## PGB layouts

Plug viewed from above, socket viewed from below.


50 way


2 holes at $\varnothing 3.2 \mathrm{~min}$.
(2 holes at Ø 3.0/3.1
boardlock only)*

| DIMENSIONS <br> Contact <br> Arrangement |  |
| :---: | :---: | A crs | 9 | 25.00 |
| :---: | :---: |
| 15 | 33.32 |
| 25 | 47.04 |
| 37 | 63.50 |
| 50 | 61.10 |

## 15 way High Density D



50 way

*Special D only

## 26 way High Density D



44 way High Density I

## 62 way High Density D



## 78 way High Density D



## ORDERING information

## for CONNECTORS



## CONTACT ORDERING INFORMATION

## Contact/Wire Gauge

MP642-Pin, 24/28 A.W.G (HD only) MP643-Socket, 24/28 A.W.G (HD only) MP647-Pin, 24/28 A.W.G (crimp D only) MP 648-Socket, 24/28 A.W.G (crimp D only) MP649-Pin, 20/24 A.W.G (crimp D only) MP650-Socket, 20/24 A.W.G (crimp D only)


Method of supply
No designator - in
packs of 100
R-10,000 on a reel

Performance Code High Density 05-P in, 200 operations 06-P in, 50 operations 15-Socket, 200 operations 16-Socket, 50 operations C rimp D
45-P in, standard 500 operations 46-P in, budget 300 operations $55-$ Socket, standard 500 operations 56 -Socket, budget 300 operations


C - $\mathbf{3 7}$ contacts


D - $\mathbf{5 0}$ contacts


D - 78 contacts

## Aecessories

A range of accessories are available including automatic and hand crimp tools, insertion and extraction tools ask our sales office for details.
Due to our policy of continuous product
development, ITW McMurdo Connectors development, ITW McMurdo Connectors
retain the right to change the specification retain the right to change the specification at
any time without prior notice. Designed \& printed in the UK.

ITW McMurdo Connectors
Division of ITW Limited
Norway Road
Hilsea
Portsmouth
PO3 5HT
United Kingdom
Tel: 02392656200
Fax: 02392666352
e-mail: info@itwmcmurdo.co.uk www.itwmcmurdo.co.uk



## Special D

A range of D connectors utilising stamped and formed or turned contacts to provide a low cost option for commercial applications.

## FEATURES

Choice of three termination styles - solder bucket, straight p.c. and $90^{\circ}$ p.c.

Threaded inserts on $90^{\circ}$ p.c. versions as standard accepts a wide range of mounting hardware.

Tinned and dimpled shell options - for EMI/RFI shielding.

Optional solderable boardlock features for $90^{\circ}$ p.c. types reduces installation time.


## Standarid

HIGH PERFORMANCE D SUB-MINIATURE


Designed for demanding industrial applications, McMurdo's D connectors offer precision turned contacts in two performance levels: Standard D offers a minimum of 500 operations. Budget D has been developed for harsh industrial applications offering 300 operations.


## FEATURES

Standard D meets the most demanding requirements.

Precision turned contacts.

Available in five shell sizes, providing up to 50 contacts.

Solder bucket, straight p.c., $90^{\circ}$ p.c. and wire wrapping termination styles - to suit all your applications.

Tinned and dimpled shell options - for EMI/RFI shielding.

Wide range of accessories greater user flexibility.


All ranges: male


| No.of <br> contacts | A | B | C | D | E | F |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 9 | 31.19 | 17.04 | 25.12 | 8.48 | 12.93 | 6.12 |
|  | 30.43 | 16.79 | 24.87 | 8.23 | 12.17 | 5.82 |
| 15 | 39.52 | 25.37 | 33.45 | 8.48 | 12.93 | 6.12 |
|  | 38.76 | 25.12 | 33.20 | 8.23 | 12.17 | 5.82 |
| 25 | 53.42 | 39.09 | 47.17 | 8.48 | 12.93 | 5.99 |
|  | 52.65 | 38.84 | 46.91 | 8.23 | 12.17 | 5.69 |
| 37 | 69.70 | 55.55 | 63.63 | 8.48 | 12.93 | 5.99 |
|  | 68.94 | 55.30 | 63.37 | 8.23 | 12.17 | 5.69 |
| 50 | 67.34 | 52.93 | 61.24 | 11.33 | 15.75 | 5.99 |
|  | 66.55 | 52.68 | 60.99 | 10.95 | 14.99 | 5.69 |


|  | Special 1 | Standari I | Grimp D | aty Irasty |
| :---: | :---: | :---: | :---: | :---: |
| FEATURES <br> Shell |  | Steel plated zin | assivate or tin |  |
| Insulator |  | Thermopla | UL94V-0 |  |
| Contact |  | Copper alloy | d acid gold |  |
| Termination - solder bucket | Tin | Gold | - | Tin |
| - straight PC | Tin | Gold | - | Tin |
| - $90^{\circ} \mathrm{PC}$ | Tin | Gold | - | Tin |
| - CRIMP | - | - | Tin or Gold | Tin |
| MECHANICAL <br> Operations | 100 | 300 (budget) <br> 500 (standard) | 300 (budget) <br> 500 (standard) | $\begin{aligned} & 100 \\ & 50 \text { or } 200 \text { crimp } \end{aligned}$ |
| Temperature range |  | -55 |  |  |
| ELECTRICAL <br> Current - individual contact (in isolation) at $70^{\circ} \mathrm{C}$ | 3A | 6.5 A | 3A | 3A |
| - All contacts (simultaneously) at $70^{\circ} \mathrm{C}$ | 2 A | 3.3A | 2 A | 2 A |
| Working voltage (DC or AC PEAK) | 350 V | 500V | 350 V | 300 V |
| Proof voltage (DC or AC PEAK) | 1500V | 1500V | 1500 V | 1000V |
| Contact resistance | $15 \mathrm{~m} \Omega$ max | $10 \mathrm{~m} \Omega$ max | $15 \mathrm{~m} \Omega$ max | $15 \mathrm{~m} \Omega$ max |
| Insulation resistance | $5000 \mathrm{~m} \Omega \mathrm{~min}$ | $1000 \mathrm{~m} \Omega \mathrm{~min}$ | $5000 \mathrm{~m} \Omega \mathrm{~min}$ | $1000 \mathrm{~m} \Omega \mathrm{~min}$ |

