

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

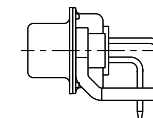
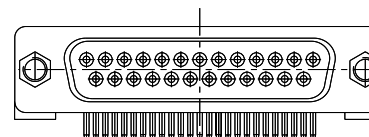
Plating

00 Right angle 500 matings/unmatings

43 Right angle 500 matings/unmatings
for harsh environment

PCB accessories definition(see sheet 2)

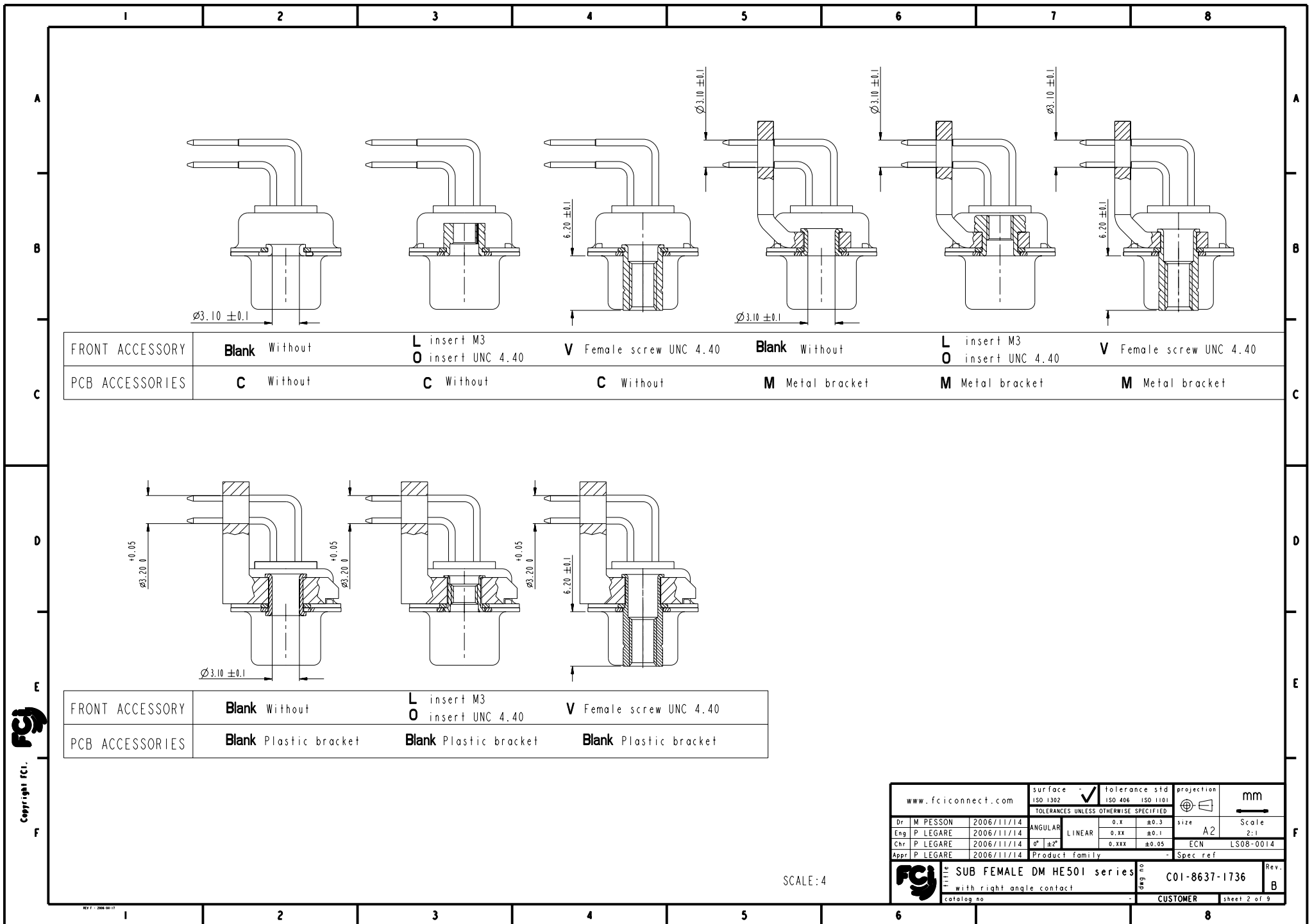
Blank :Plastic brackets
C :Without brackets
M :Metal brackets



