

REFERENCE SPECIFICATIONS

-NFC 93425 (in compliance with HE 501)

PHYSICAL CHARACTERISTICS

-INSULATOR MATERIAL: THERMOPLASTIC UL94V0

-CONTACT MATERIAL: PHOSPHOR BRONZE,
GOLD OVER NICKEL

-ACCESSORIES: STEEL FOR METAL BRACKETS,
cadmium plated yellow passivation
THERMOPLASTIC UL94V0 FOR PLASTIC BRACKETS

BRASS FOR OTHERS ACCESSORIES,
cadmium plated yellow passivation

-SHELLS: STEEL,cadmium plated yellow passivation

ELECTRICAL CHARACTERISTICS

-NOMINAL CURRENT: 7.5A

-CONTACT RESISTANCE: <=7.3 m Ohms

-CONTACT/CONTACT : >=1000 V

-CONTACT/GROUND : >=1200 V

-INSULATION RESISTANCE: >=5000 MOhms

ENVIRONMENTAL CHARACTERISTICS

- CLIMATIC CATEGORY: 55/125/56

TEMPERATURE RANGE -55°C TO +125°C

DAMP HEAT STEADY STATE 56 DAYS

SALT SPRAY 48 HOURS

MECHANICAL CHARACTERISTICS

RETENTION AGAINST TORQUE: -Threaded insert:0.7 N.m min

-Female screw:0.5 N.m min

DBML25S500M

Series

Shell size: **E A B C D**
(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)

9,15,25,37,50

Contacts

- S** :Socket

Termination type

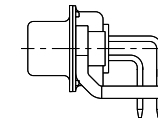
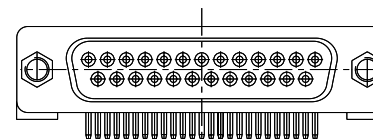
- 5** Right angle/Europe standard

Plating

- 00** Right angle 500 matings/unmatings
- 43** Right angle 500 matings/unmatings
for harsh environment

PCB accessories definition(see sheet 2)

