

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

Series

DBML25S500M

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

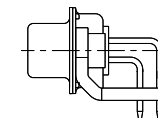
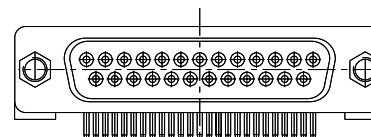
43 Right angle 500 matings/unmatings
for harsh environment

PCB accessories definition(see sheet 2)

Blank :Plastic brackets

C :Without brackets

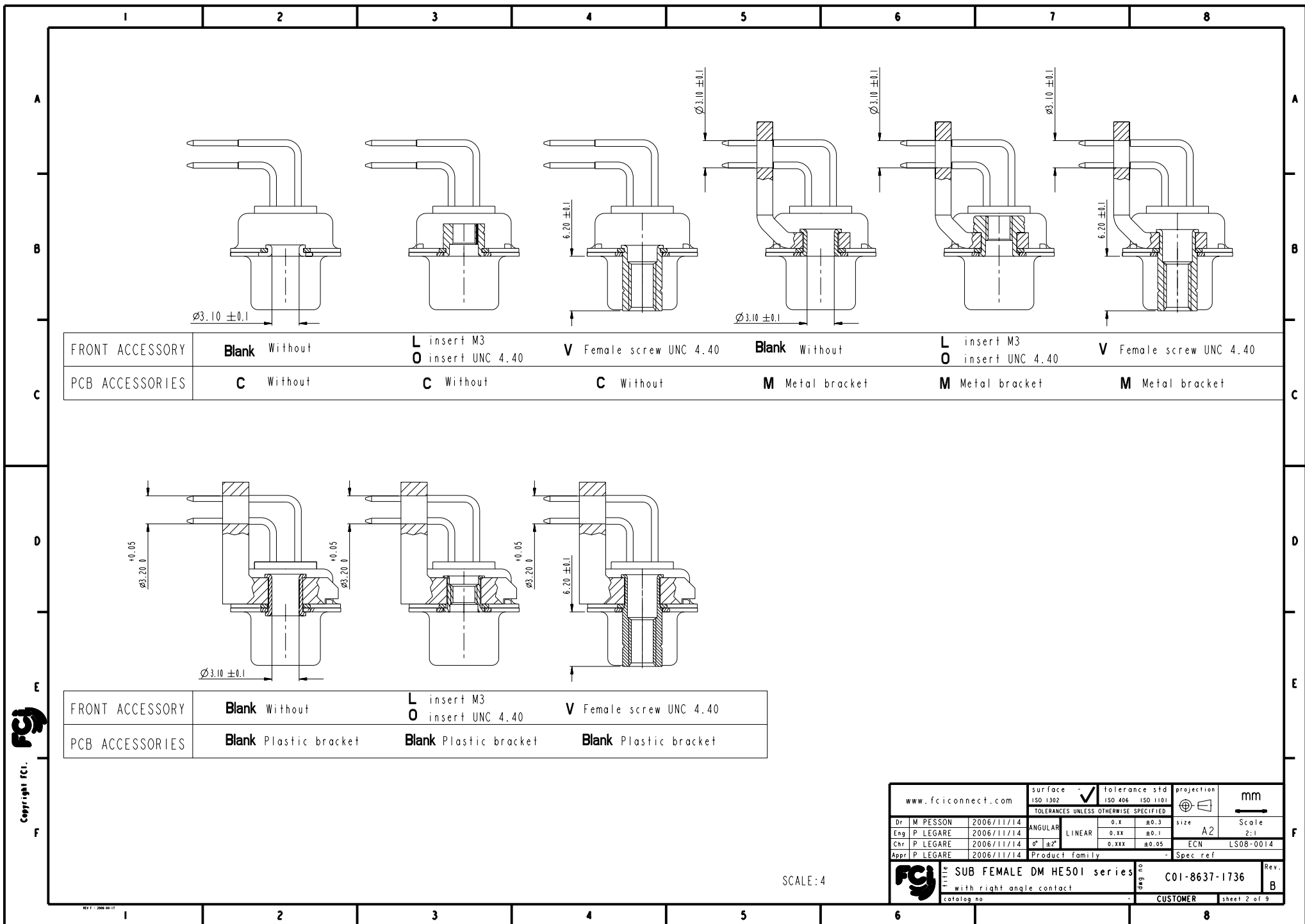
M :Metal brackets



25 WAY for Example

rev	acc no	dr	date
A	3506-0174	MPE	2006/11/14
B	3508-0014	MPE	2007/01/17
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

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