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 - ☒ 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				
			title SUB FEMALE DM HE501 series				deg no		C01-8637-1736		Rev
			with right angle contact								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

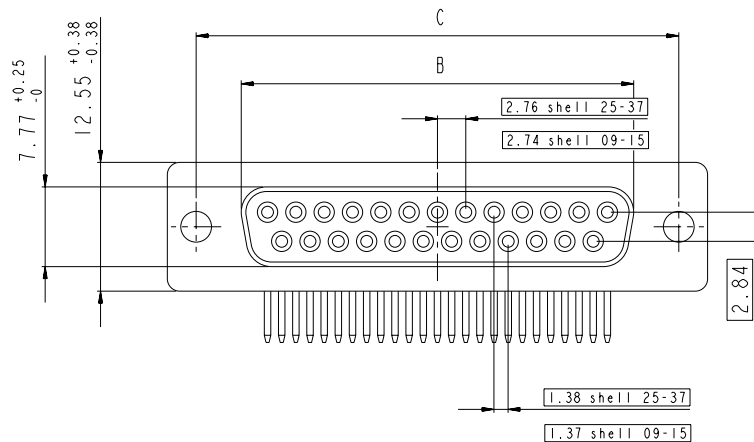
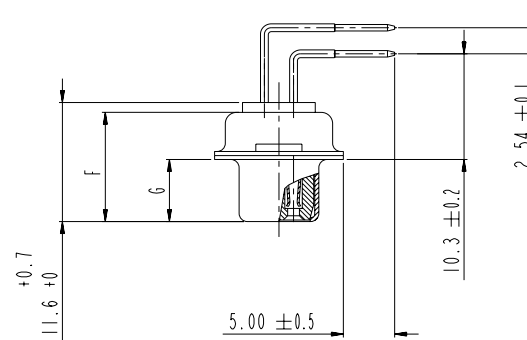
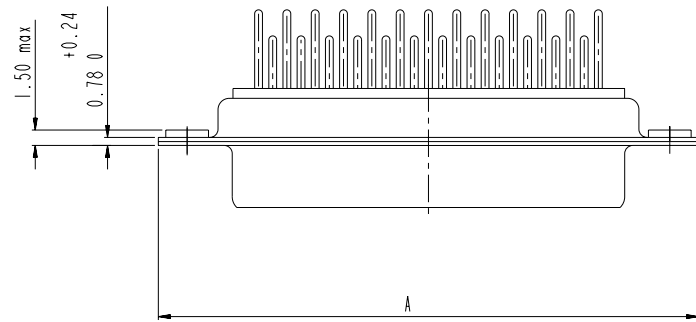
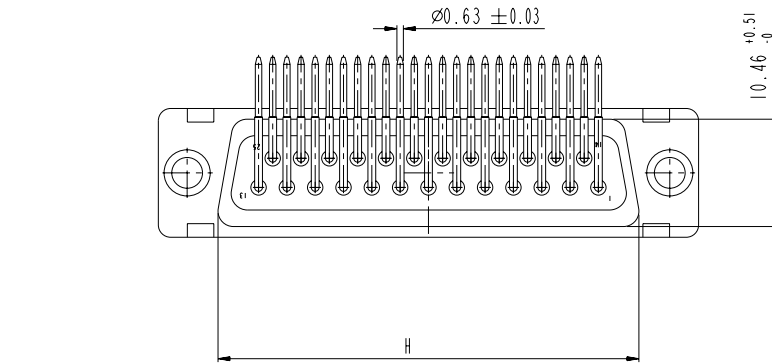
HE501 P/N	FCI P/N	FRONT ACCESSORY	PCB ACCESSORY
HE501PxxVS6	D*MxxS500	without	Plastic bracket
HE501MxxVS6	D*MxxS500M	without	Metal bracket

www.fciconnect.com			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	0° ±2°	0.XXX	±0.05	ECN	LS08-0014
Appr	P LEGARE	2006/11/14	Product family		-	Spec ref	
			SUB FEMALE DM HE501 series		deg no	C01-8637-1736	Rev. B
			with right angle contact			CUSTOMER	sheet 3 of 9
catalog no							