- Blank** :Plastic brackets
- C** :Without brackets
- M** :Metal brackets

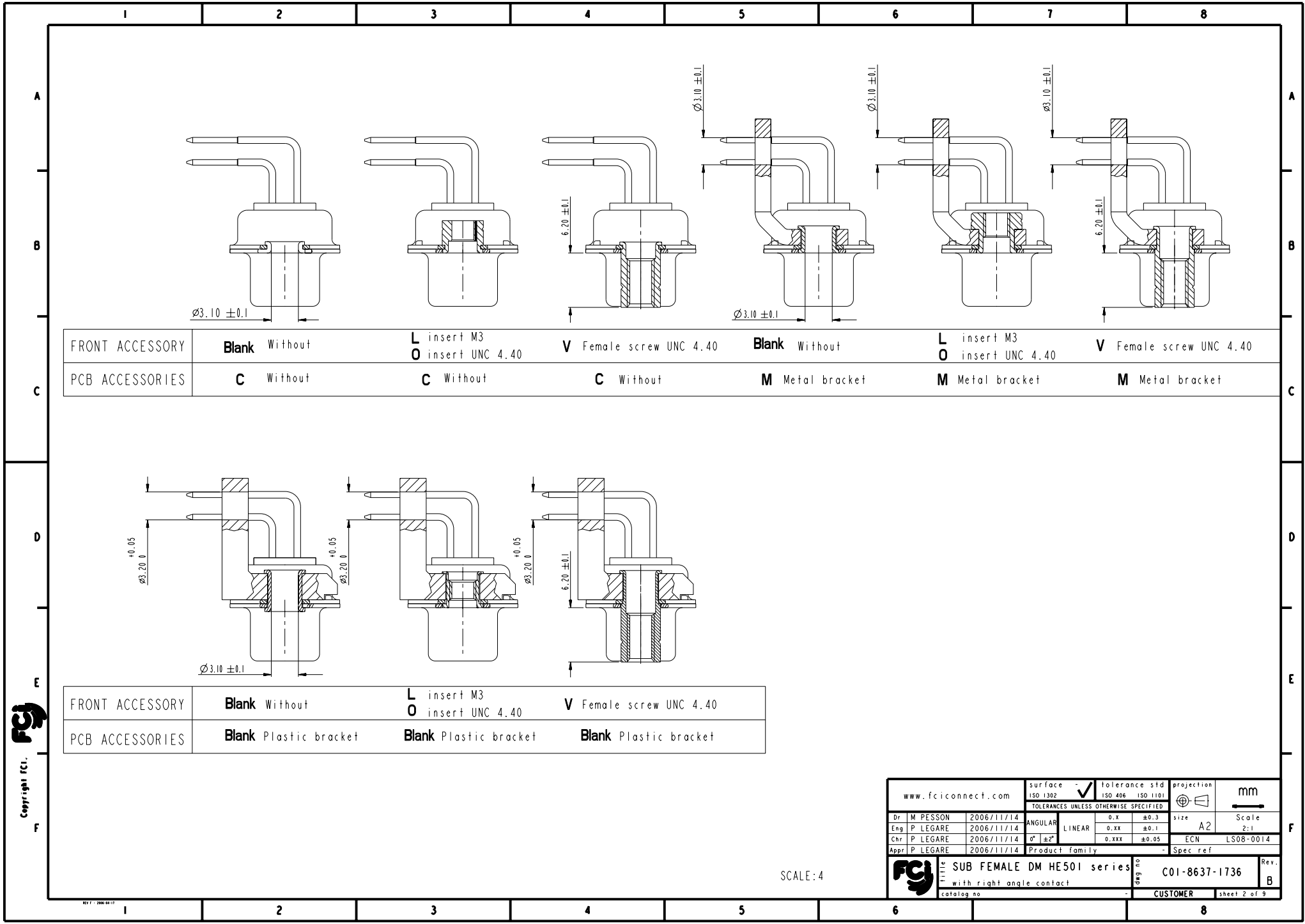


25 WAY for Example

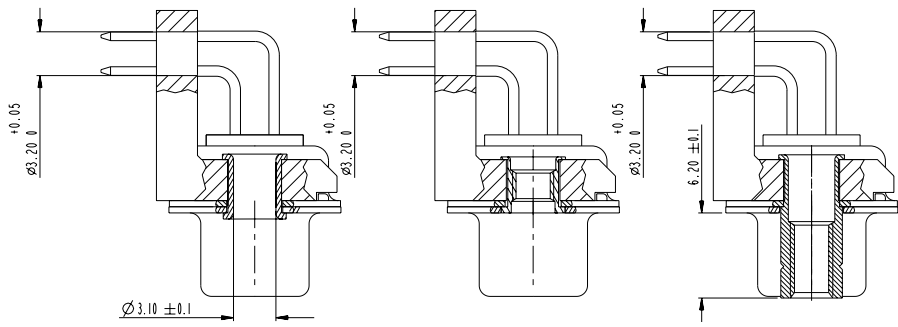
rev	acc no	dr	date
A	LS08-0014	MPE	2006/11/14
B	LS08-0014	MPE	200/01/17
-	-	-	-
-	-	-	-
-	-	-	-

www.fciconnect.com		surface	tolerance std	projection	mm
		ISO 1302	ISO 406 ISO 1101		
		TOLERANCES UNLESS OTHERWISE SPECIFIED			
Dr	M PESSON	2006/11/14	ANGULAR	LINEAR	size A2 Scale 2:1
Eng	P LEGARE	2006/11/14	0.xx	±0.3	
Chr	P LEGARE	2006/11/14	0° ±2'	0.xxx	±0.05
Appr	P LEGARE	2006/11/14	Product family		ECN LS08-0014
					Spec ref
SUB FEMALE DM HE501 series with right angle contact catalog no				ang no	C01-8637-1736
					Rev. B
CUSTOMER					sheet 1 of 9

Copyright FCI.



FRONT ACCESSORY	Blank Without	L insert M3 O insert UNC 4.40	V Female screw UNC 4.40	Blank Without	L insert M3 O insert UNC 4.40	V Female screw UNC 4.40
PCB ACCESSORIES	C Without	C Without	C Without	M Metal bracket	M Metal bracket	M Metal bracket



FRONT ACCESSORY	Blank Without	L insert M3 O insert UNC 4.40	V Female screw UNC 4.40
PCB ACCESSORIES	Blank Plastic bracket	Blank Plastic bracket	Blank Plastic bracket

SCALE: 4

www.fciconnect.com		surface - ISO 1302	tolerance std ISO 406 ISO 1101	projection mm
		TOLERANCES UNLESS OTHERWISE SPECIFIED		
Dr	M PESSON	2006/11/14	ANGULAR	0.X ±0.3
Eng	P LEGARE	2006/11/14	LINEAR	0.XX ±0.1
Chr	P LEGARE	2006/11/14	0° ±2°	0.XXX ±0.05
Appr	P LEGARE	2006/11/14	Product family	- Spec ref
TITLE SUB FEMALE DM HE501 series with right angle contact		ang no	C01-8637-1736	
catalog no		CUSTOMER		sheet 2 of 9

Copyright fci.

PART NUMBER	FRONT ACCESSORY	PCB ACCESSORY
D*MxxS500C	without	without
D*MLxxS500C	insert M3	without
D*MOxxS500C	insert UNC 4.40	without
D*MVxxS500C	female screw UNC 4.40	without
D*MxxS500M	without	Metal bracket
D*MLxxS500M	insert M3	Metal bracket
D*MOxxS500M	insert UNC 4.40	Metal bracket
D*MVxxS500M	female screw UNC 4.40	Metal bracket
D*MxxS500	without	Plastic bracket
D*MLxxS500	insert M3	Plastic bracket
D*MOxxS500	insert UNC 4.40	Plastic bracket
D*MVxxS500	female screw UNC 4.40	Plastic bracket

shell size	Contact number
X	XX
E	09
A	15
B	25
C	37
D	50

PART NUMBER	FRONT ACCESSORY	PCB ACCESSORY
D*MxxS543C	without	without
D*MLxxS543C	insert M3	without
D*MOxxS543C	insert UNC 4.40	without
D*MVxxS543C	female screw UNC 4.40	without
D*MxxS543M	without	Metal bracket
D*MLxxS543M	insert M3	Metal bracket
D*MOxxS543M	insert UNC 4.40	Metal bracket
D*MVxxS543M	female screw UNC 4.40	Metal bracket
D*MxxS543	without	Plastic bracket
D*MLxxS543	insert M3	Plastic bracket
D*MOxxS543	insert UNC 4.40	Plastic bracket
D*MVxxS543	female screw UNC 4.40	Plastic bracket

CROSS REFERENCES HE501 and FCI

HE501 P/N	FCI P/N	FRONT ACCESSORY	PCB ACCESSORY
HE501PxxVS6	D*MxxS500	without	Plastic bracket
HE501MxxVS6	D*MxxS500M	without	Metal bracket

