

MICRONECTOR 300

High Density 2 mm Pitch Connectors



FEATURES

- 2mm pitch.
- Small footprint for increased packing density.
- Optional Jackscrews will fit either male or female.
- Sizes from 27 to 78 way.
- Male straight p.c., 90° p.c. and crimp terminations.
- Female straight p.c., flexi circuit, and crimp terminations.
- Male panel mount variant.

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TECHNICAL DATA

Materials

| | |
|--------------------|------------------------------------|
| Insulator | Glass filled thermoplastic UL94V-0 |
| Contact | Copper alloy plated hard acid gold |
| Termination | Hard acid gold or tin/lead |
| Jackscrews | Stainless steel |

Electrical

Current

| | |
|---|--|
| Individual contacts (in insulation) | at 25°C Tamb. 3.3A max. at 85°C Tamb. 2.6A max. |
| All contacts (simultaneously) | at 25°C Tamb. 3.0A max. at 85°C Tamb. 2.2A max. |
| Working Voltage | 120V d.c. or a.c. peak |
| Proof Voltage | 360V d.c. or a.c. peak |
| Contact Resistance (initially) | 10mΩ max. |
| Contact Resistance (after conditioning) | 13mΩ max. |
| Insulation Resistance (initially) | 1000MΩ min. |
| Insulation Resistance (after conditioning) | 100MΩ min. |

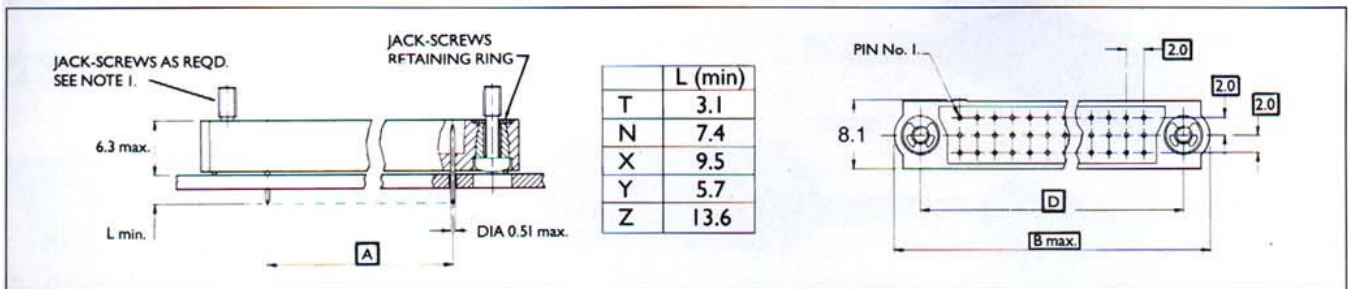
Mechanical

| | |
|--|--|
| Mechanical operations | 500 |
| Insertion and withdrawal force (per contact pair) | 0.8N max., 0.2N min. |
| Contact retention | 10N min. |
| Crimp barrel accommodation | 22 A.W.G. - 28 A.W.G. to BS G 210 Type A |