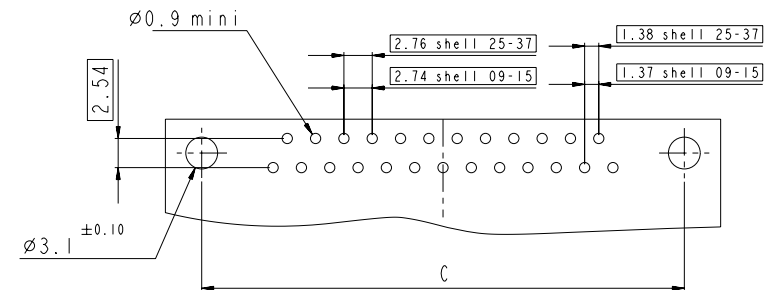
DIMENSION FOR SHELL E,A,B,C WITHOUT BRACKET

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



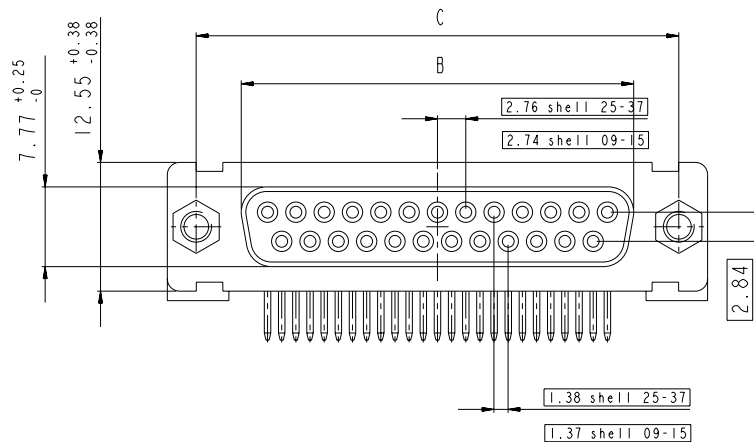
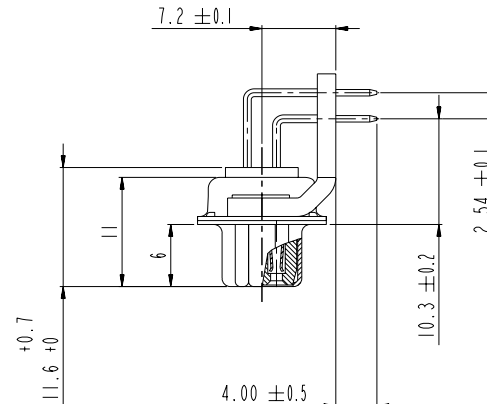
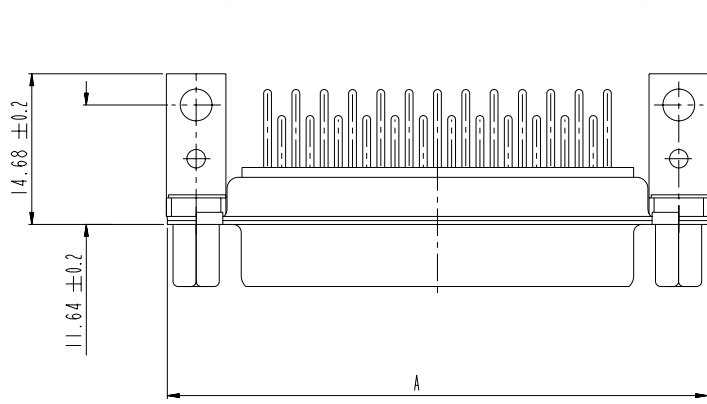
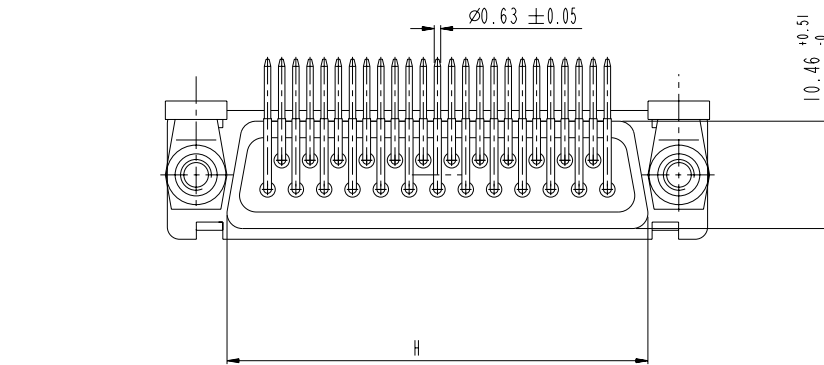
SCALE: 3

www.fciconnect.com			surface	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						
SUB FEMALE DM HE501 series			C01-8637-1736			Rev. B			
with right angle contact			C01-8637-1736			B			
catalog no			CUSTOMER			sheet 4 of 9			