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

www.fciconnect.com

Dr M PESSON2006/11/14

Eng P LEGARE2006/11/14

Chr P LEGARE2006/11/14

Appr P LEGARE2006/11/14

surface-ISO 1302

tolerance stdISO 406 ISO 1101

projection

mm

TOLERANCES UNLESS OTHERWISE SPECIFIED

0.X±0.3

0.XX±0.1

0.XXX±0.05

ANGULAR

LINEAR

sizeA2

Scale2:1

ECNLS08-0014

Product family

Spec ref

FCI

SUB FEMALE DM HE501 series

deg no

C01-8637-1736

Rev.B

with right angle contact

catalog no

CUSTOMER

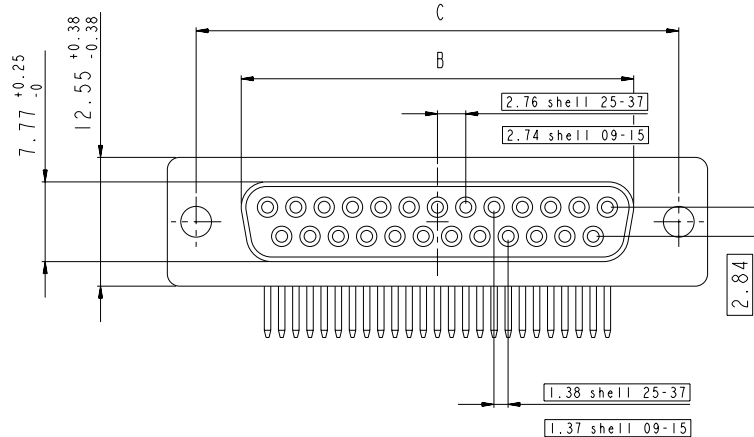
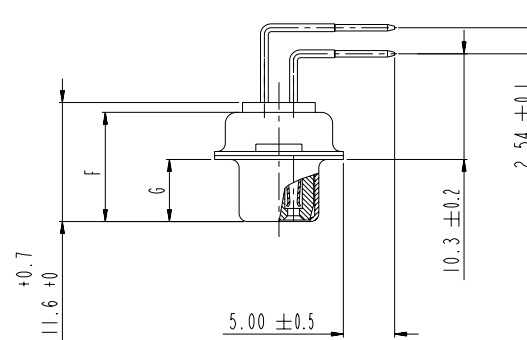
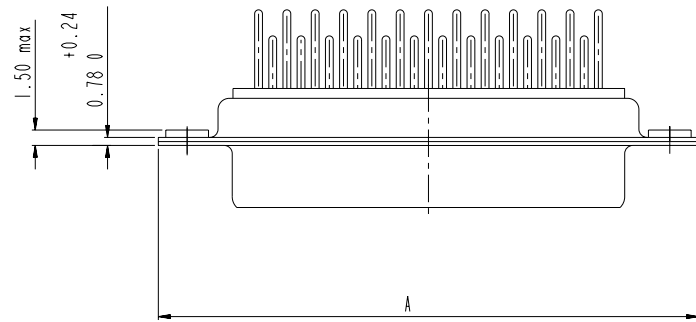
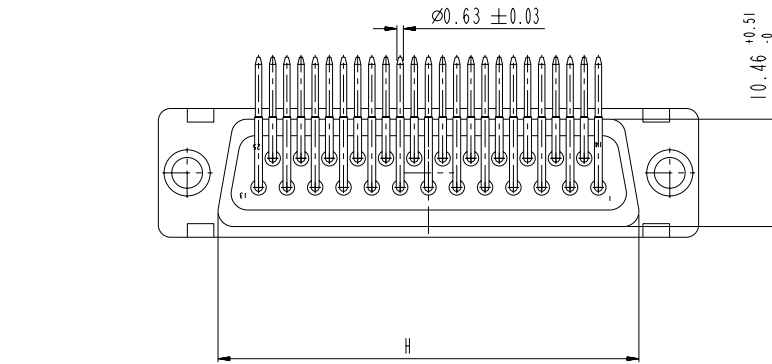
sheet 3 of 9