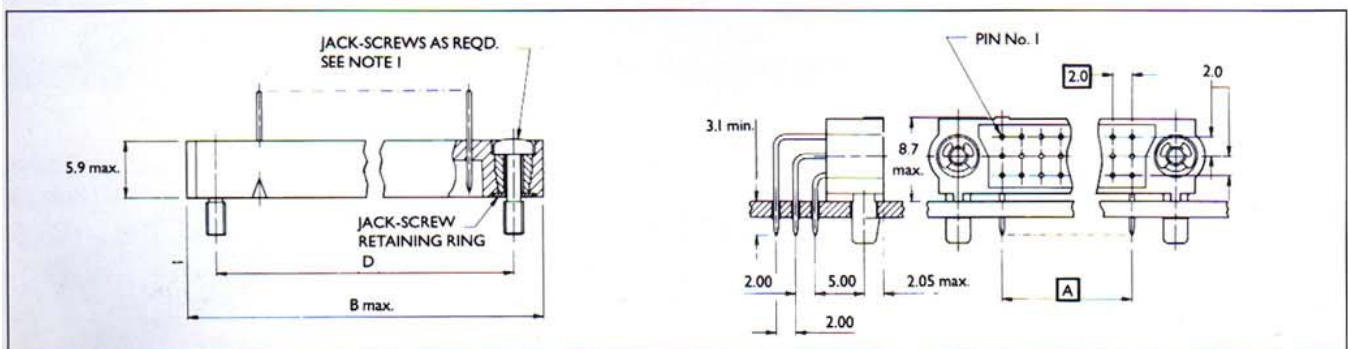
Environmental

| | |
|--------------------------------------|---|
| Climatic category | 55/125/56 |
| Vibration severity General | 10Hz, 2000 Hz 0.75mm/98m/s ² (10g _n) duration 6h |
| Vibration severity Additional | 13.3Hz to 2000Hz random with superimposed sinusoids, duration 15 min each of 4 planes. No intermittancies measured when using an H.S.L.I. (High Speed Logic Interrupt) detector with a trip threshold of 2ns |
| Bump severity | 390m/s ² (40g _n) 4000 ± 10 bumps |
| Shock severity | 981m/s ² (100g _n), for 6ms |
| Acceleration severity | 490m/s ² (50g _n) |

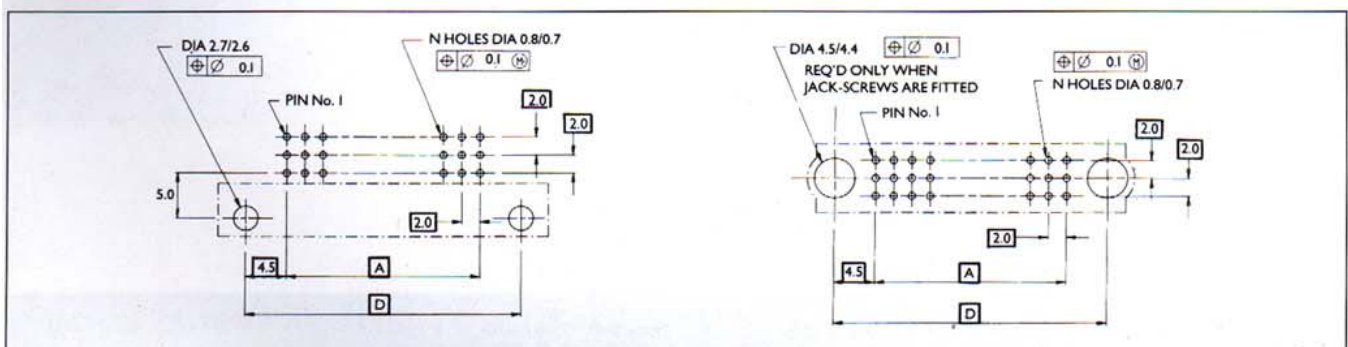
Male Straight p.c. Termination Type T, N, X, Y & Z



