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LOC

DIST

REVISIONS

P

LTR

DESCRIPTION

DATE

DWN

APVD

GP

00

G

REVISE PER 06-008555 ECO

28/APR/06

ECC

FDM

NOTES:

⚠ PITCH TOLERANCE TO BE ±.18[.007] FOR 1.27[.050] PITCH JUMPERS & ±.25[.010] FOR ALL REMAINING PITCHES. TOLERANCE TO BE NON CUMULATIVE OVER GAUGE LENGTH.

⚠ 11.92-152.40[.500-6.000] ARE STANDARD LENGTHS. JUMPERS ARE AVAILABLE IN INCREMENTS OF 2.50[.10] PLUS 6.35[.25] AND 19.05[.75].

⚠ DELETED

⚠ FOR CONDUCTOR PITCH 7 (2mm), ON PAGE 2 & 3, DIMENSION "B" IS 2.00[.079]

⚠ SPECIAL PIN LENGTHS ARE AVAILABLE FOR JUMPERS WITH A PIN CONFIGURATION OF "A" OR "B" ON LENGTHS OF UP TO 609.6[24.0] IN 2.54[.100] & 5.08[.200] PITCH VARIANTS ONLY BY ADDING THE FOLLOWING SUFFIXES:

| SUFFIX | PEN LENGTH  | TOLERANCE        |
|--------|-------------|------------------|
| V1     | 2.85 (.112) | ±.305<br>[±.012] |
| V2     | 3.40 (.134) |                  |
| V3     | 4.10 (.161) |                  |
| V4     | 6.50 (.256) |                  |
| V5     | 3.10 (.122) |                  |
| V6     | 2.81 (.150) |                  |
| V7     | 4.50 (.177) |                  |
| V8     | 2.00 (.079) |                  |
| V9     | TBD         |                  |
| V10    | .76 (.030)  |                  |
| V11    | 2.41 (.095) |                  |

"C"

DIMENSION FROM THE EDGE OF INSULATION MATERIAL TO EDGE OF THE FIRST COND. EXCEPT "M" STYLE.

6. RECOMMENDED PCB HOLE DRILLING DETAILS ARE AS FOLLOWS:-

| PITCH A     | ØG         |
|-------------|------------|
| 1.27 (.050) | .70 (.028) |
| 1.90 (.075) | .80 (.031) |
| 2.54 (.100) | .95 (.037) |
| 3.18 (.125) | .95 (.037) |
| 3.81 (.150) | .95 (.037) |
| 5.08 (.200) | .95 (.037) |

PITCH A

ØG ±.03(.001)

⚠ BEND RADIUS TO APPLY ONLY IN THE FLAT SECTION OF JUMPER BETWEEN THE CONDUCTOR TRANSITION AREAS.

⚠ PER 108-2135.

9. TOOL MARKS PERMISSIBLE ON BENDS. NO EXPOSED COPPER.

⚠ PIN DIAMETER SPECIFIED NOT APPLICABLE IN BENDING AREA OF PIN, DUE TO NORMAL DEFORMATION OF BENDING PROCESS.

⚠ REFER TO RELEVANT MATERIAL SPECIFICATIONS.

| F - MID POINT THICKNESS BETWEEN PT 1 & PT 2 | MINIMUM     | MAXIMUM     |
|---------------------------------------------|-------------|-------------|
| NOMEX                                       | .152 [.006] | .305 [.012] |
| POLYESTER                                   | .152 [.006] | .305 [.012] |
| KAPTON                                      | .102 [.004] | .254 [.010] |
| TEFLON                                      | .305 [.012] | .533 [.021] |

12. PRODUCT AND PROCESSING MUST MEET REQUIREMENTS OF TYCO ELECTRONICS STANDARD 230-702.

①

②

F

(MID-PIN THICKNESS)

SEE CHART

D

(MAX THICKNESS)

E

(PIN DIAMETER)

C

(MARGIN)

V

(MAX ADHESIVE FLOW)

NOT INCLUDED IN DIM B

Z

(2 PLC)

JUMPER LENGTH

R ±1.524(.060)

T

NO NICKS ON INSULATION

X

NO TRANSITION OUTSIDE INSULATION AREA

Y

(CONDUCTOR WIDTH)