Copyright FCI

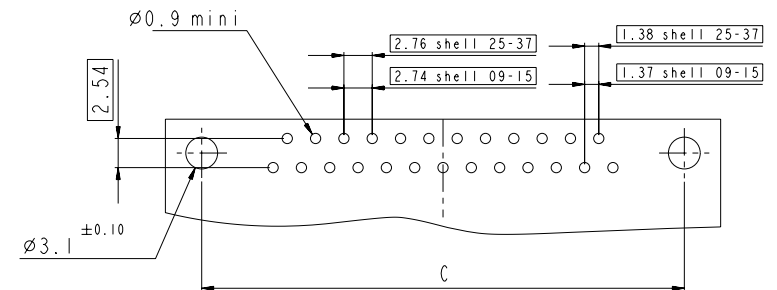
DIMENSION FOR SHELL E,A,B,C WITHOUT BRACKET

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



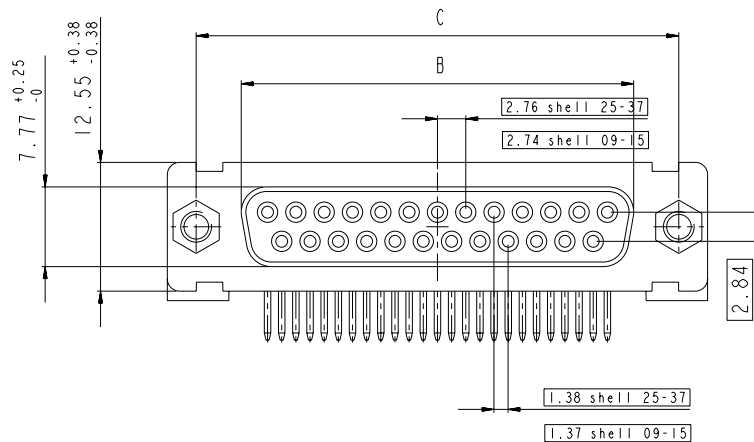
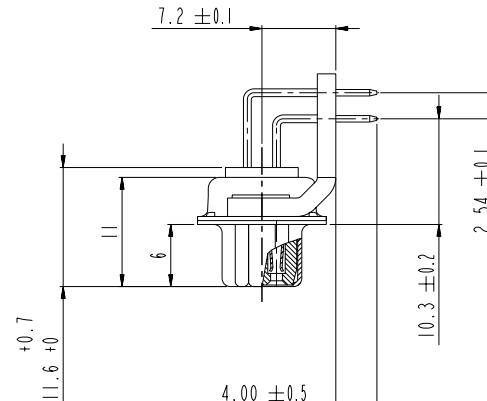
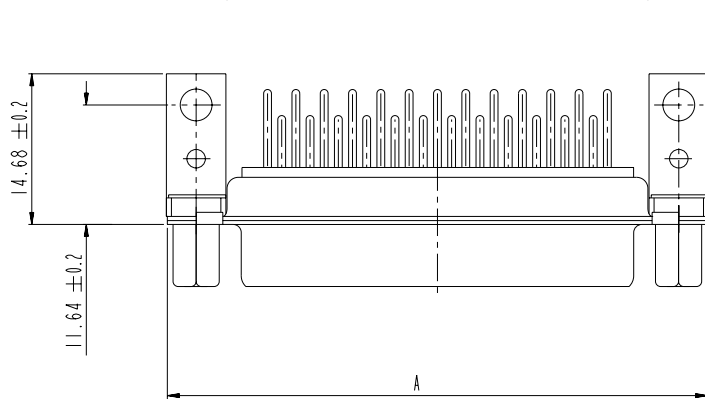
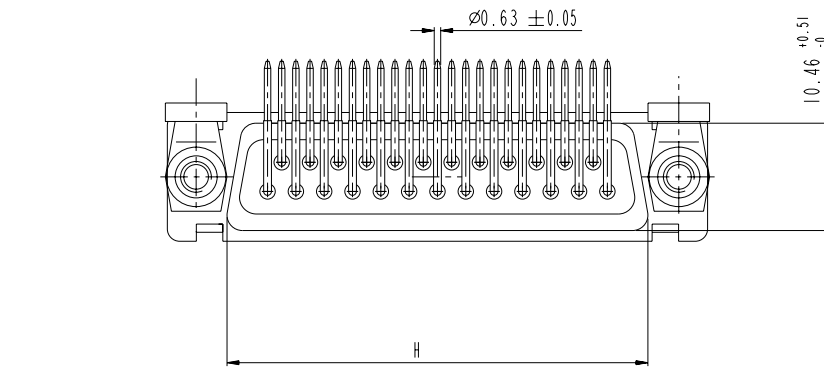
SCALE: 3