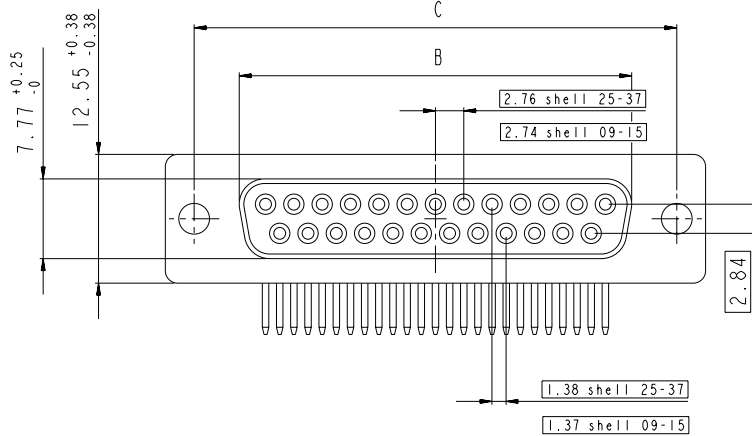
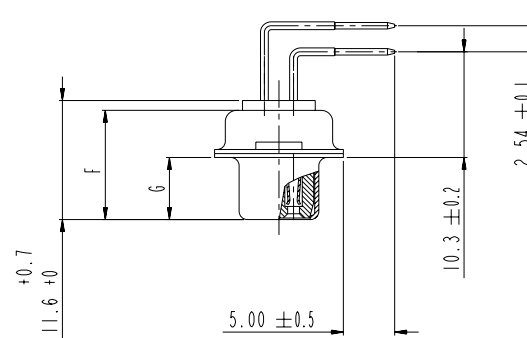
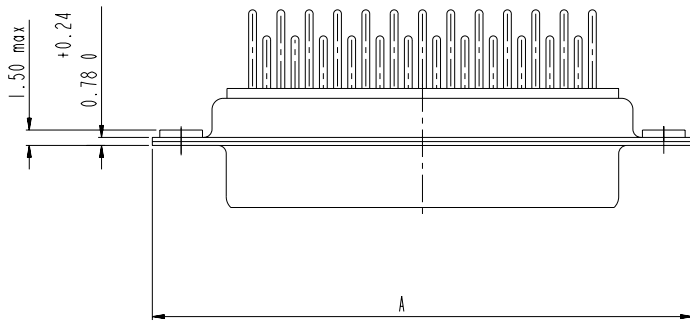
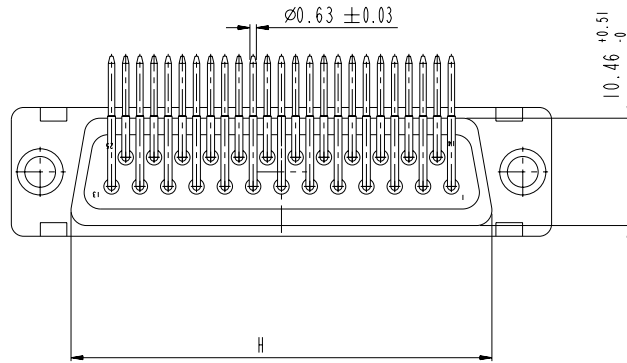
Copyright FCI

www.fciconnect.com		surface ISO 1302	tolerance std ISO 406 ISO 1101	projection mm
		TOLERANCES UNLESS OTHERWISE SPECIFIED		
Dr	M PESSON	2006/11/14	ANGULAR	0.X ±0.3
Eng	P LEGARE	2006/11/14	LINEAR	0.XX ±0.1
Chr	P LEGARE	2006/11/14	Ø ±2	0.XXX ±0.05
Appr	P LEGARE	2006/11/14	Product family	Spec ref
SUB FEMALE DM HE501 series with right angle contact				ang no C01-8637-1736
catalog no				CUSTOMER sheet 3 of 9

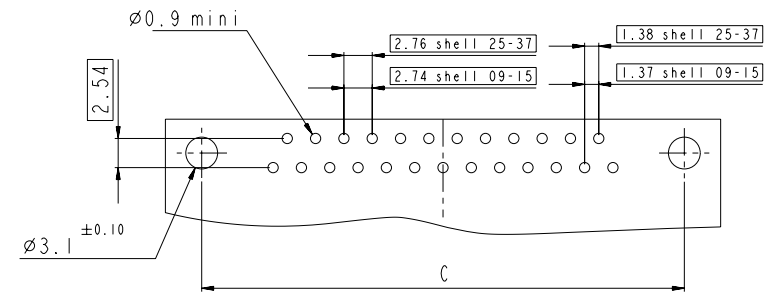
DIMENSION FOR SHELL E, A, B, C WITHOUT BRACKET

Dimensions are in millimeters

Shell size	Number of contacts	A ^{+0.76} ₋₀	B ^{+0.25} ₋₀	C ±0.12	F ^{+0.57} ₋₀	G ^{+0.25} ₋₀	H ^{+0.51} ₋₀
E	09	30.43	16.21	24.99	10.64	6.05	19.02
A	15	38.76	24.54	33.32	10.64	6.05	27.25
B	25	52.65	38.25	47.04	10.64	6.05	41.02
C	37	68.94	54.71	63.50	10.64	6.05	57.45