JUMPER WIDTH

( 1° MAX DRAW ANGLE)

| JUMPER LENGTH                                                                                                              | PITCH (NOMINAL) | TRANSITION MAX | MAX/MIN MARGIN               | △ PIN DIAMETER                   | WIRE GAUGE (AWG) | MIN/MAX No. OF CONDUCTORS | MAXIMUM ADHESIVE FLOW | MIN GAP BETWEEN CONDUCTORS | CONDUCTOR WIDTH            | MAXIMUM INSULATION MISMATCH | MAX THICKNESS |
|----------------------------------------------------------------------------------------------------------------------------|-----------------|----------------|------------------------------|----------------------------------|------------------|---------------------------|-----------------------|----------------------------|----------------------------|-----------------------------|---------------|
| R △                                                                                                                        | A △             | T              | C                            | E                                | -                | -                         | V                     | X                          | Y                          | Z                           | D             |
| 11.93<br>(.50) TO<br>863.6<br>(30.00)<br>IN<br>STEPS<br>OF 2.50<br>(.10)<br>PLUS<br>6.35<br>(.25)<br>AND<br>19.05<br>(.75) | 1.00<br>(0.039) | 4.32<br>[.170] | 0.35 (.014)<br>0.17 (.007)   | 0.330 (.0130)<br>0.317 (.0125)   | 28               | 2-70                      | 0.38<br>(0.015)       | 0.13<br>(0.009)            | 0.76 (.030)<br>0.56 (.022) | .76<br>(.030)               | .64           |
|                                                                                                                            | 1.25<br>(0.049) | 4.32<br>[.170] | 0.50 (0.020)<br>0.17 (0.007) | 0.330 (.0130)<br>0.317 (.0125)   | 28               | 2-70                      | 0.38<br>(0.015)       | 0.25<br>(0.010)            | 0.89 (.035)<br>0.64 (.025) | .76<br>(.030)               | .64           |
|                                                                                                                            | 1.27<br>(0.050) | 4.32<br>[.170] | 0.50 (0.020)<br>0.17 (0.007) | 0.330 (.0130)<br>0.317 (.0125)   | 28               | 2-70                      | 0.38<br>(0.015)       | 0.25<br>(0.010)            | 0.89 (.035)<br>0.64 (.025) | .76<br>(.030)               | .64           |
|                                                                                                                            | 2.00<br>(0.079) | 5.08<br>[.200] | 0.70 (0.028)<br>0.25 (0.010) | 0.416 (.0164)<br>0.400 (.0157)   | 26               | 2-50                      | 0.38<br>(0.015)       | 0.38<br>(0.015)            | 1.14 (.045)<br>0.89 (.035) | .76<br>(.030)               | .84           |
|                                                                                                                            | 1.90<br>(0.075) | 5.08<br>[.200] | 0.70 (0.028)<br>0.25 (0.010) | 0.416 (.0164)<br>0.400 (.0157)   | 26               | 2-50                      | 0.38<br>(0.015)       | 0.38<br>(0.015)            | 1.14 (.045)<br>0.89 (.035) | .76<br>(.030)               | .84           |
|                                                                                                                            | 2.54<br>(0.100) | 6.35<br>[.250] | 0.80 (0.031)<br>0.25 (0.010) | 0.526 (0.0207)<br>0.505 (0.0199) | 24               | 2-50                      | 0.51<br>(0.020)       | 0.51<br>(0.020)            | 1.52 (.060)<br>1.27 (.050) | .76<br>(.030)               | .84           |
|                                                                                                                            | 3.18<br>(0.125) | 6.35<br>[.250] | 1.00 (0.039)<br>0.25 (0.010) | 0.526 (0.0207)<br>0.505 (0.0199) | 24               | 2-25                      | 0.51<br>(0.020)       | 0.51<br>(0.020)            | 1.52 (.060)<br>1.27 (.050) | .76<br>(.030)               | .84           |
|                                                                                                                            | 3.81<br>(0.150) | 6.35<br>[.250] | 1.00 (0.039)<br>0.25 (0.010) | 0.526 (0.0207)<br>0.505 (0.0199) | 24               | 2-20                      | 0.51<br>(0.020)       | 0.51<br>(0.020)            | 1.52 (.060)<br>1.27 (.050) | .76<br>(.030)               | .84           |
|                                                                                                                            | 5.08<br>(0.200) | 6.35<br>[.250] | 1.00 (0.039)<br>0.25 (0.010) | 0.526 (0.0207)<br>0.505 (0.0199) | 24               | 2-15                      | 0.51<br>(0.020)       | 0.51<br>(0.020)            | 1.52 (.060)<br>1.27 (.050) | .76<br>(.030)               | .84           |

