## SURFACE MOUNT CONNECTORS

## Specifications

- Connectors according to MIL C24308 - NFC 93425-HE5

| Materials and Platings |  |
| :---: | :---: |
| Shells | Steel with tin plating |
| Insulator | High temperature (peak at $260^{\circ} \mathrm{C}$ ) glass-filled PA6T |
| Socket contact | Stamped and formed brass, selected gold in mating area; $2.54 \mu \mathrm{~m}(100 \mu$ ") min. tin on termination area, with entire contact under-plated $1.27 \mu \mathrm{~m}(50 \mu$ ") min. nickel |
| Rear insert | Brass, $3 \mu \mathrm{~m}$ to $5 \mu \mathrm{~m}$ ( $118 \mu^{\prime \prime}$ to $197 \mu^{\prime \prime}$ ) tin over nickel $2 \mu \mathrm{~m}$ to $3 \mu \mathrm{~m}$ ( $78 \mu^{\prime \prime}$ to $118 \mu^{\prime \prime}$ ) |
| Boardlock | Tin plating $4 \mu \mathrm{~m}$ to $6 \mu \mathrm{~m}$ ( $157 \mu^{\prime \prime}$ to $236 \mu^{\prime \prime}$ ) over nickel $2 \mu \mathrm{~m}$ to $3 \mu \mathrm{~m}$ ( $78 \mu^{\prime \prime}$ to $118 \mu^{\prime \prime}$ ), insertion force: |
|  | Low Insertion Force = LIF (bronze) |
|  | Zero Insertion Force $=$ ZeFo (brass) |
| Screwlock | Brass, $6 \mu \mathrm{~m}$ to $10 \mu \mathrm{~m}$ ( $236 \mu^{\prime \prime}$ to $394 \mu^{\prime \prime}$ ) tin over nickel $2 \mu \mathrm{~m}$ to $3 \mu \mathrm{~m}\left(78 \mu^{\prime \prime}\right.$ to $\left.118 \mu^{\prime \prime}\right)$ |
| Grounding | Grounding strap: brass, $4 \mu \mathrm{~m}$ to $6 \mu \mathrm{~m}$ tin over nickel $2 \mu \mathrm{~m}$ to $3 \mu \mathrm{~m}$ ( $78 \mu^{\prime \prime}$ to $118 \mu^{\prime \prime}$ ) |


|  | Electrical Data |
| :--- | :--- |
| Current rating | 3 A |
| Voltage rating | $300 \mathrm{~V} \mathrm{AC} / \mathrm{rms} 50 \mathrm{~Hz}$ |
| Withstanding voltage | $1000 \mathrm{~V} \mathrm{AC} / \mathrm{ms} 50 \mathrm{~Hz}$ for one minute |
| Insulation resistance | $5000 \mathrm{M} \Omega$ |
| Contact resistance | $10 \mathrm{~m} \Omega \max$ |


|  | Climatic Data |
| :--- | :--- |
| Operating temperature | $-55^{\circ} \mathrm{C}$, peak at $125^{\circ} \mathrm{C}$ |
| Damp heat | 56 days $\left(40^{\circ} \mathrm{C}-95 \% \mathrm{HR}\right)$ |


| Mechanical Data |  |
| :--- | :--- |
| Single contact insertion force | $1.2 \mathrm{~N}<\mathrm{F}<2.5 \mathrm{~N}$ |
| Single contact withdrawal force | 0.4 N min |
| LIF boardlock | $8 \mathrm{~N} \max$ per connector |
| Coplanarity of contacts | $0.2 \mathrm{~mm}\left(.008^{\prime \prime}\right)$ max |

Mating and unmating force
Unit: N

| No. of Cts | Mate (max) | Unmate (min) |
| :---: | :---: | :---: |
| 9 (size E) | 30 | 3.5 |
| $15($ size A) | 50 | 4.5 |
| 25 (size B) | 83 | 8.0 |

Amphenol SMT D-Sub is offered in right angle receptacle with brackets as an industry standard for $1 / 0$ connections.

Boardlock features:
-LIF (Low Insertion Force) boardlock especially designed to be fully compatible with pick and place machine.
-ZeFo (Zero Force Insertion) boardlock has been designed so that once placed and expanded, secures a safe locking.

## Daigeelfor Pickand Plaæe SMTpocess

- Industrial
- Telecom
- Any industry standard I/ O connections


## Shell Size Dimensions



PCB LAYOUT


| SHELL SIZE | mm (inch) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A $+0.05(.002)$ $-0.1(004)$ | $\begin{gathered} \text { B } \\ 0 \\ -0.2(.008) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0.1(.004) \end{gathered}$ | $\begin{gathered} \text { D } \\ 0 \\ -0.25(.01) \end{gathered}$ | PITCH | F | K |
| E | 31.15 (1.226) | 16.4 (.645) | 25 (.984) | 8.03 (.316) | 2.74 (.1078) | 10.97 (.432) | 16.3 (.642) |
| A | 39.4 (1.551) | 24.8 (.976) | 33.3 (1.311) | 8.03 (.316) | 2.74 (.1078) | 19.2 (.756) | 24.6 (.968) |
| B | 53.3 (2.098) | 38.5 (1.515) | 47 (1.850) | 8.03 (.316) | 2.76 (.1086) | 33.12 (1.304) | 38.3 (1.508) |

## Panel mounting option

## GROUNDING TABS:



## BOARDLOCKS:



## How to order



For special request, please consult factory

## Memo

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Do not hesitate to contact us for further information

## Amphenol

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