
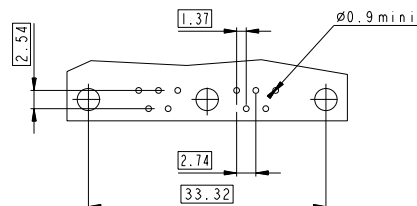


Floating signal contacts

11W1

LAYOUT AND CONNECTOR DIMENSIONS

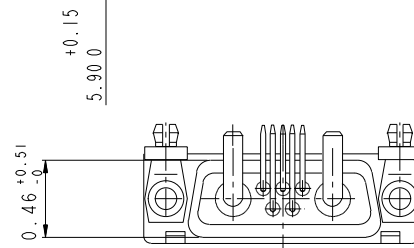
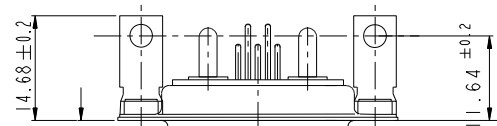
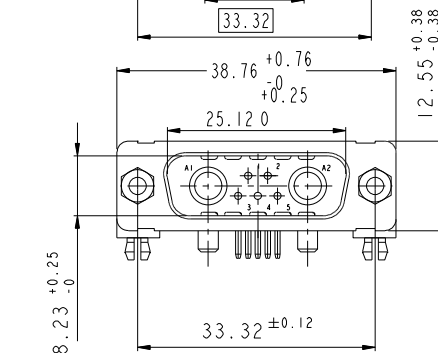
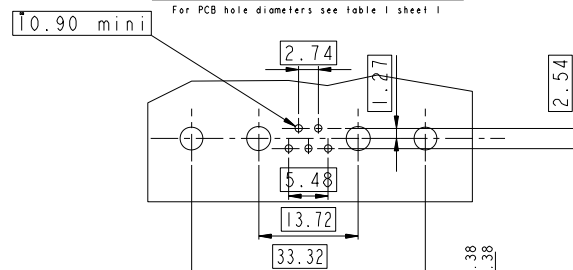
For PCB hole diameters see table 1 sheet 1



7W2

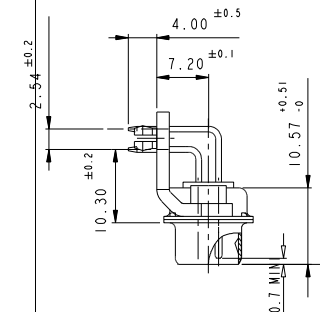
LAYOUT AND CONNECTOR DIMENSIONS

For PCB hole diameters see table 1 sheet 1

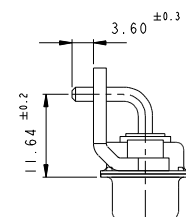


SIDE VIEW FOR ALL LAYOUTS

VIEW WITHOUT POWERS CONTACTS



VIEW WITH POWERS CONTACTS

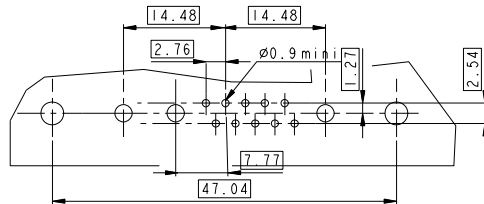


www.fciconnect.com		surface ISO 1302	tolerance std ISO 406 ISO 1101	projection mm	mm
		TOLERANCES UNLESS OTHERWISE SPECIFIED			
Dr	M PESSON	2005-10-11	ANGULAR	size A2	Scale 2:1
Eng	P LEGARE	2005-10-11	LINEAR		
Chr			0° ±2°	ECN	F09-0092
Appr			Product family	Spec ref	
FCI		SUB MALE DW EUROPE foot print mixed power right angled solder		cat no C01-8639-2304	Rev. D
		CUSTOMER		sheet 4 of 7	