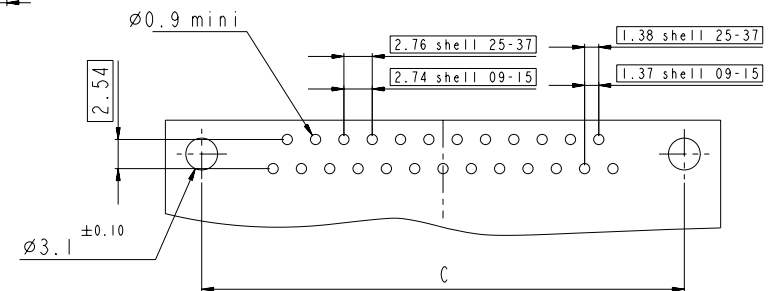
DIMENSION FOR SHELL E,A,B,C WITH METAL BRACKET

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

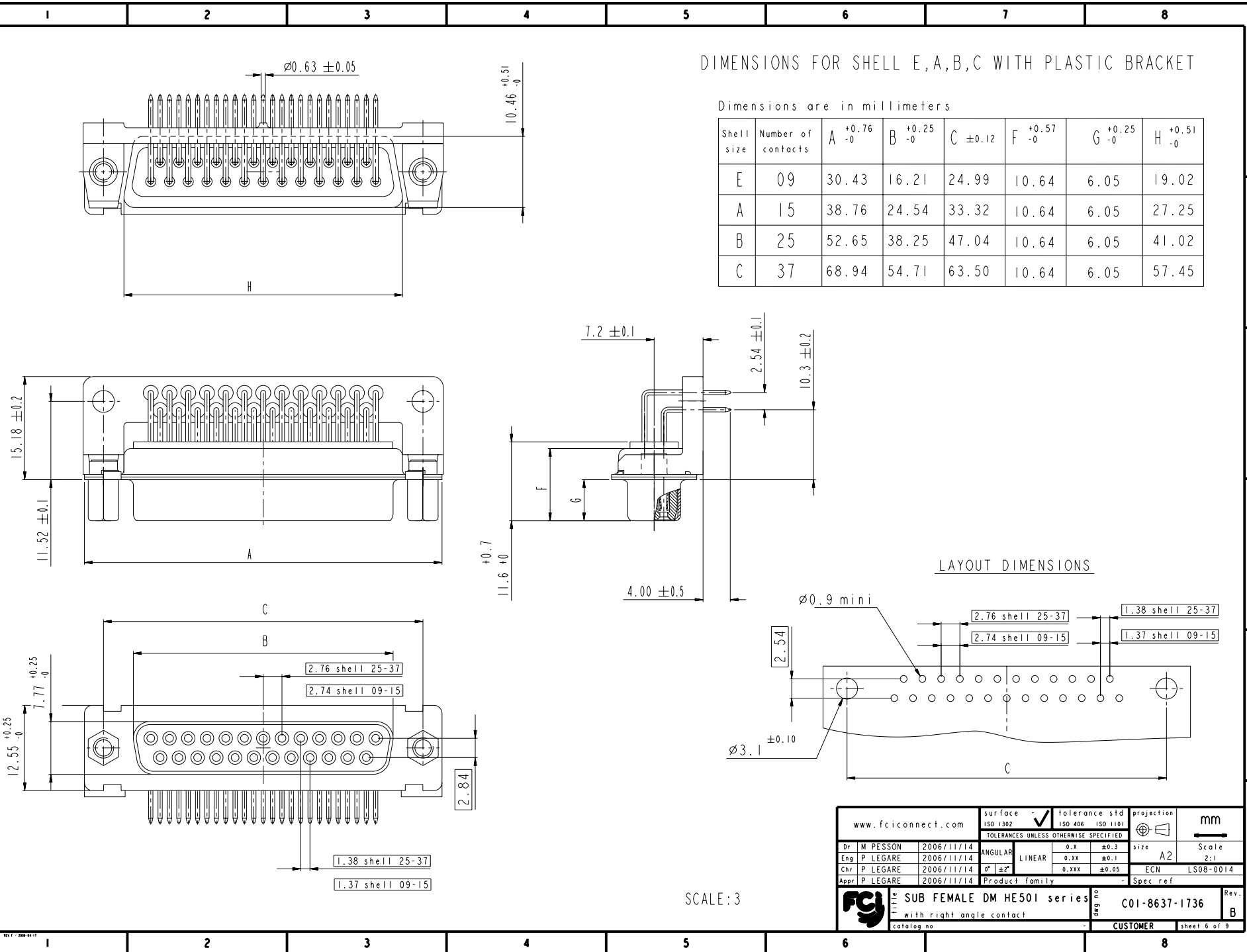


