

REFERENCE SPECIFICATIONS

-NFC 93425 (in compliance with HE 508)

PHYSICAL CHARACTERISTICS

- INSULATOR MATERIAL: THERMOSET UL94V0
- CONTACT MATERIAL: BRASS
- ACCESSORIES: STEEL FOR METAL BRACKETS
THERMOPLASTIC UL94V0 FOR PLASTIC BRACKETS
BRASS FOR OTHERS ACCESSORIES
- SHELLS: STEEL

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: 55/155/56
TEMPERATURE RANGE -55°C TO +155°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

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: Gold over Nickel
- Active area plating spec:
 - Signal contacts: Gold over nickel
- Shell plating :Zn Cr3, white or transparent color
- Accessories: Zn Cr3, white or transparent color
- Packaging spec: See GS-14-920

DBML25P500MNLF

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
P :Pin

Termination type
5 Right angle/Europe standard

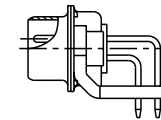
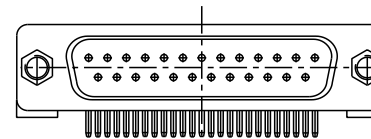
Plating
00 Right angle 500 matings/unmatings
43 Right angle 500 matings/unmatings for harsh environment

PCB accessories definition(see sheet 2)