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	Scale
Eng	P LEGARE	2006/11/14		0.XX	±0.1	A2	2:1
Chr	P LEGARE	2006/11/14		0.XXX	±0.05	ECN	LS08-0014
Appr	P LEGARE	2006/11/14	Product family	Spec ref			
			SUB FEMALE DM HE501 series			deg no	Rev.
			with right angle contact			C01-8637-1736	B
			catalog no	CUSTOMER			sheet 4 of 9

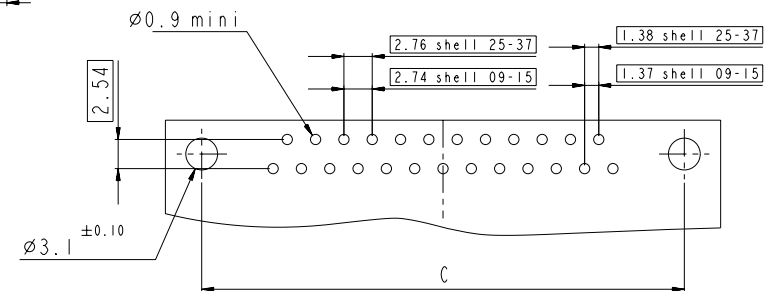
DIMENSION FOR SHELL E,A,B,C WITH METAL BRACKET

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