LAYOUT DIMENSIONS

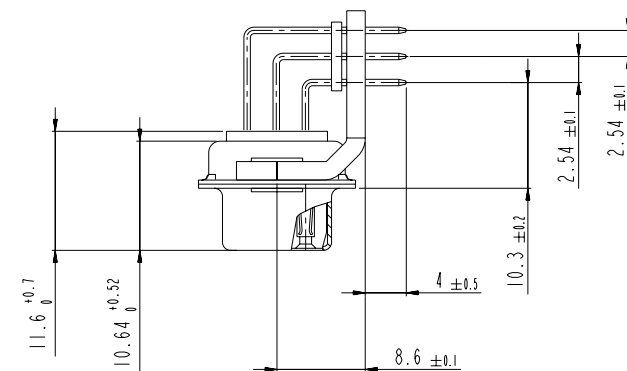
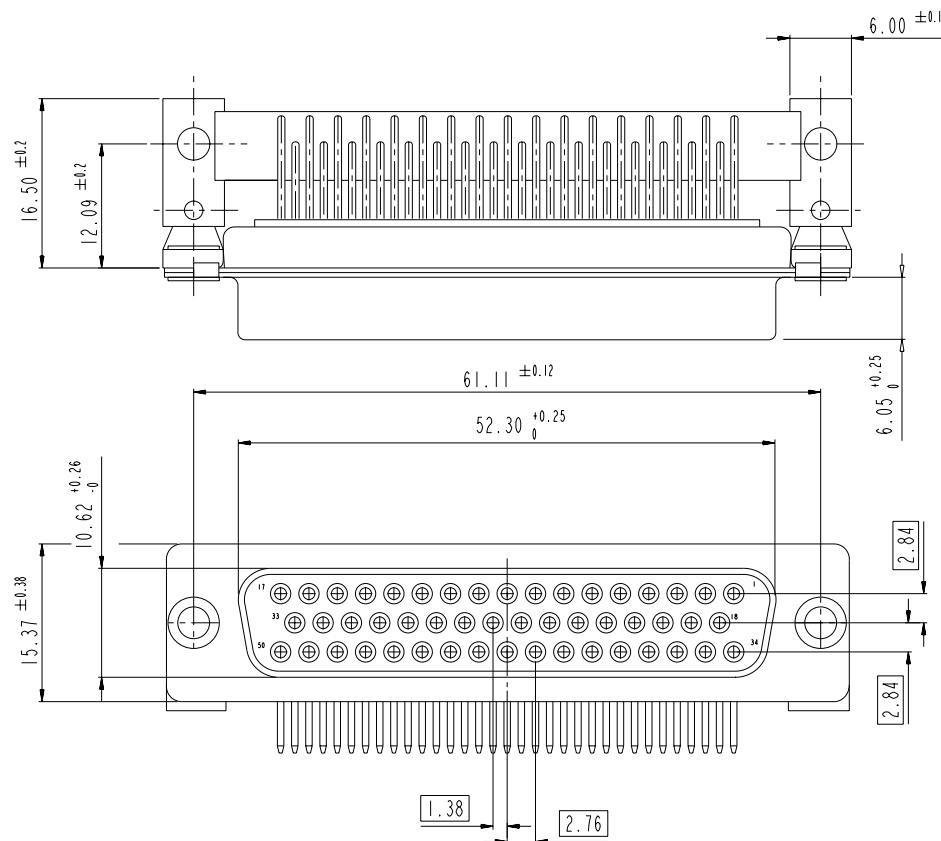
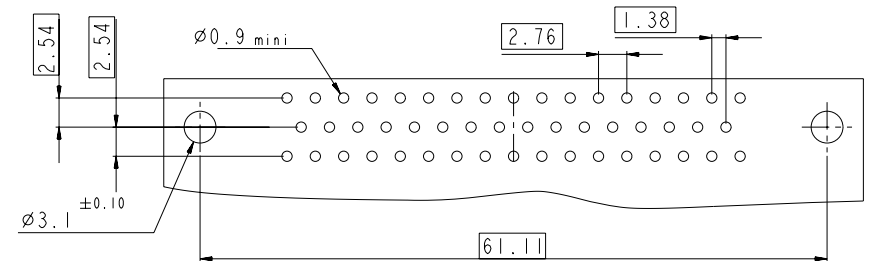
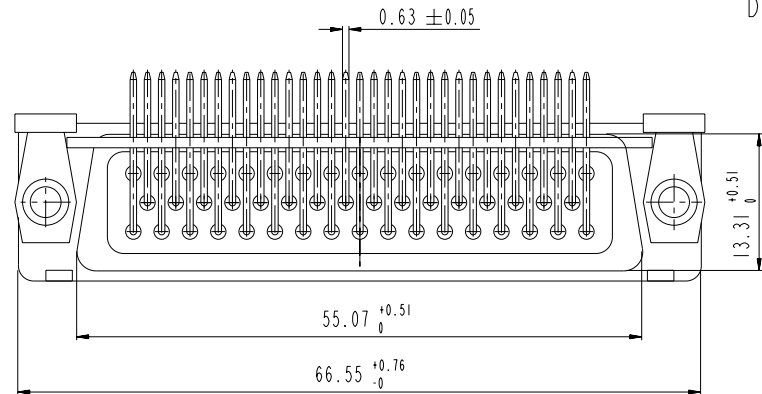