13W3

LAYOUT AND CONNECTOR DIMENSIONS

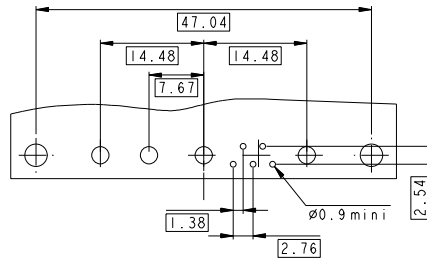
For PCB hole diameters see table 1 sheet 1



9W4

LAYOUT AND CONNECTOR DIMENSIONS

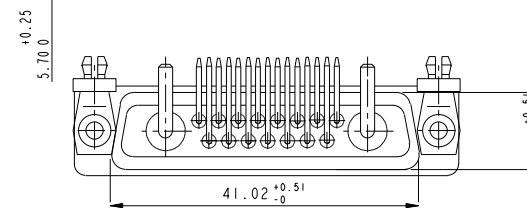
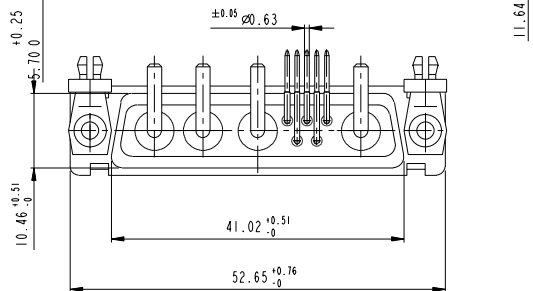
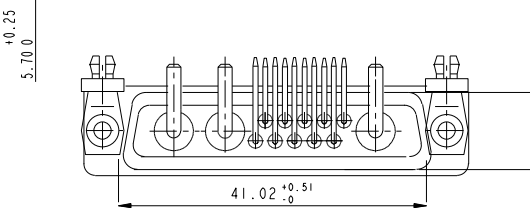
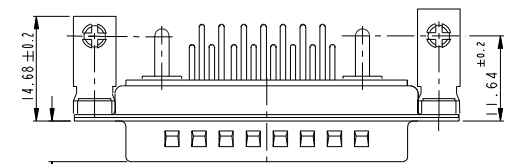
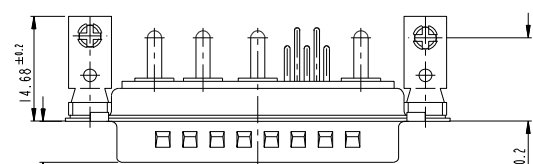
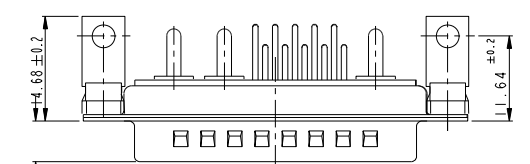
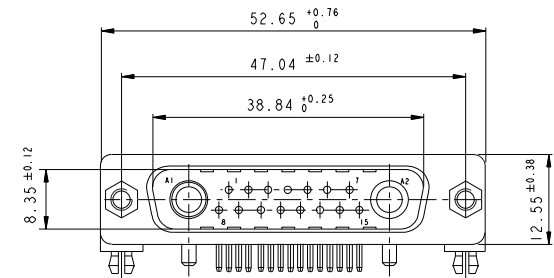
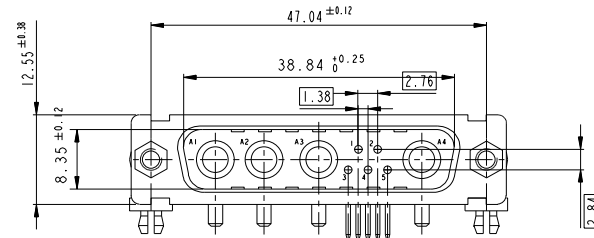
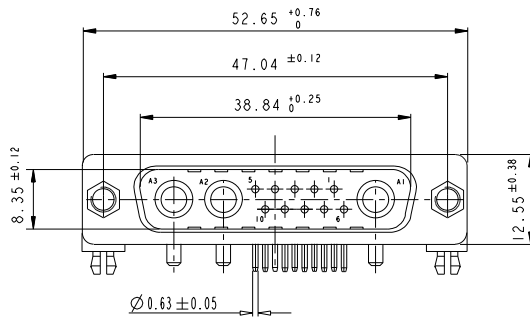
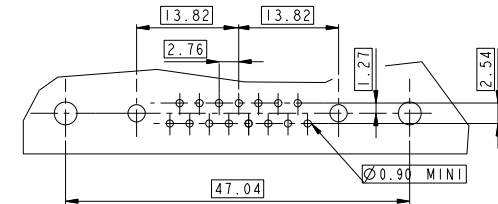
For PCB hole diameters see table 1 sheet 1