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

See note RoHS

Obligatory for HE508

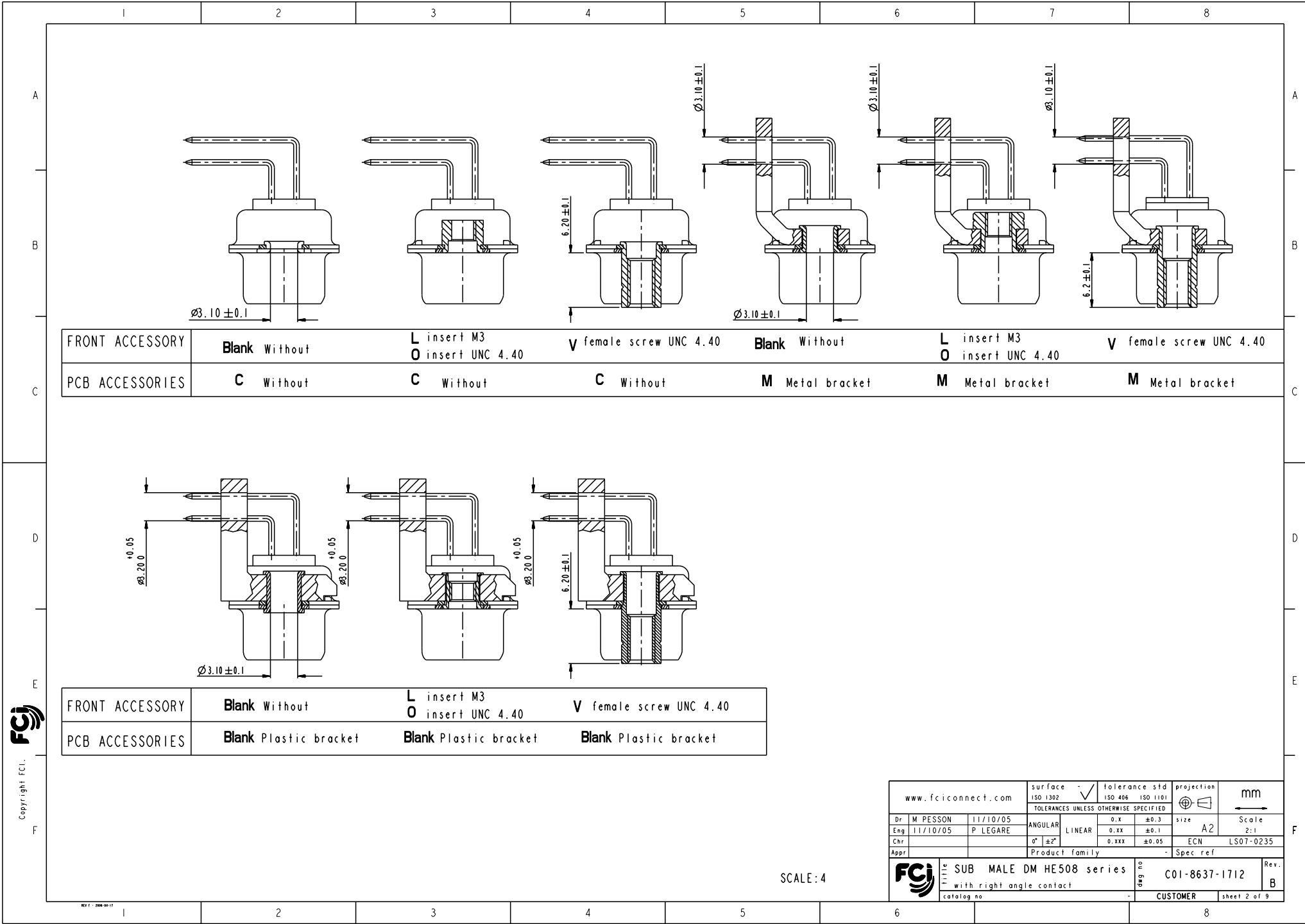


25 WAY FOR EXAMPLE

| rev | ccn no | dr | date |
|-----|-----------|-----|------------|
| A | LS06-0008 | MPE | 2006/01/16 |
| B | LS07-0235 | MPE | 2007/09/14 |
| - | - | - | - |
| - | - | - | - |
| - | - | - | - |
| - | - | - | - |

| | | | | | |
|--------------------|----------|---------------------------------------|---------------------------|--------------|-------------------|
| www.fciconnect.com | | surface | tolerance std | projection | mm |
| | | ISO 1302 | ISO 406 ISO 1101 | mm | |
| | | TOLERANCES UNLESS OTHERWISE SPECIFIED | | | |
| Dr | M PESSON | 11/10/05 | ANGULAR | LINEAR | size A2 Scale 2:1 |
| Eng | 11/10/05 | P LEGARE | 0.X ±0.3 | 0.xx ±0.1 | 0.xxx ±0.05 |
| Chr | | | 0° ±2' | | ECN LS07-0235 |
| Appr | | | Product family - Spec ref | | |
| FCJ | | SUB MALE DM HE508 series | | ang no | C01-8637-1712 |
| | | with right angle contact | | Rev. | B |
| catalog no | | CUSTOMER | | sheet 1 of 9 | |

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| | | | | | | |
|-----------------|---------------|----------------------------------|-------------------------|-----------------|----------------------------------|-------------------------|
| 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 |

| | | | | |
|--------------------|----------|--|-----------------------------------|------------------|
| www.fciconnect.com | | surface ISO 1302 | tolerance std ISO 406 ISO 1101 | projection mm |
| | | TOLERANCES UNLESS OTHERWISE SPECIFIED | | |
| Dr M PESSON | 11/10/05 | ANGULAR | 0.X ±0.3 | size A2 |
| Eng 11/10/05 | P LEGARE | LINEAR | 0.XX ±0.1 | Scale 2:1 |
| Chr | | 0° ±2° | 0.XXX ±0.05 | ECN LS07-0235 |