SCALE: 3

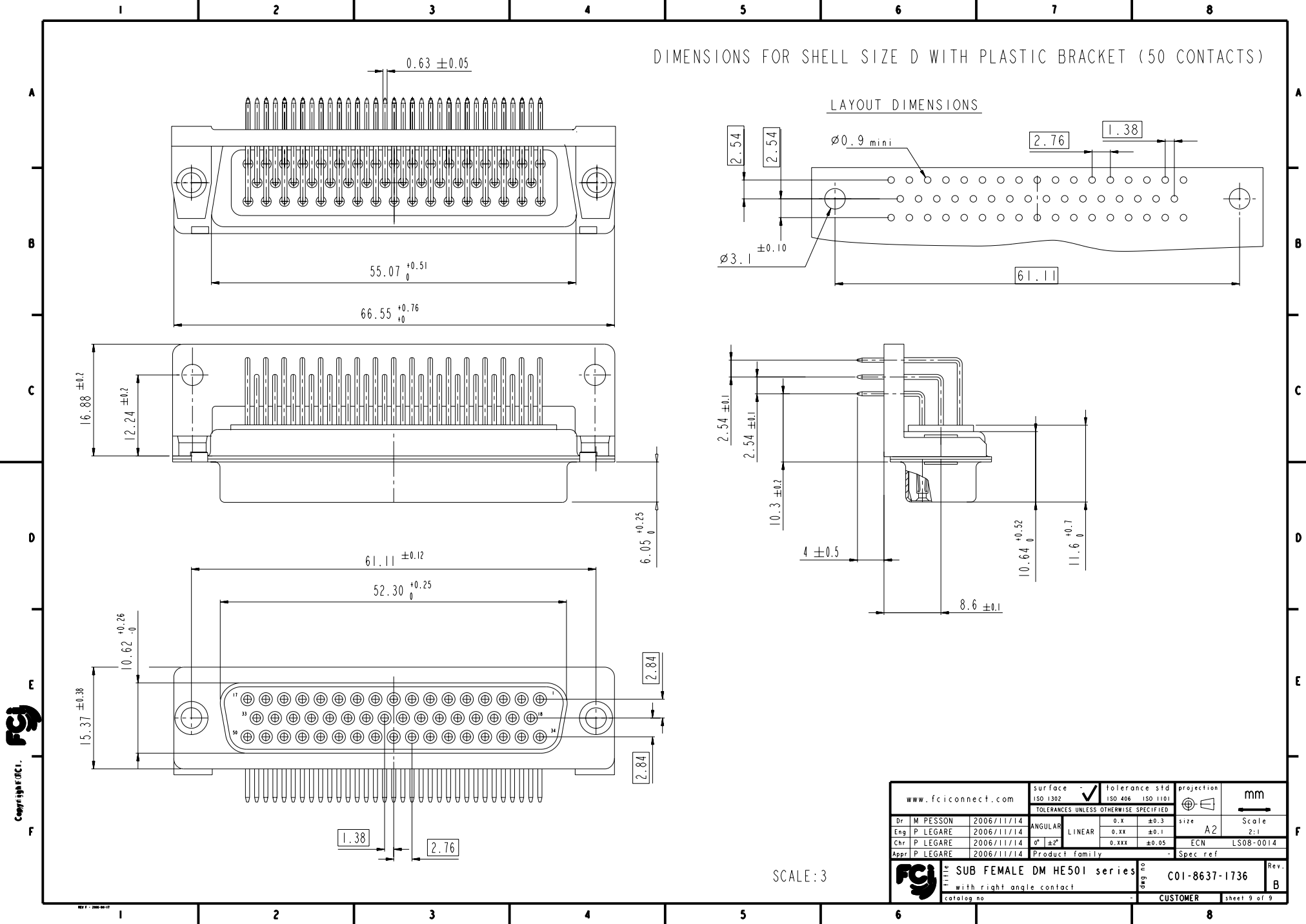
www.fciconnect.com			surface - ☒ tolerance std		projection		mm			
			ISO 1302		ISO 406		ISO 1101			
TOLERANCES UNLESS OTHERWISE SPECIFIED										
Dr	M PESSON	2006/11/14	ANGULAR	LINEAR	0.X	±0.3	size	A2		
Eng	P LEGARE	2006/11/14			0.XX	±0.1			Scale	2:1
Chr	P LEGARE	2006/11/14			0° ±2°	0.XXX				
Appr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