LAYOUT DIMENSIONS



SCALE: 3

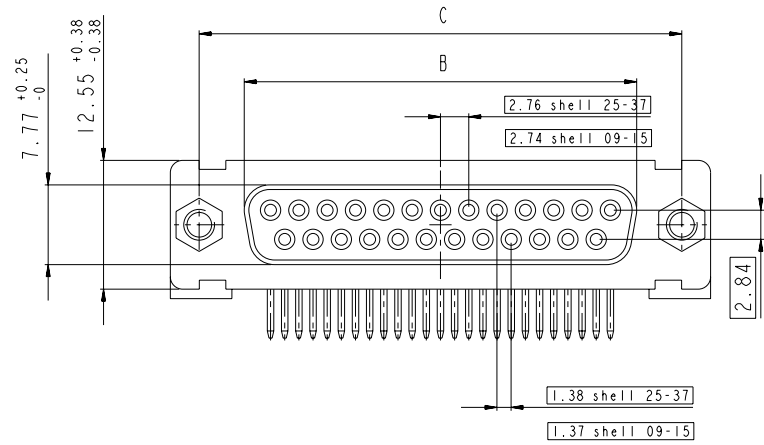
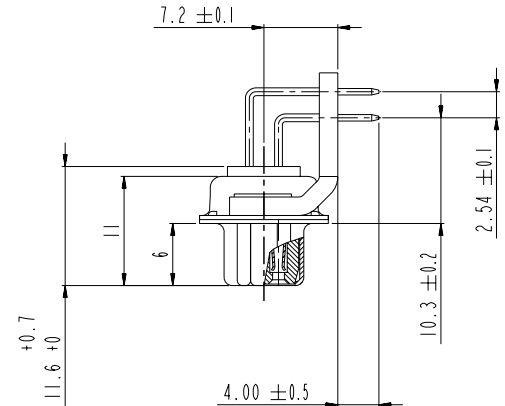
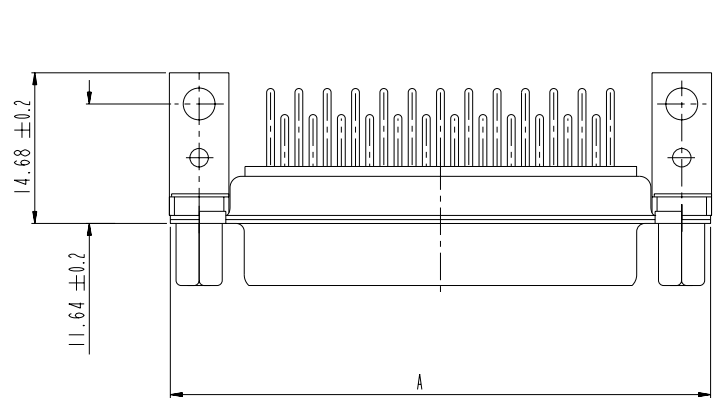
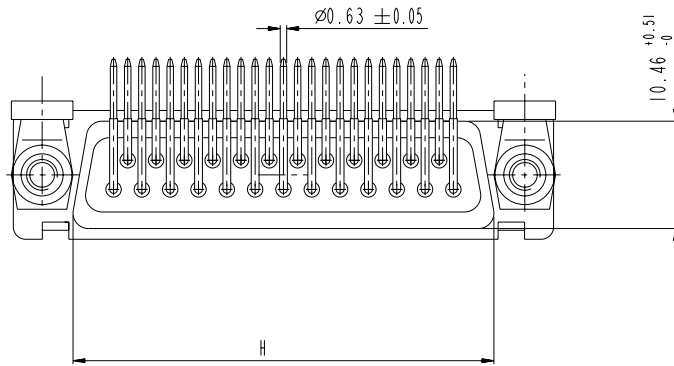
www.fciconnect.com		surface -	tolerance std	projection	mm
		ISO 1302	ISO 406 ISO 1101		
		TOLERANCES UNLESS OTHERWISE SPECIFIED			
Dr	M PESSON	2006/11/14	ANGULAR	0.X ±0.3	size A2 Scale 2:1
Eng	P LEGARE	2006/11/14	LINEAR	0.XX ±0.1	
Chr	P LEGARE	2006/11/14	∅ ±2	0.XXX ±0.05	ECN LS08-0014
Appr	P LEGARE	2006/11/14	Product family	-	Spec ref
		SUB FEMALE DM HE501 series		ang no	Rev.
		with right angle contact		C01-8637-1736	B
catalog no		CUSTOMER		sheet 4 of 9	

Copyright fci. FCI

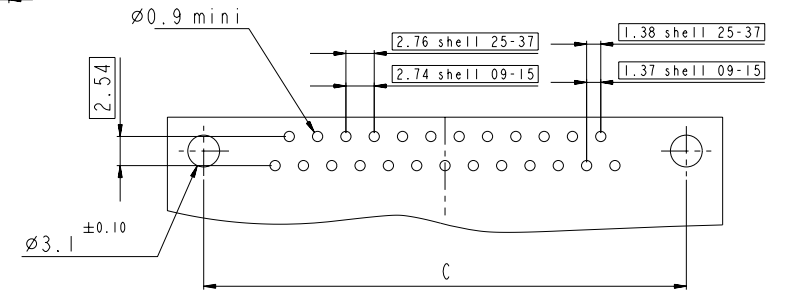
DIMENSION FOR SHELL E,A,B,C WITH METAL BRACKET

Dimensions are in millimeters

Shell size	Number of contacts	A ^{+0.76} ₋₀	B ^{+0.25} ₋₀	C ± 0.12	F ^{+0.57} ₋₀	G ^{+0.25} ₋₀	H ^{+0.51} ₋₀
E	09	30.43	16.21	24.99	10.64	6.05	19.02
A	15	38.76	24.54	33.32	10.64	6.05	27.25
B	25	52.65	38.25	47.04	10.64	6.05	41.02
C	37	68.94	54.71	63.50	10.64	6.05	57.45