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS:

MM [INCHES]

TOLERANCES UNLESS OTHERWISE SPECIFIED:

0 PLC ± -

1 PLC ± -

2 PLC ± -

3 PLC ± -

4 PLC ± -

ANGLES ± 1/2°

FINISH -

MATERIAL

-

DWN

J. SCHWARTZ

28FEB01

CHK

E. FOX

28FEB01

APVD

E. FOX

28FEB01

PRODUCT SPEC

-

APPLICATION SPEC

-

WEIGHT

-

CUSTOMER DRAWING

tyco

Electronics

Tyco Electronics Corporation

Harrisburg, Pa. 17105

NAME

FLEXSTRIP PIN CONFIGURATIONS, GENERIC

SIZE

A3

CAGE CODE

00779

DRAWING NO

C=1474339

RESTRICTED TO

-

SCALE

N.T.S.

SHEET

1 OF 4

REV

G

AMP 1470-19 REV 31MAR2000

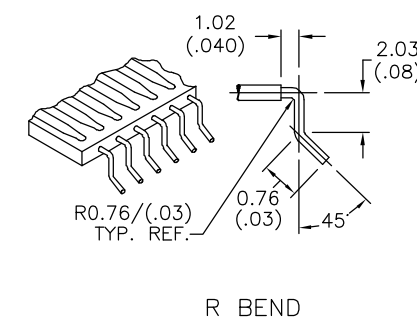
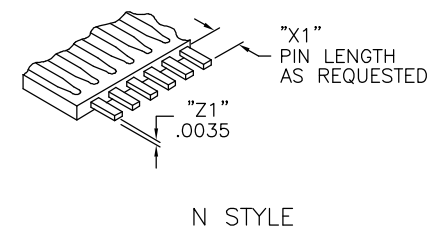
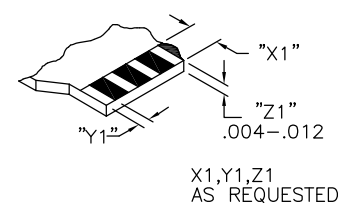
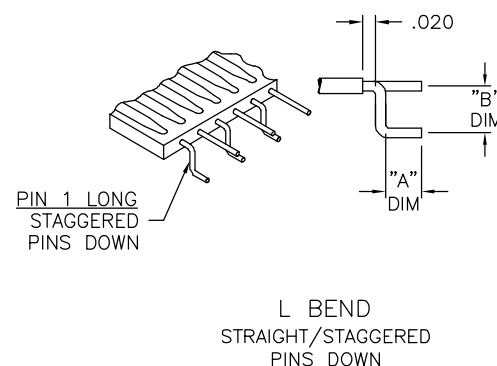
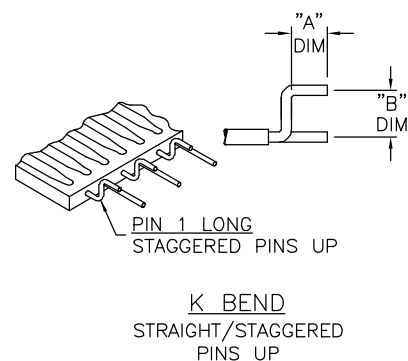
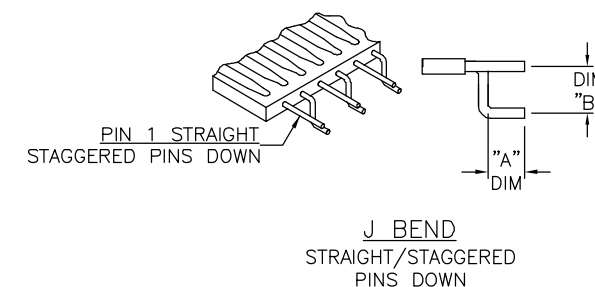
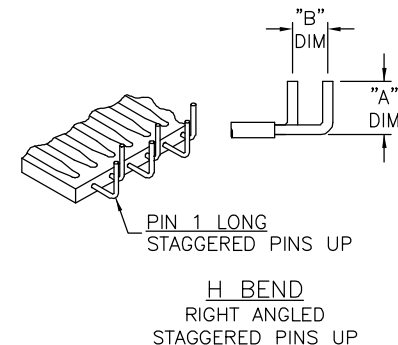
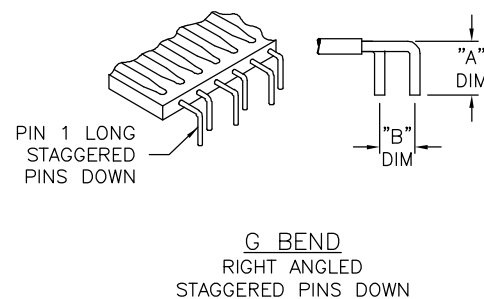
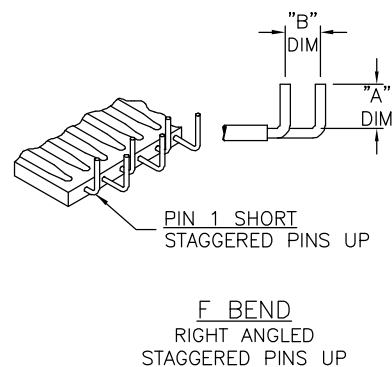
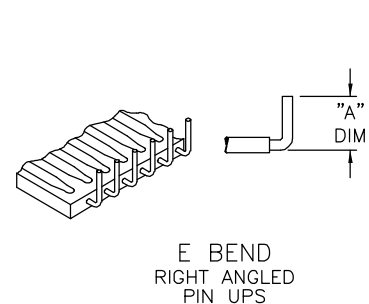
AMP 1470-19 REV 31MAR2000