| Appr | | Product family | - Spec ref | |
| FCJ | | SUB MALE DM HE508 series with right angle contact | | Rev. B |
| catalog no | | C01-8637-1712 | | sheet 2 of 9 |
| | | CUSTOMER | | |

SCALE: 4

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| PART NUMBER | FRONT ACCESSORY | PCB ACCESSORY |
|----------------|-----------------------|-----------------|
| D*MxxP500CNLF | without | without |
| D*MLxxP500CNLF | insert M3 | without |
| D*MOxxP500CNLF | insert UNC 4.40 | without |
| D*MVxxP500CNLF | female screw UNC 4.40 | without |
| D*MxxP500MNLF | without | Metal bracket |
| D*MLxxP500MNLF | insert M3 | Metal bracket |
| D*MOxxP500MNLF | insert UNC 4.40 | Metal bracket |
| D*MVxxP500MNLF | female screw UNC 4.40 | Metal bracket |
| D*MxxP500NLF | without | Plastic bracket |
| D*MLxxP500NLF | insert M3 | Plastic bracket |
| D*MOxxP500NLF | insert UNC 4.40 | Plastic bracket |
| D*MVxxP500NLF | female screw UNC 4.40 | Plastic bracket |

| | |
|------------|----------------|
| shell size | Contact number |
| * | XX |
| E | 09 |
| A | 15 |
| B | 25 |
| C | 37 |
| D | 50 |

| PART NUMBER | FRONT ACCESSORY | PCB ACCESSORY |
|---------------|-----------------------|-----------------|
| D*MxxP543CLF | without | without |
| D*MLxxP543CLF | insert M3 | without |
| D*MOxxP543CLF | insert UNC 4.40 | without |
| D*MVxxP543CLF | female screw UNC 4.40 | without |
| D*MxxP543MLF | without | Metal bracket |
| D*MLxxP543MLF | insert M3 | Metal bracket |
| D*MOxxP543MLF | insert UNC 4.40 | Metal bracket |
| D*MVxxP543MLF | female screw UNC 4.40 | Metal bracket |
| D*MxxP543LF | without | Plastic bracket |
| D*MLxxP543LF | insert M3 | Plastic bracket |
| D*MOxxP543LF | insert UNC 4.40 | Plastic bracket |
| D*MVxxP543LF | female screw UNC 4.40 | Plastic bracket |