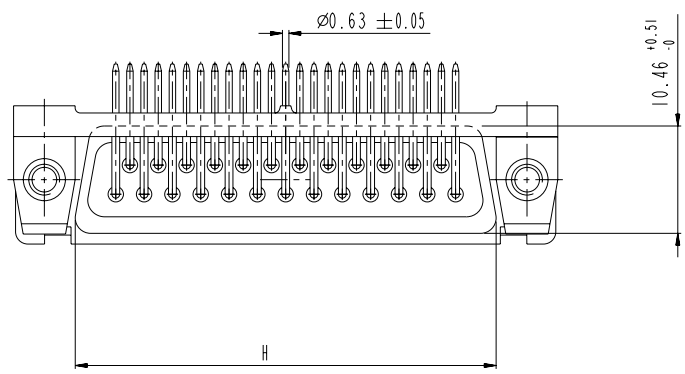
LAYOUT DIMENSIONS



SCALE: 3

www.fciconnect.com		surface - ISO 1302	tolerance std ISO 406 ISO 1101	projection mm
		TOLERANCES UNLESS OTHERWISE SPECIFIED		
Dr M PESSON	2006/11/14	ANGULAR	0.X ± 0.3	size A2 Scale 2:1
Eng P LEGARE	2006/11/14	LINEAR	0.XX ± 0.1	ECN LS08-0014
Chr P LEGARE	2006/11/14	$\sigma^{\circ} \pm 2^{\circ}$	0.XXX ± 0.05	Spec ref
Appr P LEGARE	2006/11/14	Product family		
SUB FEMALE DM HE501 series		ang no	C01-8637-1736	Rev. B
with right angle contact		catalog no	CUSTOMER	sheet 5 of 9

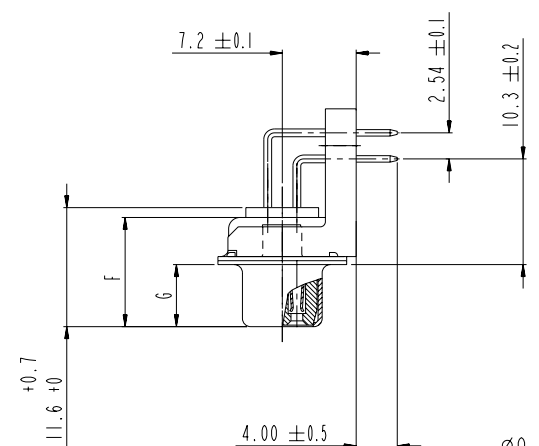
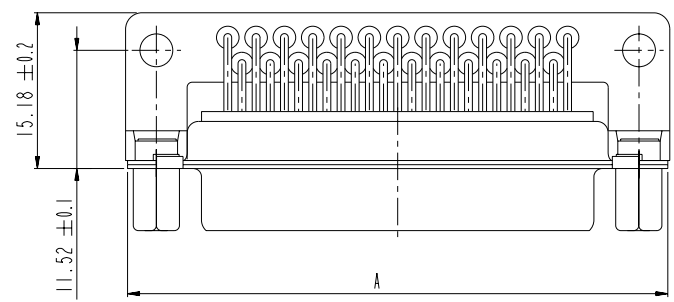
Copyright fci. FCJ



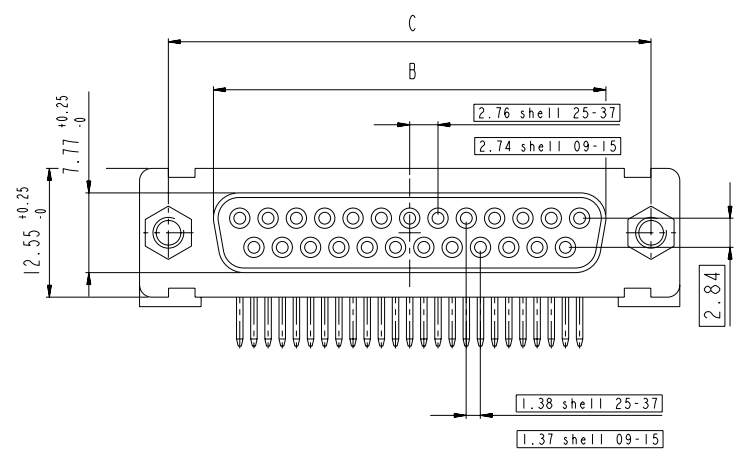
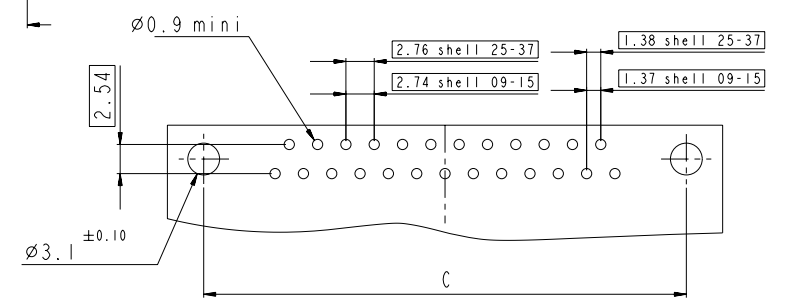
DIMENSIONS FOR SHELL E,A,B,C WITH PLASTIC BRACKET

Dimensions are in millimeters

Shell size	Number of contacts	A $^{+0.76}_0$	B $^{+0.25}_0$	C ± 0.12	F $^{+0.57}_0$	G $^{+0.25}_0$	H $^{+0.51}_0$
E	09	30.43	16.21	24.99	10.64	6.05	19.02
A	15	38.76	24.54	33.32	10.64	6.05	27.25
B	25	52.65	38.25	47.04	10.64	6.05	41.02
C	37	68.94	54.71	63.50	10.64	6.05	57.45