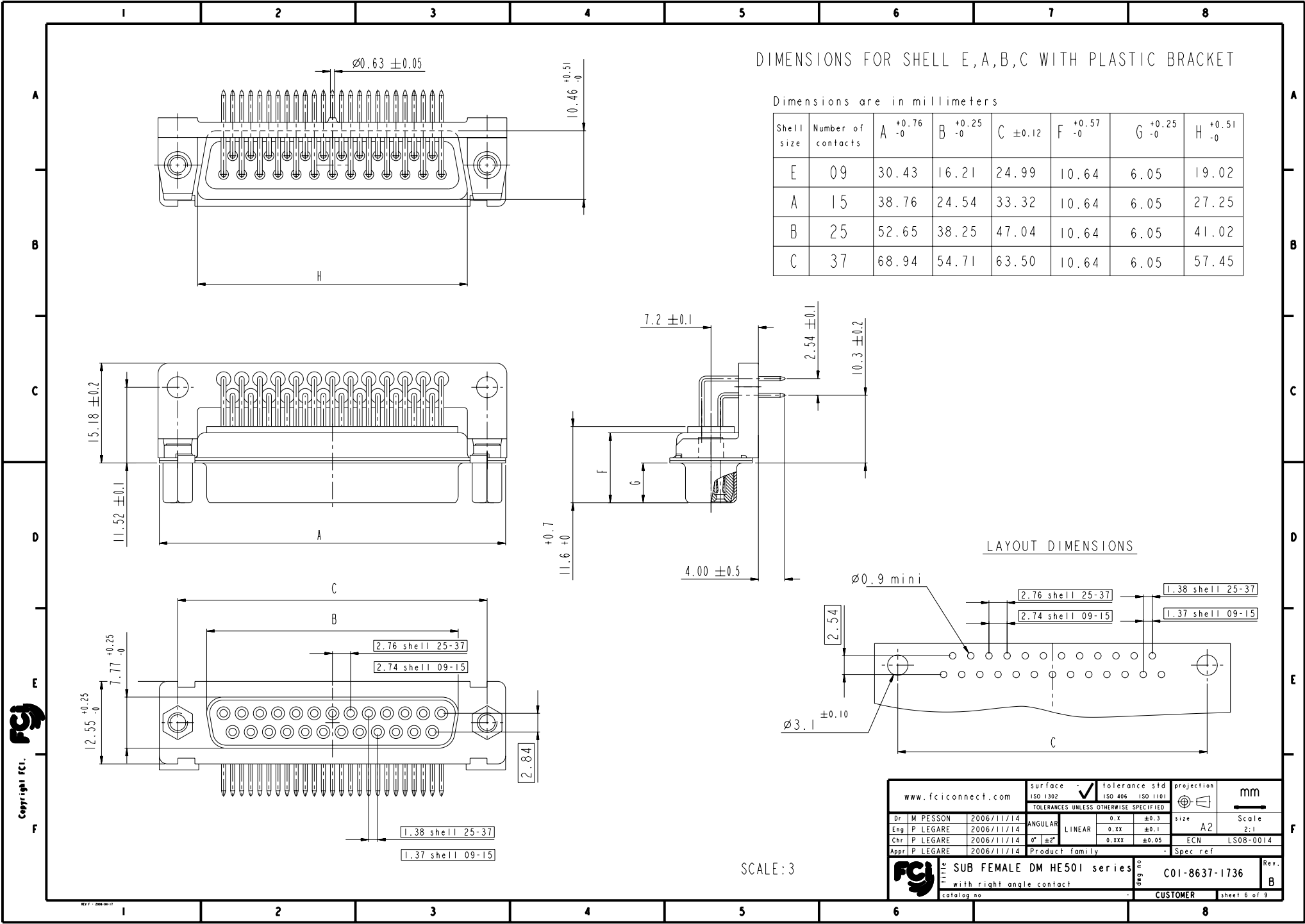


LAYOUT DIMENSIONS



SCALE: 3

www.fciconnect.com			surface - ☒ tolerance std ISO 1302 ISO 406 ISO 1101			projection 		mm 	
TOLERANCES UNLESS OTHERWISE SPECIFIED									
Dr	M PESSON	2006/11/14	ANGULAR	LINEAR	0.X	±0.3	size A2	Scale 2:1	ECN LS08-0014
Eng	P LEGARE	2006/11/14			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			
			SUB FEMALE DM HE501 series				C01-8637-1736		Rev. B
with right angle contact			deg no						
catalog no			CUSTOMER				sheet 5 of 9		