17W2

LAYOUT AND CONNECTOR DIMENSIONS

For PCB hole diameters see table 1 sheet 1



Floating signal contacts

www.fciconnect.com		surface ISO 1302	tolerance std ISO 406 ISO 1101	projection	mm
		TOLERANCES UNLESS OTHERWISE SPECIFIED		size	Scale
Dr	M PESSON	2005-10-11	ANGULAR	0.X	±0.3
Eng	P LEGARE	2005-10-11	LINEAR	0.XX	±0.1
Chr			0° ±2°	0.XXX	±0.05
Appr			Product family	Spec ref	ECN F09-0092
FCI		SUB MALE DW EUROPE foot print mixed power right angled solder		COI-8639-2304	Rev. D
colation no		CUSTOMER		sheet 5 of 7	

PDM: Rev.D

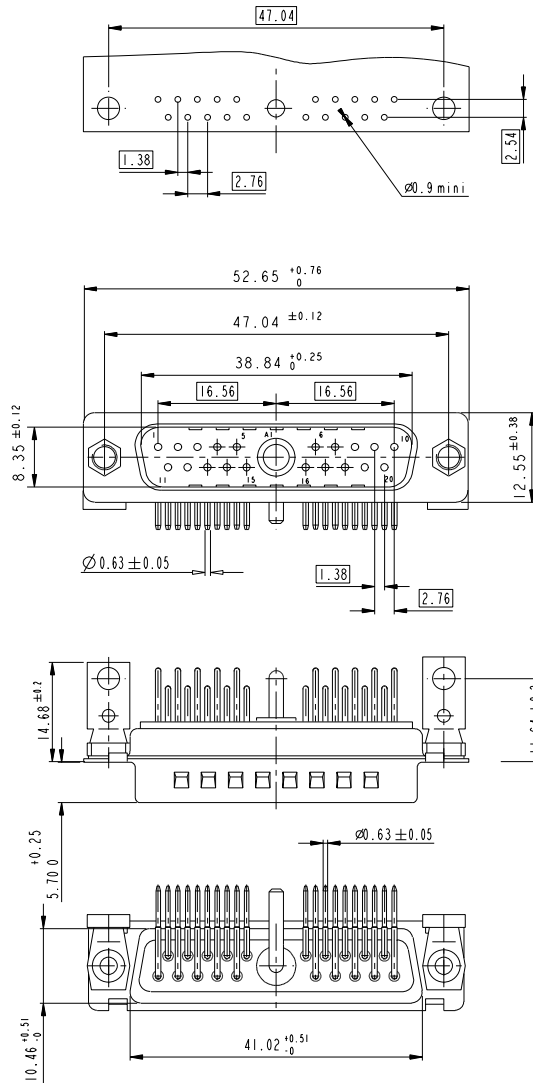
STATUS: Released

Printed: Oct 01, 2010

21W1

LAYOUT AND CONNECTOR DIMENSIONS