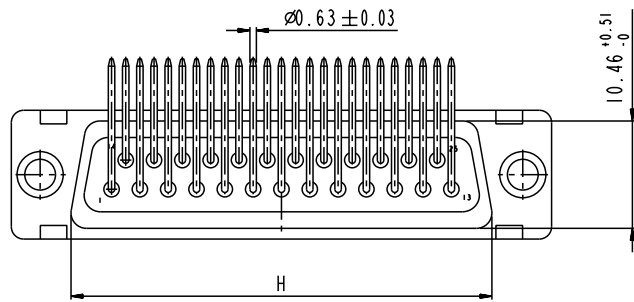
CROSS REFERENCES HE501 and FCI

| HE508 P/N | FCI P/N | FRONT ACCESSORY | PCB ACCESSORY |
|-------------|---------------|-----------------|-----------------|
| HE508PxxVP6 | D*MxxP500NLF | without | Plastic bracket |
| HE508MxxVP6 | D*MxxP500MNLF | without | Metal bracket |



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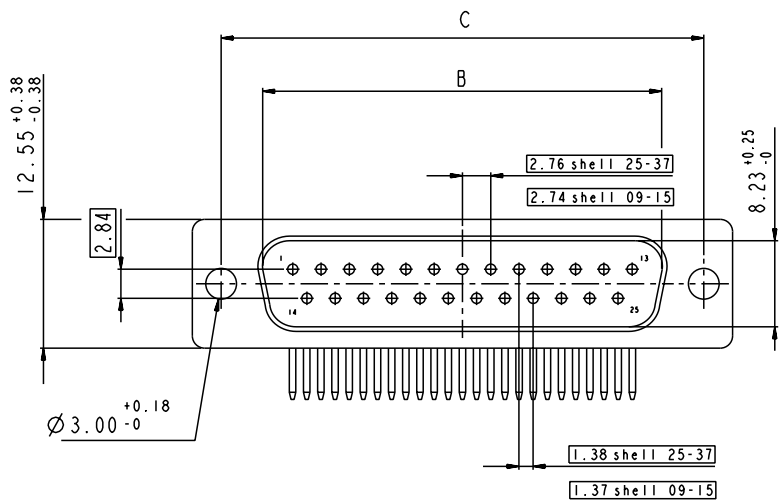
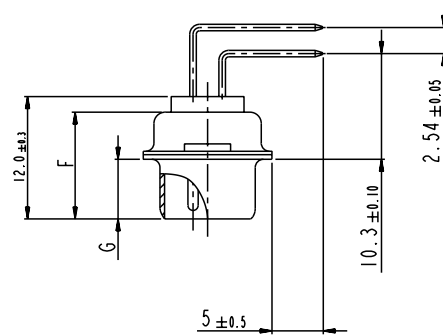
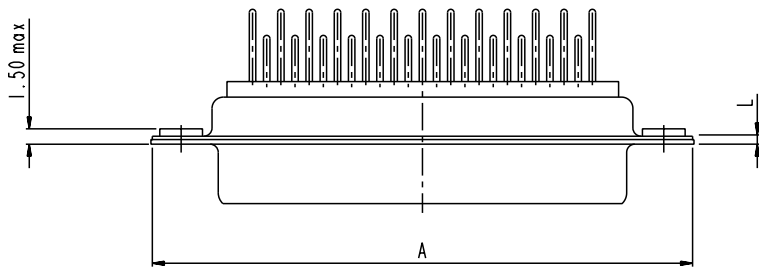
| | | | | |
|--------------------|----------|---------------------------------------|-----------------------------------|---------------------------|
| www.fciconnect.com | | surface ISO 1302 | tolerance std ISO 406 ISO 1101 | projection mm |
| | | TOLERANCES UNLESS OTHERWISE SPECIFIED | | |
| Dr M PESSON | 11/10/05 | ANGULAR | 0.X ±0.3 | size A2 Scale 2:1 |
| Eng 11/10/05 | P LEGARE | LINEAR | 0.XX ±0.1 | ECN LS07-0235 |
| Chr | | 0° ±2° | 0.XXX ±0.05 | Product family - Spec ref |
| Appr | | SUB MALE DM HE508 series | | Rev. B |
| | | with right angle contact | | ang no C01-8637-1712 |
| | | catalog no | CUSTOMER | sheet 3 of 9 |