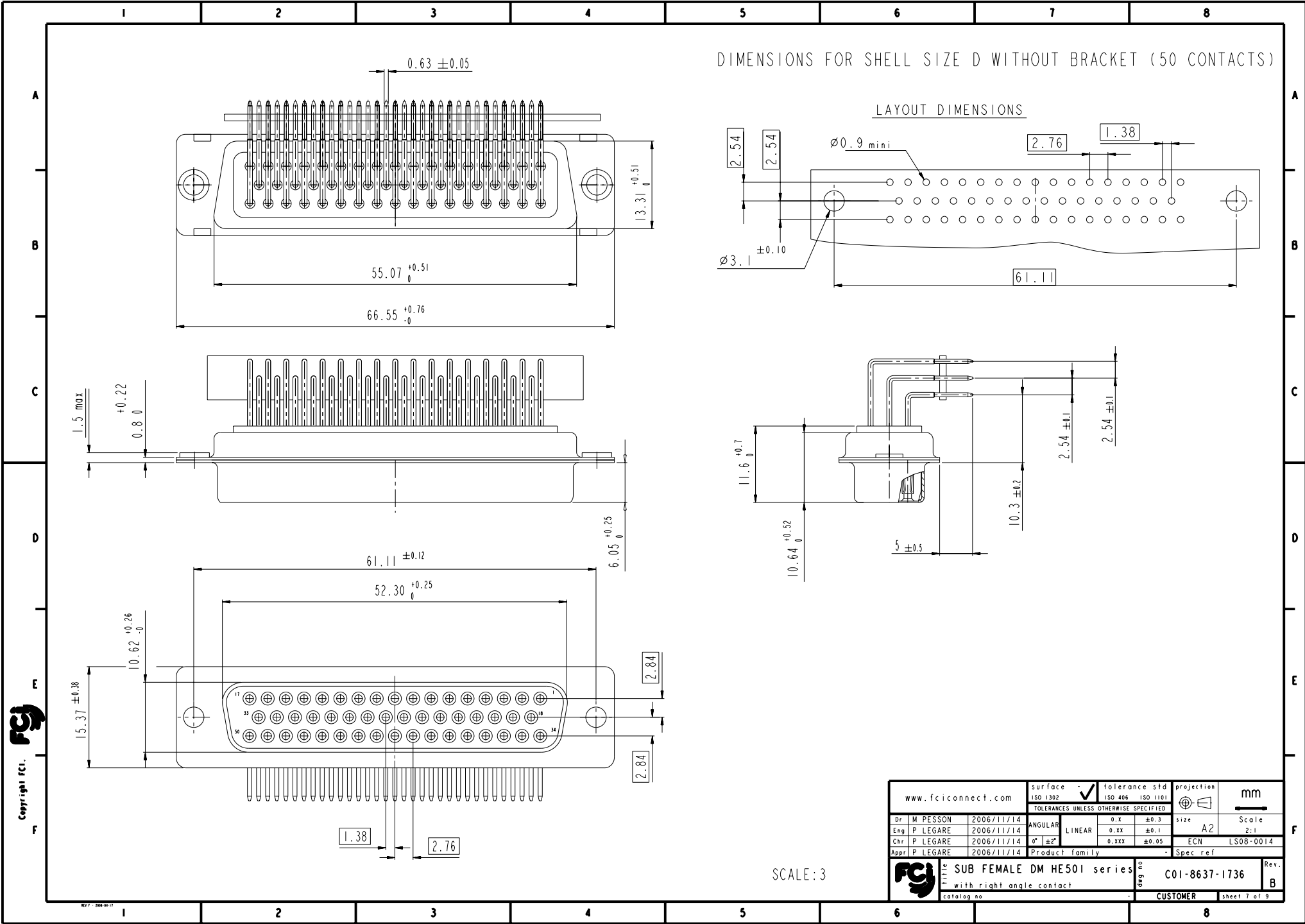
LAYOUT DIMENSIONS



SCALE: 3

www.fciconnect.com		surface -	tolerance std	projection	mm
		ISO 1302	ISO 406 ISO 1101		
TOLERANCES UNLESS OTHERWISE SPECIFIED					
Dr	M PESSON	2006/11/14	ANGULAR	0.X ±0.3	size A2 Scale 2:1
Eng	P LEGARE	2006/11/14	LINEAR	0.XX ±0.1	ECN LS08-0014
Chr	P LEGARE	2006/11/14	° ±2'	0.XXX ±0.05	
Appr	P LEGARE	2006/11/14	Product family	-	Spec ref
		SUB FEMALE DM HE501 series		ang no	Rev.
		with right angle contact		C01-8637-1736	B
catalog no		CUSTOMER		sheet 6 of 9	

Copyright fci. FCI



DIMENSIONS FOR SHELL SIZE D WITHOUT BRACKET (50 CONTACTS)