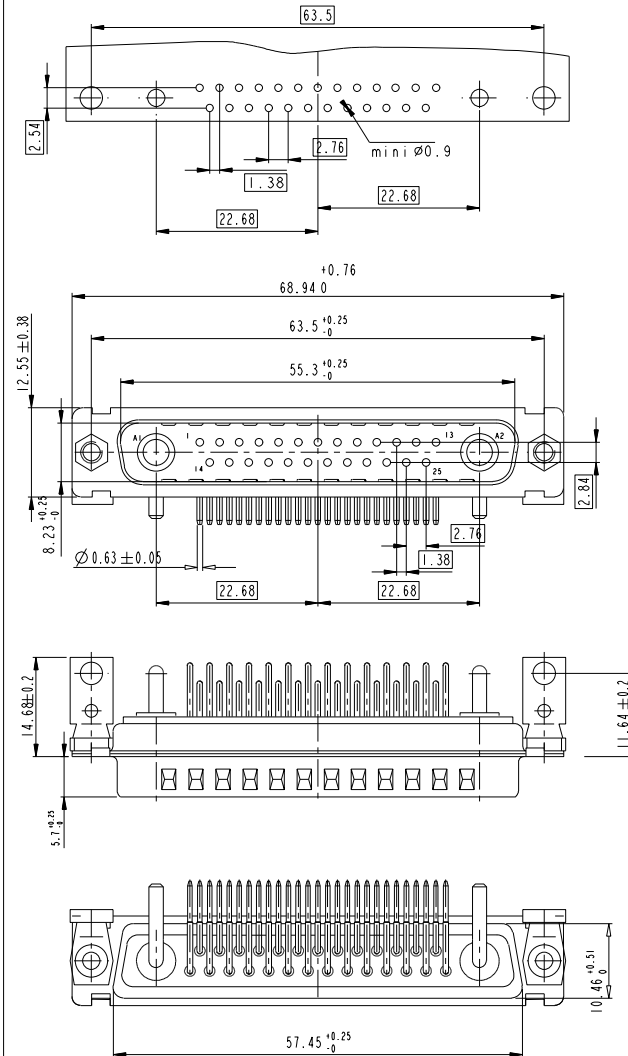
For PCB hole diameters see table 1 sheet 1



27W2

LAYOUT AND CONNECTOR DIMENSIONS

For PCB hole diameters see table 1 sheet 1



www.fciconnect.com			surface 		tolerance std ISO 1302 ISO 406 ISO 1101		projection 		mm 	
TOLERANCES UNLESS OTHERWISE SPECIFIED										
Dr	M PESSON	2005-10-11	ANGULAR LINEAR	0.X ± 0.3		size		Scale		
Eng	P LEGARE	2005-10-11		0.XX ± 0.1		A2		2:1		
Chr				0° $\pm 2^\circ$		ECN		F09-0092		
Appr				Product family		-		Spec ref		

FCI		SUB MALE DW EUROPE foot print		cat no	C01-8639-2304	Rev.	D
		mixed power right angled solder		CUSTOMER		sheet 6 of 7	