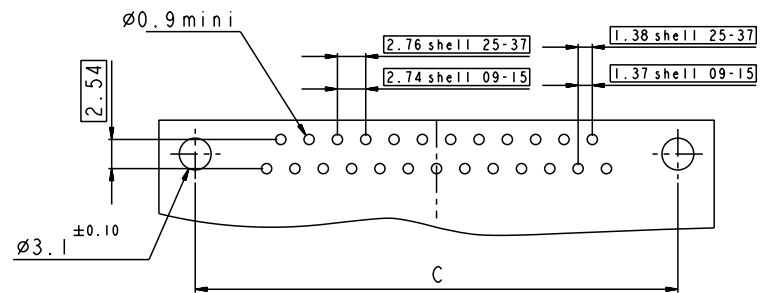
DIMENSION FOR SHELL E,A,B,C WITHOUT BRACKET

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 $^{+0.51}_{-0}$ | L $^{+0.22}_{-0}$ |
|------------|--------------------|-------------------|-------------------|--------------|-------------------|---------------------|-------------------|-------------------|
| E | 09 | 30.43 | 16.79 | 24.99 | 10.47 | 5.9 $^{+0.15}_{-0}$ | 19.02 | 0.80 |
| A | 15 | 38.76 | 25.12 | 33.32 | 10.47 | 5.9 $^{+0.15}_{-0}$ | 27.25 | 0.80 |
| B | 25 | 52.65 | 38.84 | 47.04 | 10.43 | 5.7 $^{+0.25}_{-0}$ | 41.02 | 0.80 |
| C | 37 | 68.94 | 55.30 | 63.50 | 10.56 | 5.7 $^{+0.25}_{-0}$ | 57.45 | 0.90 |



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 | 11/10/05 | ANGULAR | LINEAR | size A2 Scale 2:1 |
| Eng | | | | | |
| Chr | | | | | |
| Appr | | | | | |
| | | Product family | - Spec ref | | |
| SUB MALE DM HE508 series | | ang no | C01-8637-1712 | | |
| with right angle contact | | Rev. | B | | |
| catalog no | | CUSTOMER | sheet 4 of 9 | | |

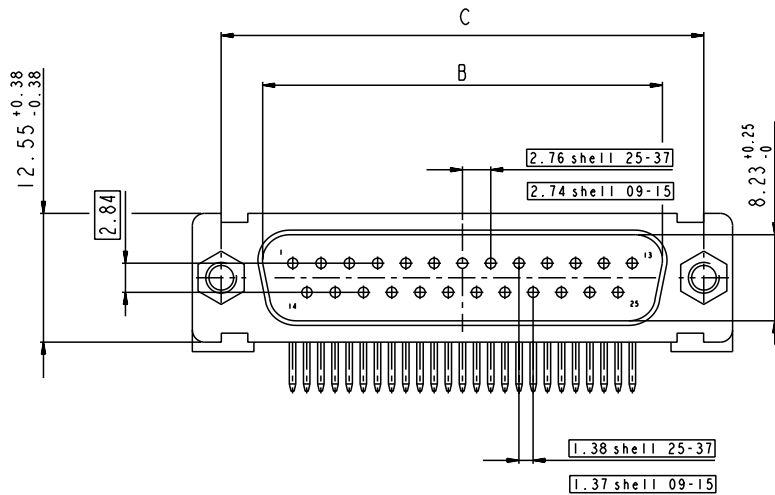
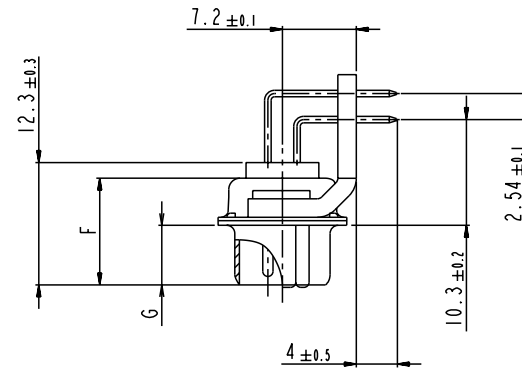
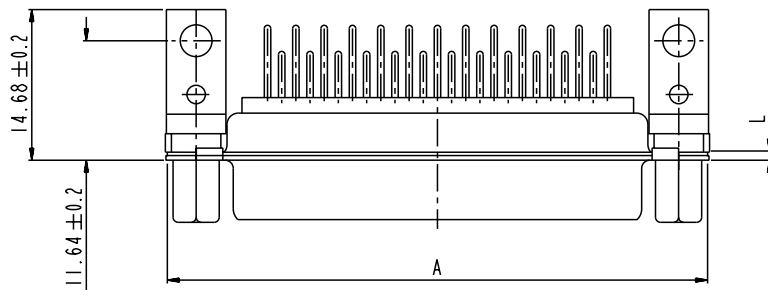
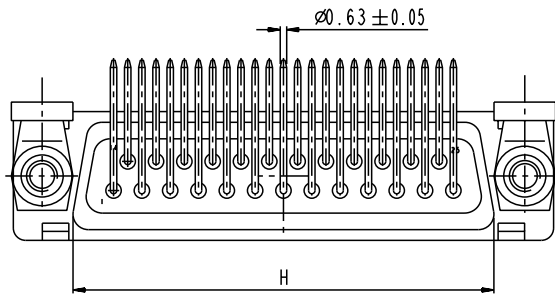