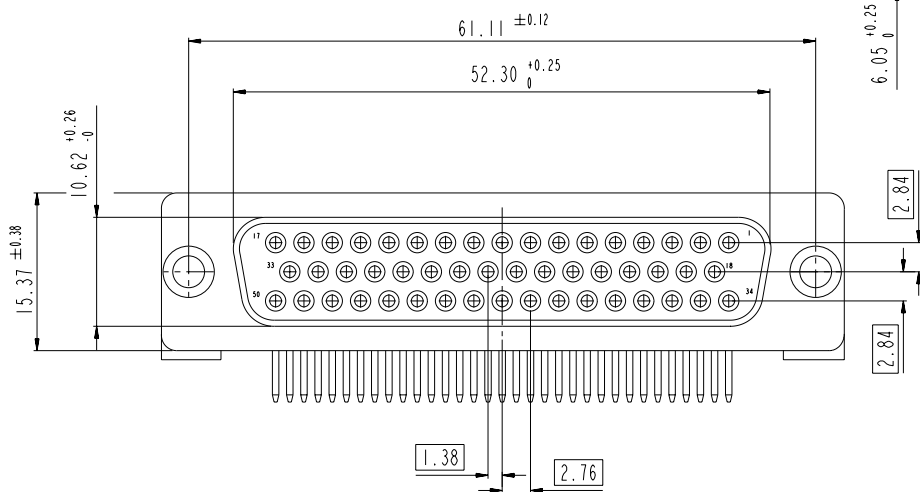
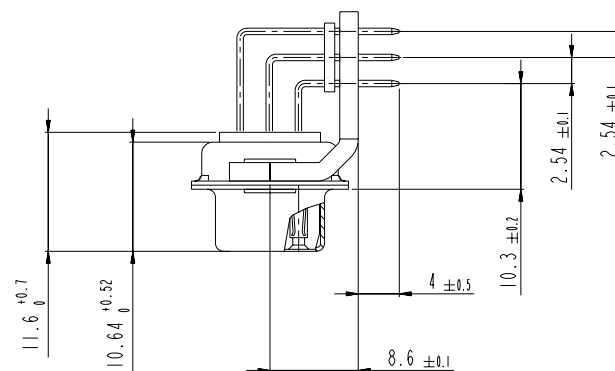
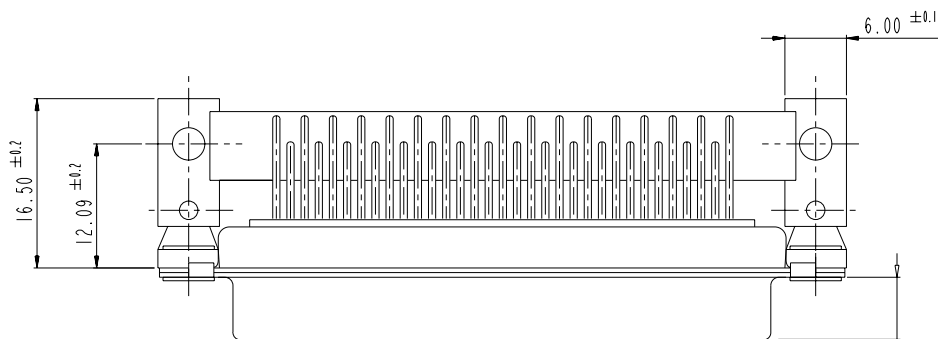
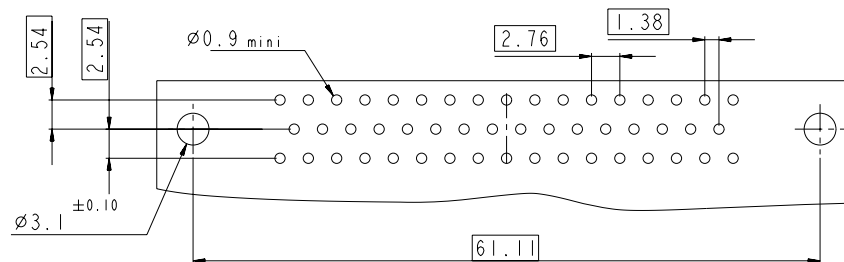
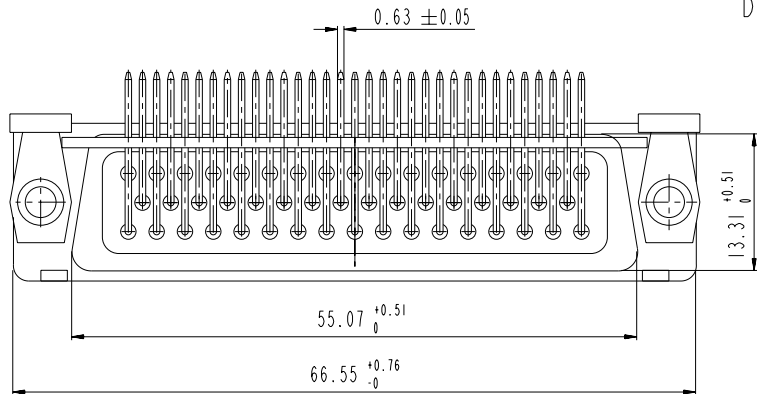
LAYOUT DIMENSIONS

SCALE: 3

www.fciconnect.com		surface -	tolerance std	projection	mm
		ISO 1302	ISO 406 ISO 1101		
		TOLERANCES UNLESS OTHERWISE SPECIFIED			
Dr	M PESSON	2006/11/14	ANGULAR	0.X ±0.3	size A2 Scale 2:1
Eng	P LEGARE	2006/11/14	LINEAR	0.XX ±0.1	ECN LS08-0014
Chr	P LEGARE	2006/11/14	0° ±2°	0.XXX ±0.05	Spec ref
Appr	P LEGARE	2006/11/14	Product family		
		SUB FEMALE DM HE501 series		ang no	Rev. B
		with right angle contact		C01-8637-1736	
		catalog no		CUSTOMER	sheet 7 of 9

DIMENSIONS FOR SHELL SIZE D WITH METAL BRACKET (50 CONTACTS)