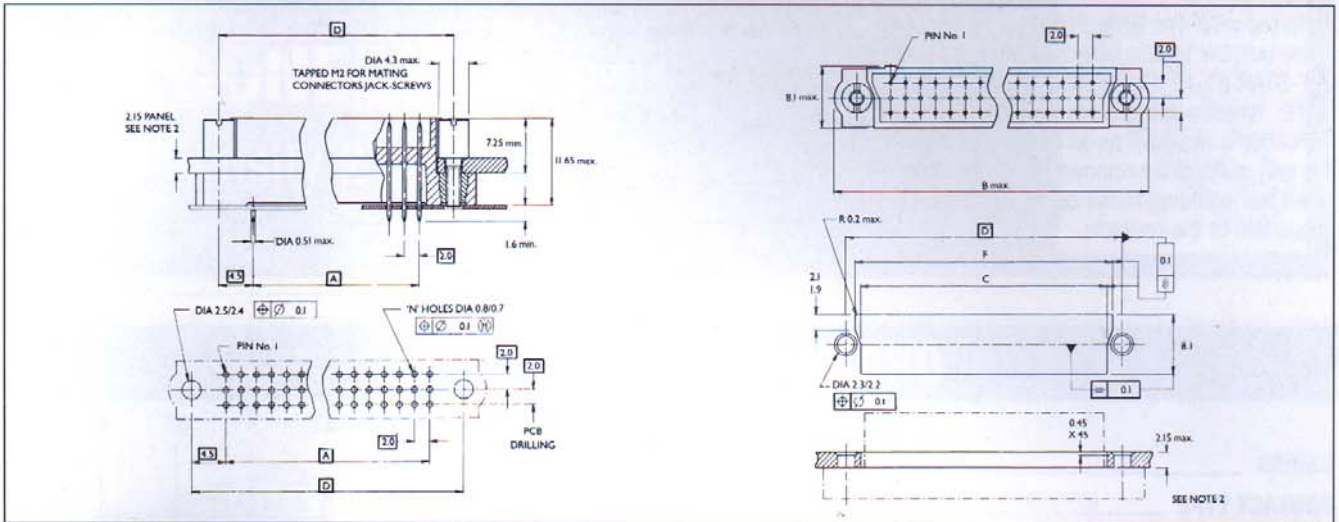
Male 90° p.c. Termination Type L



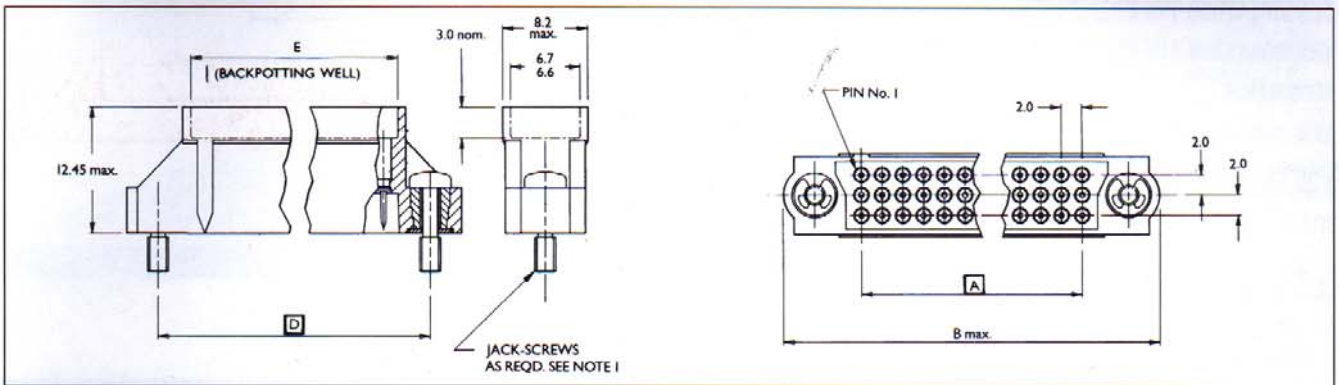
Mounting Details Termination Type T & L



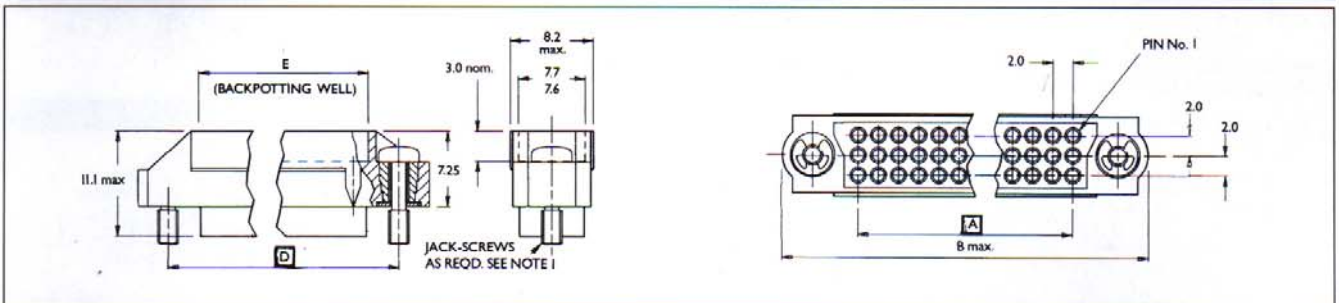
Male Panel Mounting (2.15 max.) Termination Type N