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 6 of 9	

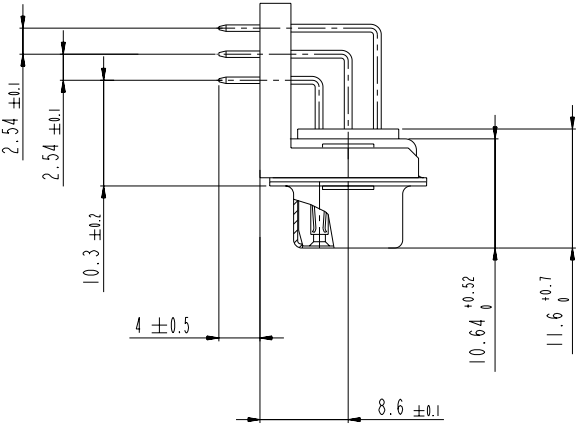
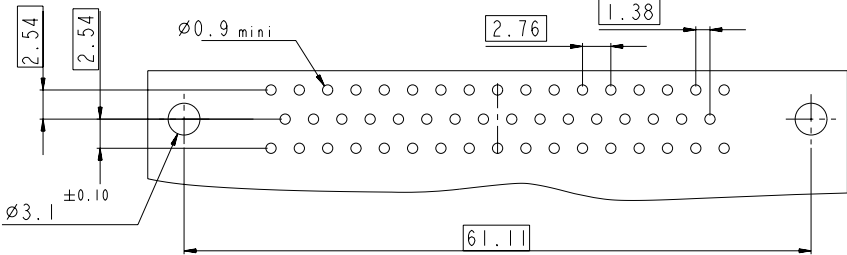


www.fciconnect.com			surface - ☒ tolerance std ISO 1302 ISO 460 ISO 1101		projection 		mm 	
TOLERANCES UNLESS OTHERWISE SPECIFIED								
Dr	M PESSON	2006/11/14	ANGULAR	LINEAR	0.X ±0.3	size	A2	Scale 2:1
Eng	P LÉGARE	2006/11/14			0.XX ±0.1			
Chr	P LÉGARE	2006/11/14	0° ±2°		0.XXX ±0.05	ECN	LS08-0014	
Appr	P LÉGARE	2006/11/14	Product family			- Spec ref		
			SUB FEMALE DM HE501 series with right angle contact				C01-8637-1736	
title			part no			Rev. B		
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 ☒ ISO 1302			tolerance std ☒ ISO 406 ☐ ISO 1101			projection 			
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				part no		C01-8637-1736		Rev. B	
			with right angle contact				catalog no		CUSTOMER		sheet 9 of 9	