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| LOC | DIST | REVISIONS |     |             |      |
|-----|------|-----------|-----|-------------|------|
| GP  | 00   | P         | LTR | DESCRIPTION | DATE |
|     |      | —         | —   | SEE SHEET 1 | —    |
|     |      |           |     |             | DWN  |
|     |      |           |     |             | APVD |



### SPECIAL JUMPERS ORDERING CODE/CATALOGUE NUMBER

FS N — 1 3.25 A G — 20 V1 (SEE NOTE 5)

FLEXSTRIP PRODUCT CODE

INSULATION MATERIAL:  
N — NOMEX  
P — POLYESTER  
T — TEFLON  
K — KAPTON

CONDUCTOR PITCH:  
1 — 1.27(.050)  
2 — 2.54(.100)  
3 — 3.18(.125)  
4 — 3.81(.150)  
5 — 5.08(.200)  
6 — 1.90(.075)  
7 — 2.00(.078)  
8 — 1.25(.049)  
9 — 1.00(.039)

INSULATION LENGTH: (in inches)  
.50 MIN. — 30.0 MAX.  
IN .10 INCREMENTS PLUS .25 AND .50

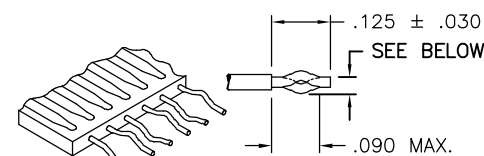
SPECIAL PIN LENGTH  
V1 — 2.84(.112)  
V2 — 3.40(.134)  
V3 — 4.09(.161)  
V4 — 6.50(.256)  
V5 — 3.01(.122)  
V6 — 3.81(.150)  
V7 — 4.50(.177)  
V8 — 2.01(.079)  
V9 — TBD  
V10 — .76 (.030)  
V11 — 2.41(.095)

NUMBER OF CONDUCTORS (SEE MAX./MIN. PAGE 1)

PIN ARRANGEMENT (RIGHT)