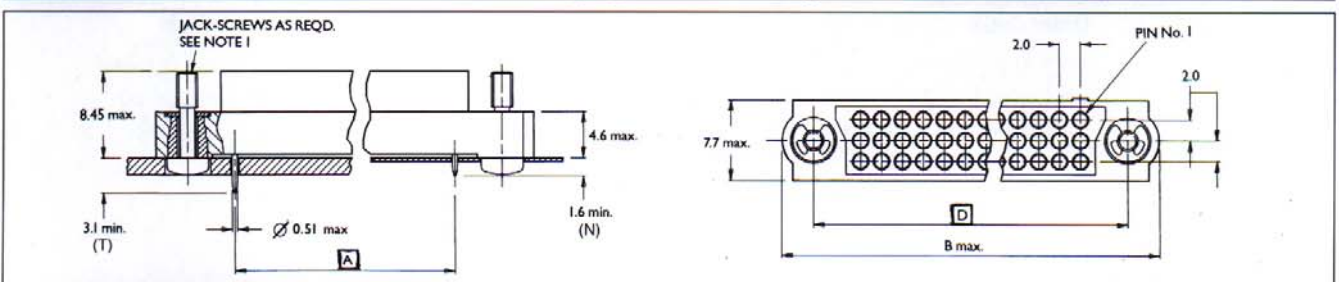
Male Crimp Termination Type C & D



Female Crimp Termination Type C & D



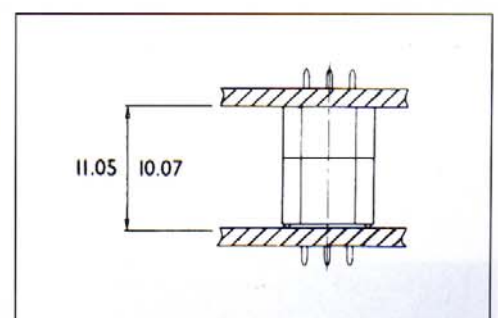
Female Straight p.c. Termination Type T & N



Common Dimensions

| Contact Arrangement | | | |
|---------------------|------------|-----------|-----------|
| Dimensions | 27 | 51 | 78 |
| A | 16 | 32 | 50 |
| B max. | 31.1 | 47.1 | 65.1 |
| C | 20.7/20.06 | 36.7/36.6 | 54.7/54.6 |
| D | 25 | 41 | 59 |
| E | 19.1/18.9 | 35.1/34.9 | 53.1/52.9 |
| F | 22.9/22.8 | 38.9/38.8 | 56.9/56.8 |

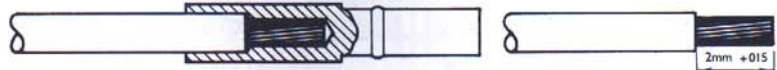
Spacing Board - Board



Crimp Details

Preferred wire type BS G 210 (Type A)
 * Also suitable for use with 24 A.W.G.
 DEF-STAN 61-12 (Part 6 Type 1) PVC
 NOTE: Whilst a crimp contact withdrawal tool (MP6808) is available as an optional accessory, it is only suitable for removal of ALL contacts when the moulding MUST be replaced prior to reinsertion of the contacts.

| Termination type | Crimp barrel accommodation | Wire Size/Crimp Tool Setting | | | |
|------------------|----------------------------|------------------------------|-----------|-----------|-----------|
| | | 22 A.W.G. | 24 A.W.G. | 26 A.W.G. | 28 A.W.G. |
| C* | 24-28 A.W.G. | - | 7 | 6 | 6 |
| D | 22 A.W.G. | 6 | - | - | - |



Wire preparation

ORDERING INFORMATION

SERIES _____ 301
CONTACT TYPE _____ M
CONTACT ARRANGEMENT _____ 27
TERMINATION TYPE _____ T
TERMINATION FINISH _____ 03
MOUNTING _____ A
VARIANT _____ 00

Series

301 - Three row

Contact Type

M - Male
 F - Female

Contact Arrangement

27 - 51 - 78

Termination Type

L - 90° p.c. (male only)
 T - Straight p.c.
 N - Straight p.c. (short for flexi circuits)
 X - Straight p.c. (male only)
 Y - Straight p.c. (male only)
 Z - Straight p.c. (male only)

C - Crimp 24-28 A.W.G.
 D - Crimp 22 A.W.G.

Termination Finish

01 - Gold (standard for crimp)
 03 - Tin alloy (standard for p.c.)

Mounting

A - p.c.b.
 B - Panel (2.15max.)
 C - Cable

Variant

00 - Standard
 01 - With Jackscrews (except mounting "B")

Jackscrew Assembly (pair) Part No. **MP 6822**

Tools

| | Order Code | | Order Code |
|------------------------|------------------------|-------------------------|------------------|
| Hand Crimp Tool | MP22520/2-01 | Contact Withdrawal Tool | MP 6808 (female) |
| 8 Indent Die Set | (BS Style 5310-3A-300) | | MP 6809 (male) |
| Contact Insertion Tool | MP 6811 | Crimp Tool Positioner | MP 6823 |
| | (BS Style T5748-19) | | |

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