PDM: Rev:D

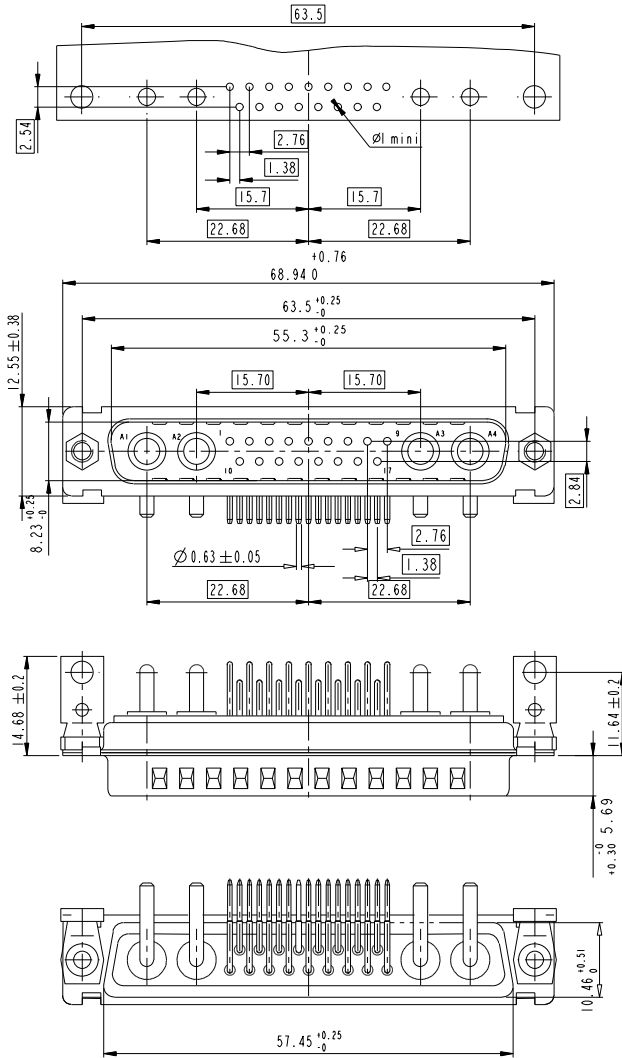
STATUS: Released

Printed: Oct 01, 2010

21WA4

LAYOUT AND CONNECTOR DIMENSIONS

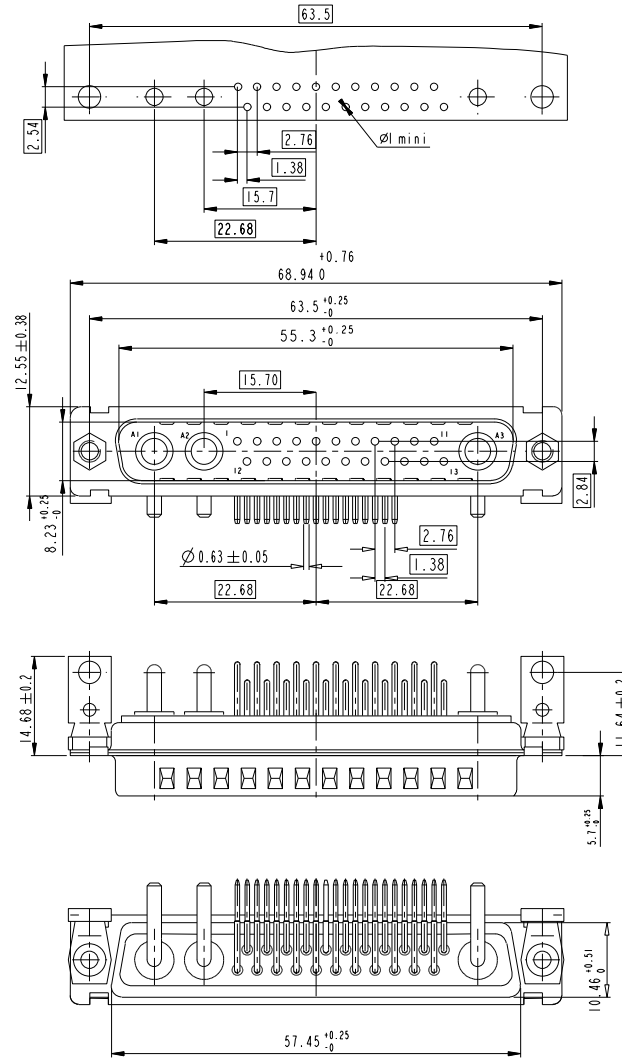
For PCB hole diameters see table I sheet I



25W3

LAYOUT AND CONNECTOR DIMENSIONS

For PCB hole diameters see table I sheet I



www.fciconnect.com		surface ISO 1302	tolerance std ISO 406 ISO 1101	projection mm	mm
		TOLERANCES UNLESS OTHERWISE SPECIFIED			
Dr	M PESSON	2005-10-11	ANGULAR	0.X	±0.3
Eng	P LEGARE	2005-10-11	LINEAR	0.XX	±0.1
Chr				0.XXX	±0.05
Appr			Product family	-	Spec ref
Title		SUB MALE DW EUROPE foot print		Proj no	C01-8639-2304
Material		mixed power right angled solder		Rev.	D
Coloration				CUSTOMER	sheet 7 of 7