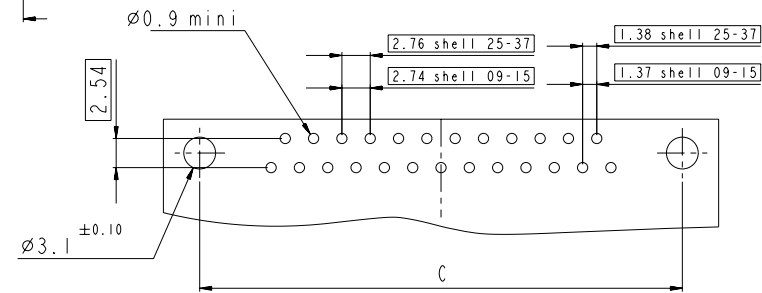


DIMENSIONS FOR SHELL E,A,B,C WITH PLASTIC BRACKET

Dimensions are in millimeters

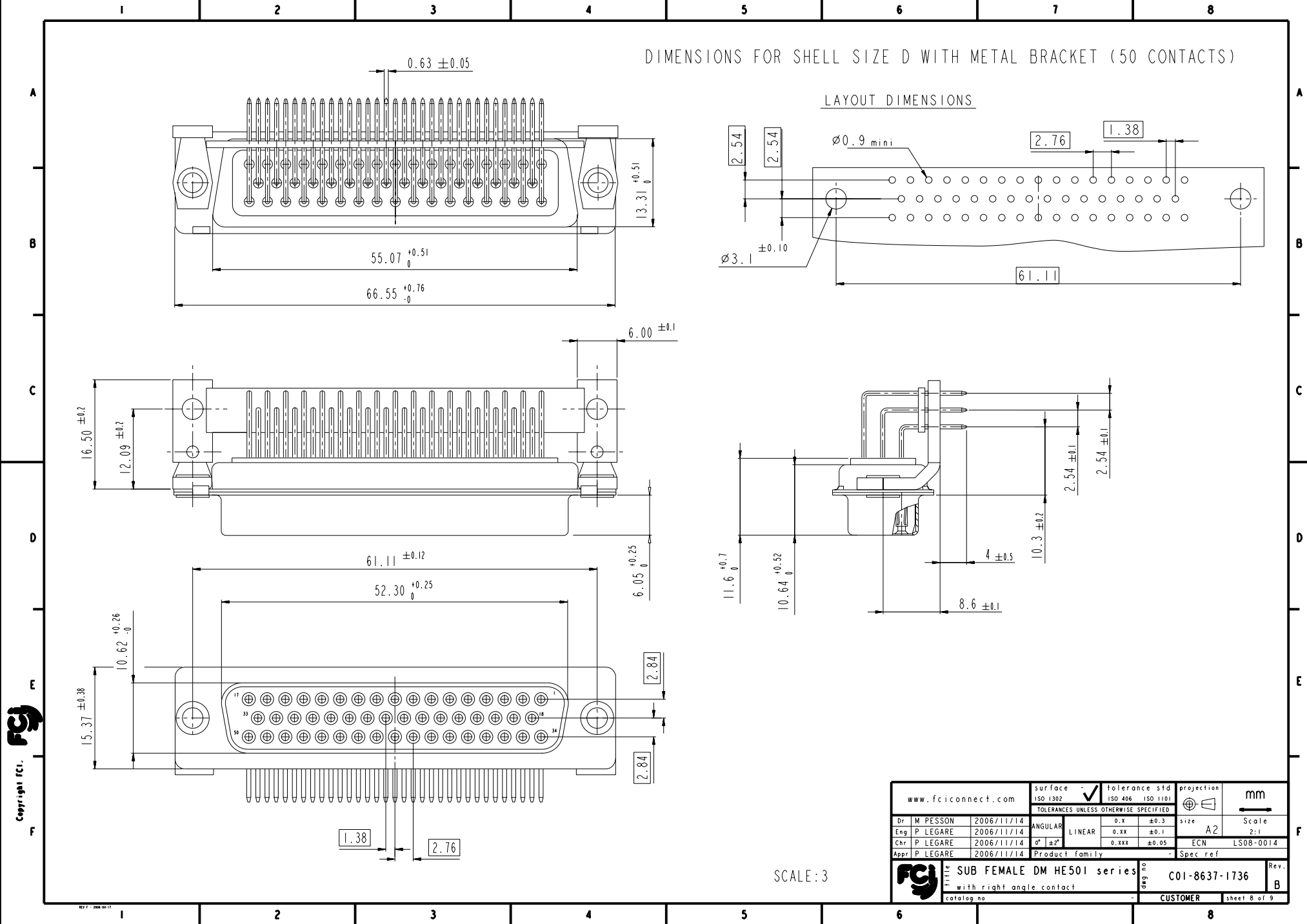
Shell size	Number of contacts	A ^{+0.76 -0}	B ^{+0.25 -0}	C ^{±0.12}	F ^{+0.57 -0}	G ^{+0.25 -0}	H ^{+0.51 -0}
E	09	30.43	16.21	24.99	10.64	6.05	19.02
A	15	38.76	24.54	33.32	10.64	6.05	27.25
B	25	52.65	38.25	47.04	10.64	6.05	41.02
C	37	68.94	54.71	63.50	10.64	6.05	57.45