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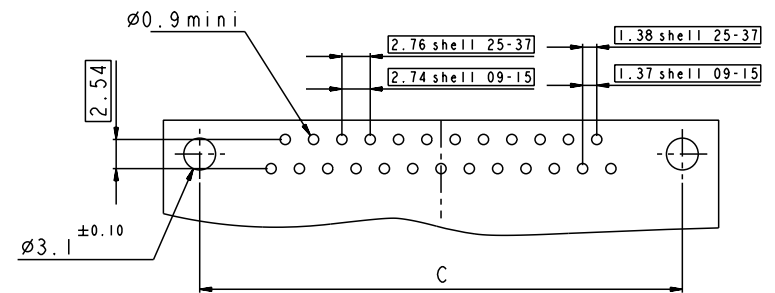
DIMENSION FOR SHELL E,A,B,C WITH METAL BRACKET

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 | L ^{+0.22} ₋₀ |
|------------|--------------------|----------------------------------|----------------------------------|---------|----------------------------------|------------------------------------|----------------------------------|----------------------------------|
| E | 09 | 30.43 | 16.79 | 24.99 | 10.47 | 5.9 ^{+0.15} ₋₀ | 19.02 | 0.80 |
| A | 15 | 38.76 | 25.12 | 33.32 | 10.47 | 5.9 ^{+0.15} ₋₀ | 27.25 | 0.80 |
| B | 25 | 52.65 | 38.84 | 47.04 | 10.43 | 5.7 ^{+0.25} ₋₀ | 41.02 | 0.80 |
| C | 37 | 68.94 | 55.30 | 63.50 | 10.56 | 5.7 ^{+0.25} ₋₀ | 57.45 | 0.90 |



LAYOUT DIMENSIONS



SCALE: 3

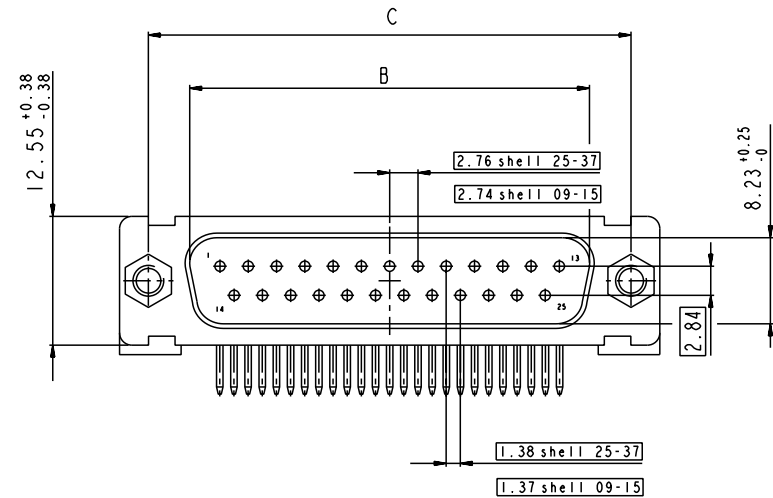
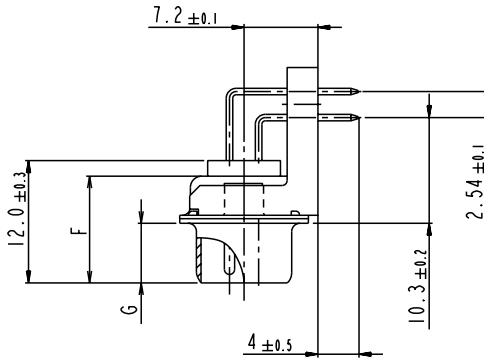
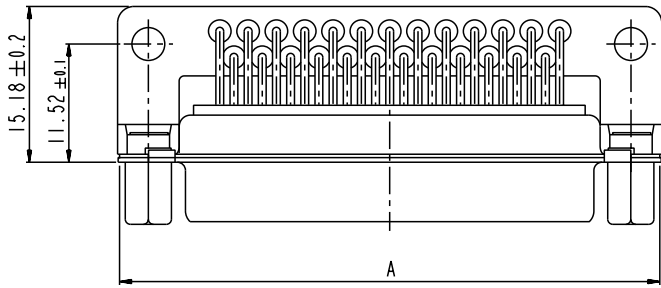
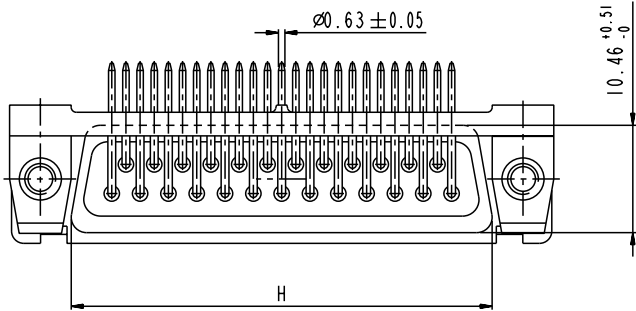
| | | | | | | | | |
|--------------------|----------|---------------------------------------|----------|---------------|----------|----------------|------------|----------|
| www.fciconnect.com | | surface | ISO 1302 | tolerance std | ISO 406 | ISO 1101 | projection | mm |
| | | TOLERANCES UNLESS OTHERWISE SPECIFIED | | | | | | |
| Dr | M PESSON | 11/10/05 | ANGULAR | 0.X | ±0.3 | size | A2 | Scale |
| Eng | 11/10/05 | P LEGARE | LINEAR | 0.XX | ±0.1 | ECN | LS07-0235 | 2:1 |
| Chr | | | 0° ±2° | 0.XXX | ±0.05 | Product family | - | Spec ref |
| Appr | | | | | | | | |
| | | SUB MALE DM HE508 series | | | ang no | C01-8637-1712 | | Rev. |
| | | with right angle contact | | | | | | B |
| catalog no | | | | | CUSTOMER | sheet 5 of 9 | | |