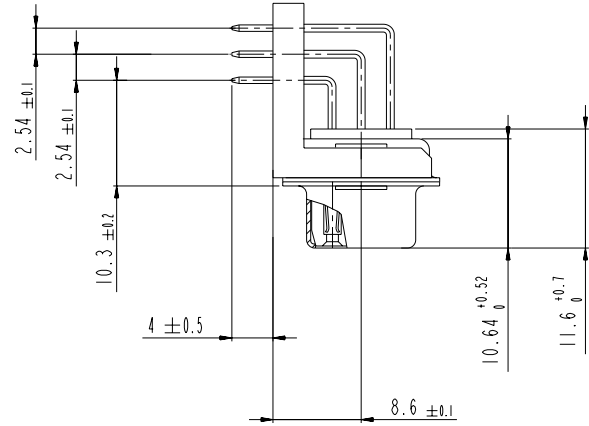
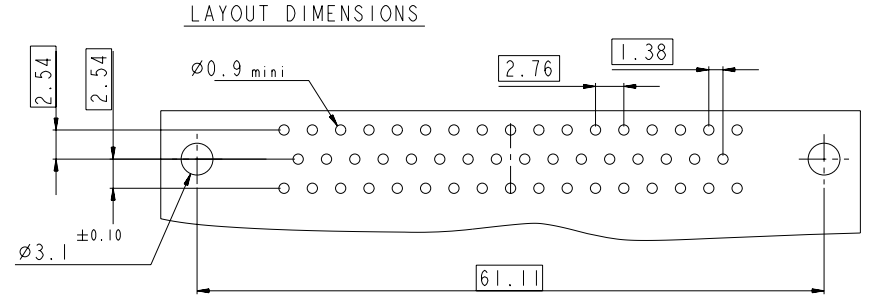
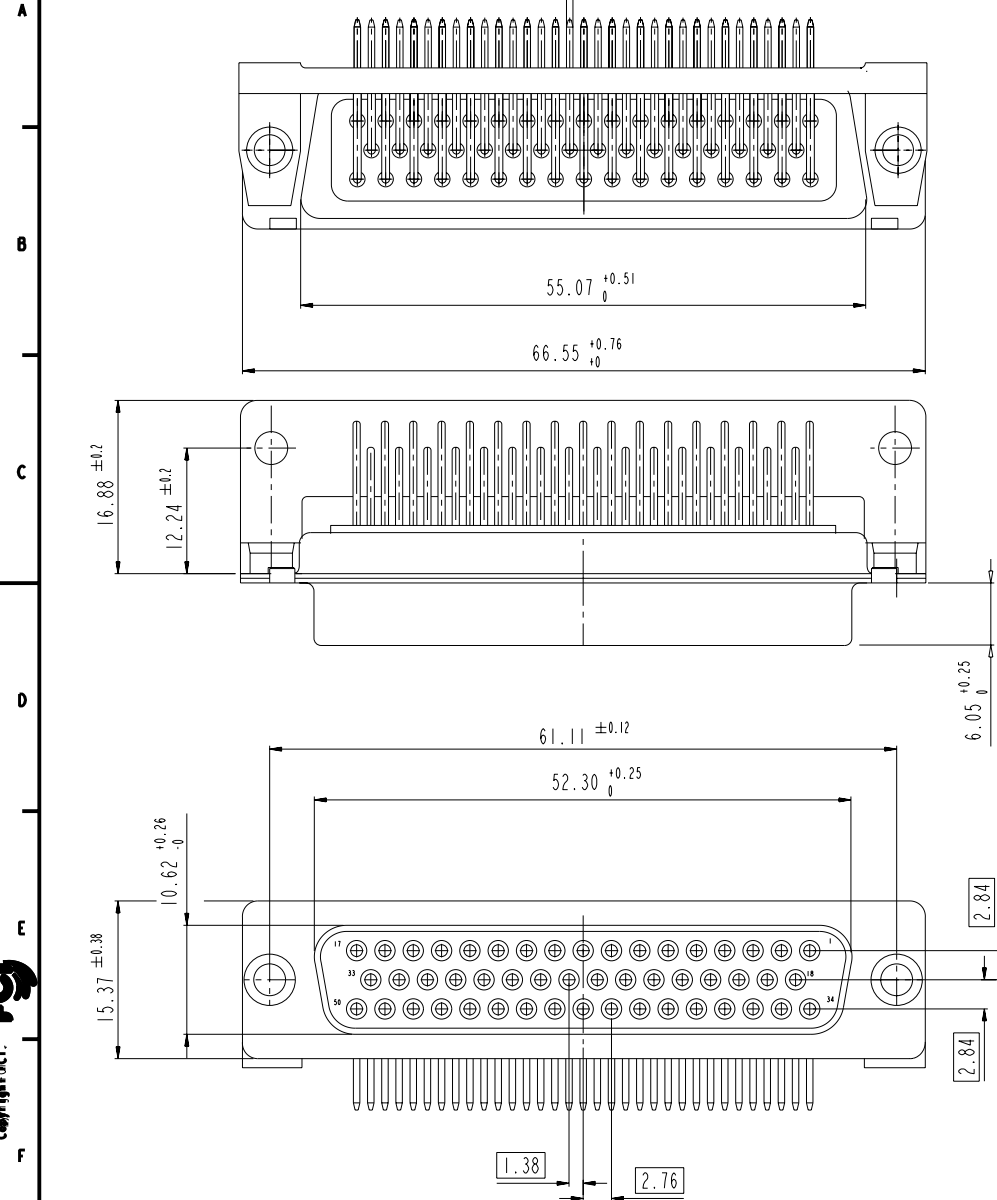
LAYOUT DIMENSIONS



SCALE: 3

www.fciconnect.com		surface - ISO 1302	tolerance std ISO 406 ISO 1101	projection mm
		TOLERANCES UNLESS OTHERWISE SPECIFIED		
Dr	M PESSON	2006/11/14	ANGULAR	0.X ± 0.3
Eng	P LEGARE	2006/11/14	LINEAR	0.XX ± 0.1
Chr	P LEGARE	2006/11/14	0° ± 2°	0.XXX ± 0.05
Appr	P LEGARE	2006/11/14	Product family	Spec ref
TITLE SUB FEMALE DM HE501 series with right angle contact catalog no		ang no C01-8637-1736		Rev. B
CUSTOMER			sheet 8 of 9	

DIMENSIONS FOR SHELL SIZE D WITH PLASTIC BRACKET (50 CONTACTS)



SCALE: 3

www.fciconnect.com		surface - ISO 1302	tolerance std ISO 406 ISO 1101	projection mm
		TOLERANCES UNLESS OTHERWISE SPECIFIED		
Dr M PESSON	2006/11/14	ANGULAR	0.X ±0.3	size A2 Scale 2:1
Eng P LEGARE	2006/11/14	LINEAR	0.XX ±0.1	ECN LS08-0014
Chr P LEGARE	2006/11/14	0° ±2°	0.XXX ±0.05	Spec ref
Appr P LEGARE	2006/11/14	Product family		
TITLE SUB FEMALE DM HE501 series with right angle contact catalog no		ang no	C01-8637-1736	Rev. B
CUSTOMER			sheet 9 of 9	