LAYOUT DIMENSIONS



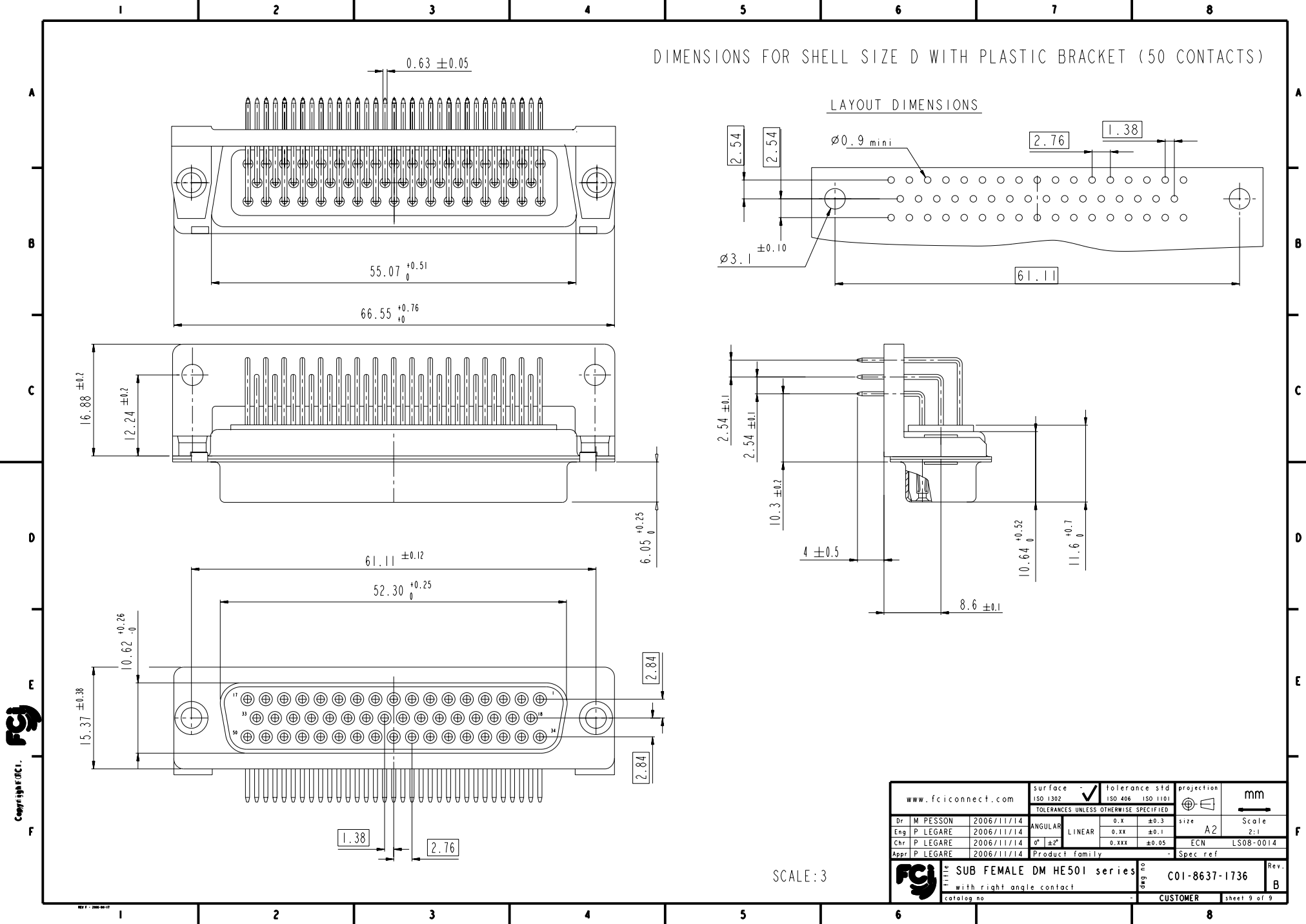
SCALE: 3

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



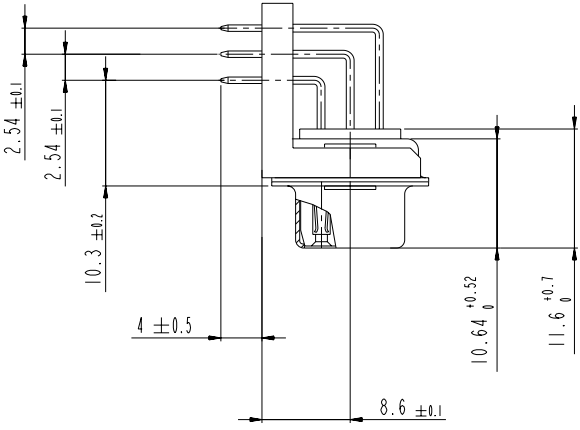
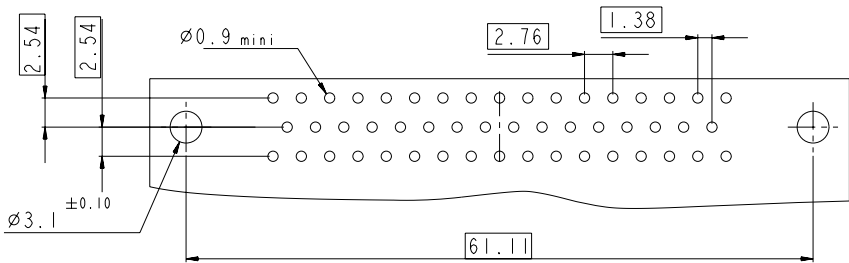
SCALE:3

www.fciconnect.com			surface -  tolerance std ISO 1302 ISO 406 ISO 1101			projection 		mm 	
			TOLERANCES UNLESS OTHERWISE SPECIFIED						
Dr	M PESSON	2006/11/14	ANGULAR	LINEAR	0.X	±0.3	size A2	Scale 2:1	
Eng	P LEGARE	2006/11/14			0.XX	±0.1			
Chr	P LEGARE	2006/11/14	0° ±2°		0.XXX	±0.05	ECN	LS08-0014	
Appr	P LEGARE	2006/11/14	Product family				Spec ref		
			SUB FEMALE DM HE501 series				C01-8637-1736		Rev. B
			with right angle contact						
catalog no			-				CUSTOMER		sheet 8 of 9



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

LAYOUT DIMENSIONS



SCALE: 3

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