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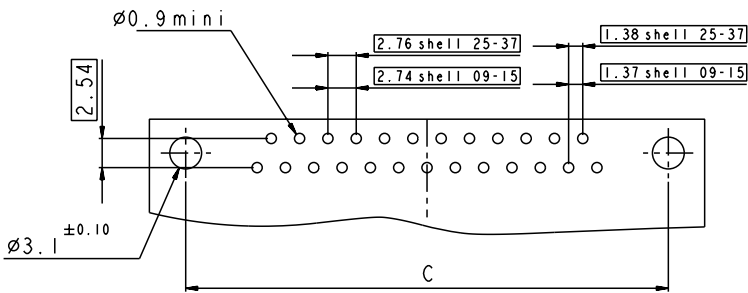
DIMENSION FOR SHELL E,A,B,C WITH PLASTIC BRACKET

Dimensions are in millimeters

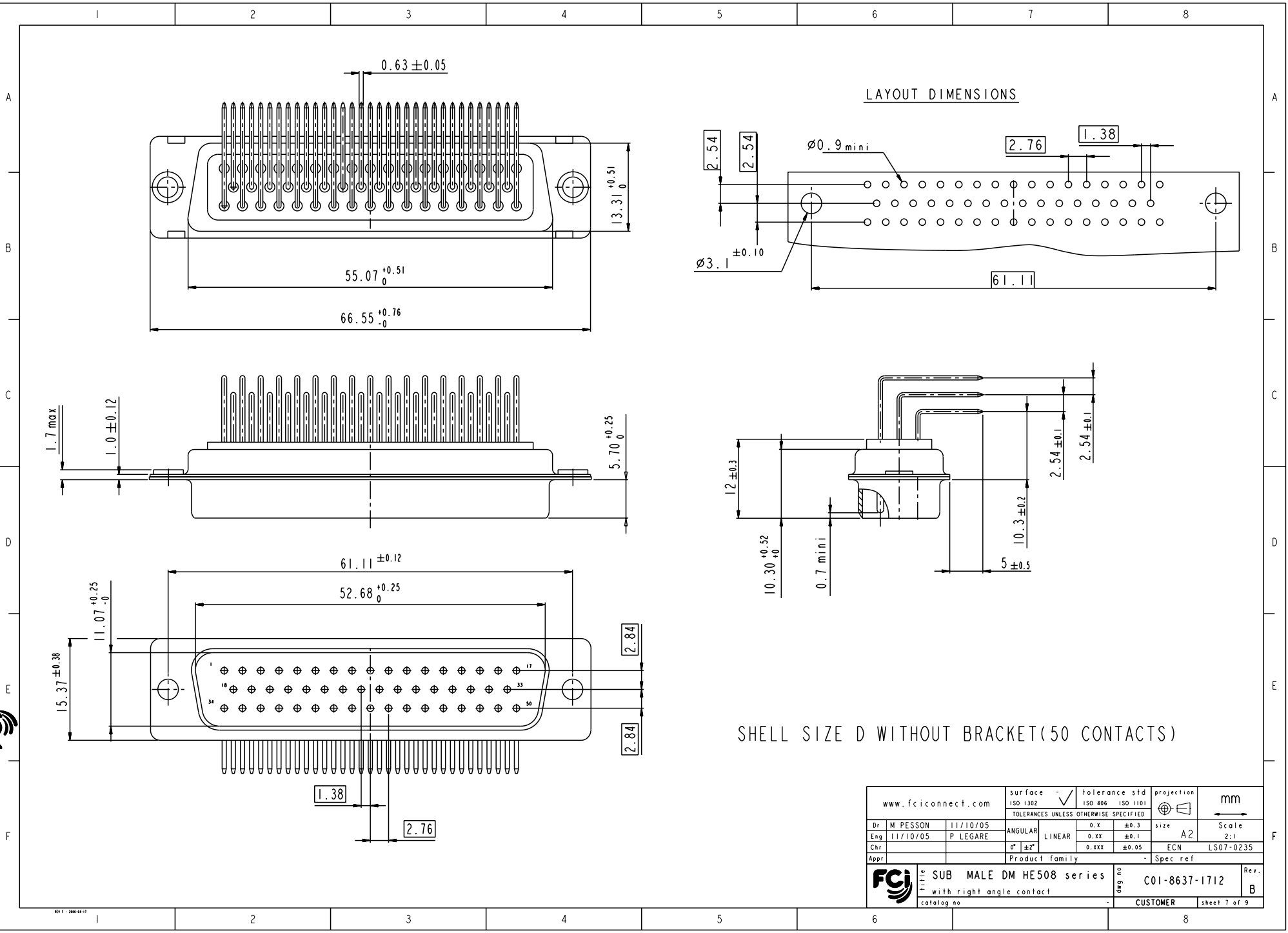
| Shell size | Number of contacts | A ^{+0.76} ₋₀ | B ^{+0.25} ₋₀ | C ±0.12 | F ^{+0.57} ₋₀ | G ^{+0.25} ₋₀ | H ^{+0.51} ₋₀ | L ^{+0.22} ₋₀ |
|------------|--------------------|----------------------------------|----------------------------------|---------|----------------------------------|------------------------------------|----------------------------------|----------------------------------|
| E | 09 | 30.43 | 16.79 | 24.99 | 10.47 | 5.9 ^{+0.15} ₋₀ | 19.02 | 0.80 |
| A | 15 | 38.76 | 25.12 | 33.32 | 10.47 | 5.9 ^{+0.15} ₋₀ | 27.25 | 0.80 |
| B | 25 | 52.65 | 38.84 | 47.04 | 10.43 | 5.7 ^{+0.25} ₋₀ | 41.02 | 0.80 |
| C | 37 | 68.94 | 55.30 | 63.50 | 10.56 | 5.7 ^{+0.25} ₋₀ | 57.45 | 0.90 |