All ranges: panel mounting options

| Contact Arrangement |  |  |  | Rear Panel Mounting |  |  |  |  | Front Panel Mounting |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Shell } \\ & \text { size } \\ & \hline \end{aligned}$ | $\begin{array}{r} \text { No of C } \\ \mathrm{D}, \mathrm{SD}, \mathrm{LD} \\ \hline \end{array}$ | HD | A | Std | Float | Std | Float | R | Std | Float | Std | Float | R |
| E | 9 | 15 | 25.00 | 20.32 | 21.16 | 11.30 | 12.09 | 3.50 | 22.07 | 22.88 | 12.90 | 13.71 | 2.25 |
| A | 15 | 26 | 33.32 | 28.70 | 29.49 | 11.30 | 12.09 | 3.50 | 30.40 | 31.22 | 12.90 | 13.71 | 2.25 |
| B | 25 | 44 | 47.04 | 42.42 | 43.20 | 11.30 | 12.09 | 3.50 | 44.14 | 44.96 | 12.90 | 13.71 | 2.25 |
| C | 37 | 62 | 63.50 | 58.93 | 59.77 | 11.30 | 12.09 | 3.50 | 60.60 | 61.42 | 12.90 | 13.71 | 2.25 |
| D | 50 | 78 | 61.10 | 56.26 | 57.02 | 13.97 | 14.78 | 3.50 | 58.21 | 59.44 | 15.69 | 16.51 | 2.25 |



Rear Panel Mounting


Front Panel Mounting

## Grimp D

Maximum flexibility and reduced assembly costs are achieved through full or partial loading of selectively plated stamped and formed contacts.

## FEATURES

Replaceable contacts - no connector wastage.

Two contact performance levels - Budget for commercial and Standard for industrial applications.

Accepts wire sizes of 20 to 28 AWG - offers greater flexibility.

Tinned and dimpled shell options - for effective EMI/RFI shielding.

Complete selection of crimp tooling enables quick

Wire strip length 2.4 $\pm 0.2 \mathrm{~mm}$.
assembly.

ASSEMBLY TOOLS AND HAND TOOLS


Hand Crimp Tool MP600-D/HD Insertion/extraction tool MP601-D or MP601-HD

## JTigh Density D

INCREASED DENSITY D SUB-MINIATURE

Increased contact density is provided in five industry standard shell sizes providing up to 78
contacts. A choice of four termination styles including crimp are available making this range one of the most versatile.


## FEATURES

Tinned and dimpled shell as standard for enhanced electrical continuity and effective EMI/RFI shielding.

Threaded inserts - enable quick assembly of mounting hardware to $90^{\circ}$ p.c. versions.

Solder bucket, straight p.c.
$90^{\circ}$ p.c. and crimp termination styles.

Optional screwlocks and solderable boardlocks fitted to $90^{\circ}$ p.c. versions.

Compatible with Standard D range accessories.


Solder Bucket


Straight P. C.

$90^{\circ}$ P. C.


Crimp

All ranges: female


FRONT FACE


| No.of <br> contacts | A | B | C | D | E | F |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 9 | 31.19 | 16.46 | 25.12 | 8.03 | 12.93 | 6.30 |
|  | 30,43 | 16.21 | 24.87 | 7.77 | 12.17 | 6.05 |
| 15 | 39.52 | 24.79 | 33.45 | 8.03 | 12.93 | 6.30 |
|  | 38.76 | 24.54 | 33.20 | 7.77 | 12.17 | 6.05 |
| 25 | 53.42 | 38.51 | 47.17 | 8.03 | 12.93 | 6.30 |
|  | 52.65 | 38.25 | 46.91 | 7.77 | 12.17 | 6.05 |
| 37 | 69.70 | 54.97 | 63.63 | 8.03 | 12.93 | 6.30 |
|  | 68.94 | 54.71 | 63.37 | 7.77 | 12.17 | 6.05 |
| 50 | 67.34 | 52.56 | 61.24 | 10.87 | 15.75 | 6.30 |
|  | 66.55 | 52.30 | 60.99 | 10.62 | 14.99 | 6.05 |

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components
Click to view similar products for itw switches manufacturer:
Other Similar products are found below :
MP648-16(50) SDBS25PN 76-1024 48M-111B 76-959034 181541B MDJ15 DA15POLF 48M-111G 22-204 DC37PF DB25SNF DB25SF 76-9510/4044 49-59115 40-2-5 76-9513/4044G 76-9113/439088 SDAX15SNT SDD50PTD 59-900091 48M210N ES1020 SDB25PNTD DE9SNF DAC15P H48M-112B/4044 40-2-10 57-112R 76-9116/439088 DE9PF HDAX26SNT 48-1-RB-G-BK-B 76-9112/439088 48M112R H48M-112G/4044 57M110N H48M-212B/4044 H48M-212R/4044 57M-211B 49-59116 4959213 48M110N $\underline{1640401 ~ 76-~}$ 9711/439088R 76-9440/439088B 48-1-RB-R-BK-B 76-1266 76-9450/439088R 11-304