LAYOUT DIMENSIONS

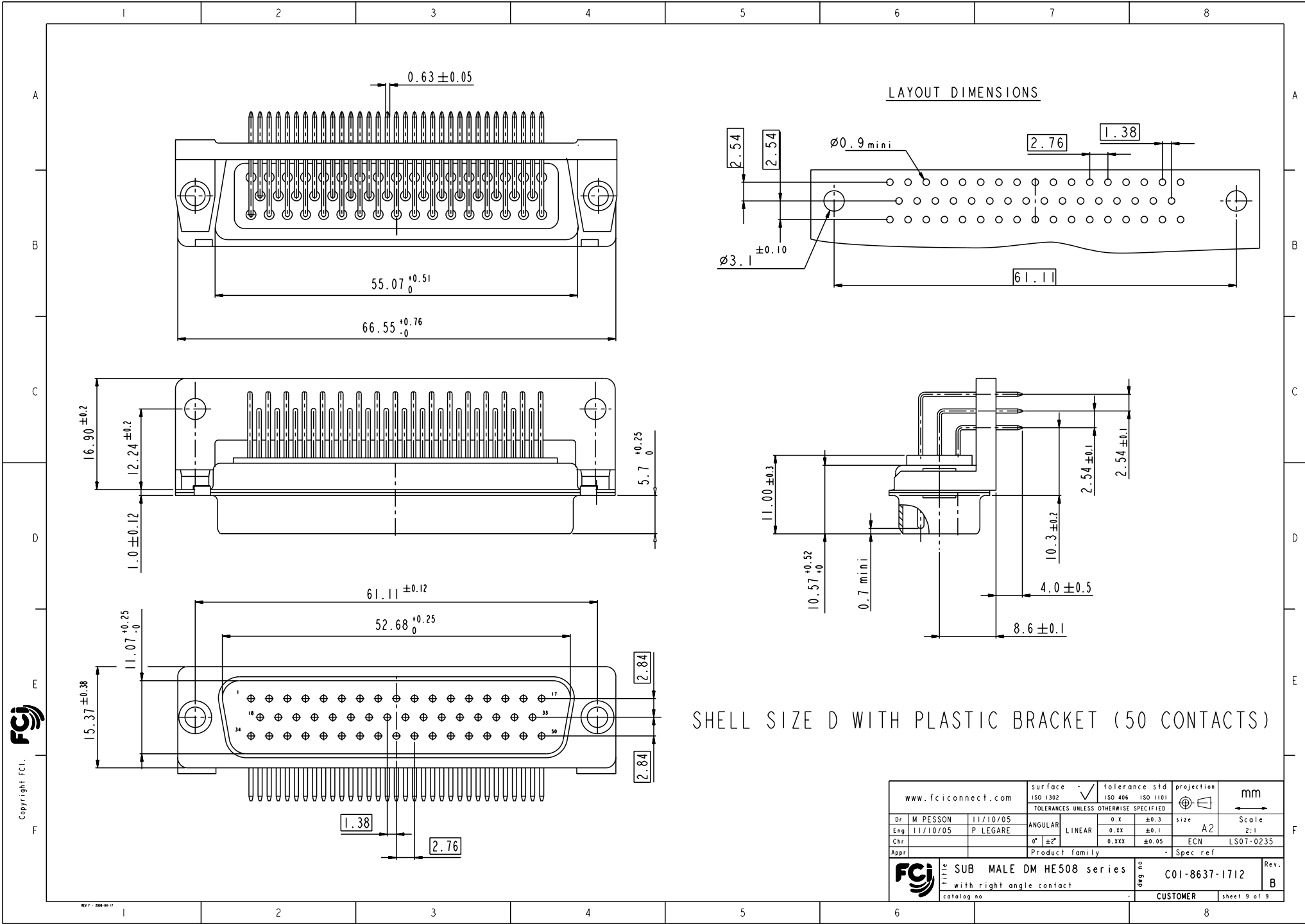


| | | | | |
|--------------------|----------|---------------------------------------|-----------------------------------|-----------------------|
| www.fciconnect.com | | surface ISO 1302 | tolerance std ISO 406 ISO 1101 | projection mm |
| | | TOLERANCES UNLESS OTHERWISE SPECIFIED | | |
| Dr M PESSON | 11/10/05 | ANGULAR | 0.X ±0.3 | size A2 |
| Eng 11/10/05 | P LEGARE | LINEAR | 0.XX ±0.1 | Scale 2:1 |
| Chr | | 0° ±2° | 0.XXX ±0.05 | ECN LS07-0235 |
| Appr | | Product family | | Spec ref |
| FCI | | SUB MALE DM HE508 series | | Rev. B |
| | | with right angle contact | | ang no C01-8637-1712 |
| | | catalog no | | CUSTOMER sheet 6 of 9 |



SHELL SIZE D WITHOUT BRACKET(50 CONTACTS)

| | | | | | | | | |
|--------------------|----------|---------------------------------------|-----------------------|---------------|------------|----------------|------------|----------|
| www.fciconnect.com | | surface | ISO 1302 | tolerance std | ISO 406 | ISO 1101 | projection | mm |
| | | TOLERANCES UNLESS OTHERWISE SPECIFIED | | | | | | |
| Dr | M PESSON | 11/10/05 | ANGULAR | 0.X | ± 0.3 | size | A2 | Scale |
| Eng | 11/10/05 | P LEGARE | LINEAR | 0.XX | ± 0.1 | ECN | LS07-0235 | 2:1 |
| Chr | | | $0^\circ \pm 2^\circ$ | 0.XXX | ± 0.05 | Product family | - | Spec ref |
| Appr | | | | | | | | |
| | | SUB MALE DM HE508 series | | | ang no | C01-8637-1712 | | Rev. |
| | | with right angle contact | | | | CUSTOMER | | B |
| | | catalog no | | | | sheet 7 of 9 | | |



SHELL SIZE D WITH PLASTIC BRACKET (50 CONTACTS)

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| | | | | |
|--------------------|----------|---------------------------------------|-----------------------------------|-----------------------|
| www.fciconnect.com | | surface ISO 1302 | tolerance std ISO 406 ISO 1101 | projection mm |
| | | TOLERANCES UNLESS OTHERWISE SPECIFIED | | |
| Dr M PESSON | 11/10/05 | ANGULAR | 0.X ±0.3 | size A2 |
| Eng 11/10/05 | P LEGARE | LINEAR | 0.XX ±0.1 | Scale 2:1 |
| Chr | | 0° ±2° | 0.XXX ±0.05 | ECN LS07-0235 |
| Appr | | Product family | | Spec ref |
| FCJ | | SUB MALE DM HE508 series | | Rev. B |
| | | with right angle contact | | ang no C01-8637-1712 |
| | | catalog no | | CUSTOMER sheet 9 of 9 |