PIN ARRANGEMENT (LEFT)

| CONDUCTOR PITCH  | BENDS AVAILABLE        |
|------------------|------------------------|
| 1 — 1.27/(.050)  | E, F, G, H, J, K, L, M |
| 2 — 2.54/(.100)  | E, F, G, H, J, K, L, M |
| 3 — 3.18/(.125)  | E                      |
| 4 — 3.81/(.150)  | E                      |
| 5 — 5.08/(.200)  | E                      |
| 6 — 1.91/(.075)  | E, F, G, H, J, K, L    |
| 7 — 2.00/(.0787) | E, F, G, H, J, K, L    |
| 8 — 1.25/(.049)  | E                      |
| 9 — 1.00/(.039)  | E, M                   |



24 AWG: .034 ±.004  
26 AWG: .028 ±.004  
28 AWG: .022 ±.004

### SPECIAL FLEXSTRIP BENDS

SPECIAL FLEXSTRIP BENDS  
E THRU R, AND Z MAY APPLY TO EITHER  
LEFT OR RIGHT SIDE

| E THRU L BEND                       |
|-------------------------------------|
| "A"<br>DIM<br>3.18±0.76/(.125±.030) |
| "B"<br>DIM<br>2.54±0.25/(.100±.010) |

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| DIMENSIONS:<br>MM [INCHES] | TOLERANCES UNLESS<br>OTHERWISE SPECIFIED: |
|----------------------------|-------------------------------------------|
| 0 PLC                      | ± —                                       |
| 1 PLC                      | ± —                                       |
| 2 PLC                      | ± —                                       |
| 3 PLC                      | ± —                                       |
| 4 PLC                      | ± —                                       |
| ANGLES                     | ± 1/2°                                    |
| MATERIAL                   | FINISH                                    |
| —                          | —                                         |

|                  |             |         |
|------------------|-------------|---------|
| DWN              | J. SCHWARTZ | 28FEB01 |
| CHK              | E. FOX      | 28FEB01 |
| APVD             | E. FOX      | 28FEB01 |
| PRODUCT SPEC     | —           | —       |
| APPLICATION SPEC | —           | —       |
| WEIGHT           | —           | —       |
| CUSTOMER DRAWING |             |         |

|                                                       |           |                                               |               |
|-------------------------------------------------------|-----------|-----------------------------------------------|---------------|
| Tyco Electronics Corporation<br>Harrisburg, Pa. 17105 |           | NAME<br>FLEXSTRIP PIN CONFIGURATIONS, GENERIC |               |
| SIZE                                                  | CAGE CODE | DRAWING NO                                    | RESTRICTED TO |
| A3                                                    | 00779     | C=1474339                                     | —             |
| SCALE<br>N.T.S.                                       |           | SHEET<br>3 OF 4                               | REV<br>G      |

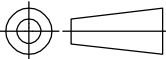
| LOC | DIST | REVISIONS |     |             |      |      |
|-----|------|-----------|-----|-------------|------|------|
| GP  | 00   | P         | LTR | DESCRIPTION | DATE | APVD |
|     |      |           | —   | SEE SHEET 1 | —    | —    |

|                                                                                                                   |                  |                                                                                                                                                                                                          |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------------------------------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| NORMAL CONDUCTOR PITCH                                                                                            |                  | 1.00<br>(.039)                                                                                                                                                                                           | 1.25<br>(.049)                                                                      | 1.27<br>(.050)                                                                      | 1.90<br>(.075)                                                                      | 2.00<br>(.078)                                                                      | 2.54<br>(.100)                                                                      | 3.18<br>(.125)                                                                      | 3.81<br>(.150)                                                                      | 5.08<br>(.200)                                                                      | 7.62<br>(.300)                                                                      |
| WIRE GAUGE                                                                                                        |                  | AWG 28                                                                                                                                                                                                   | AWG 28                                                                              | AWG 28                                                                              | AWG 26                                                                              | AWG 26                                                                              | AWG 24                                                                              | AWG 24                                                                              | AWG 24                                                                              | AWG 24                                                                              | AWG 24                                                                              |
| NOMINAL WIRE DIAMETER                                                                                             |                  | .32(.0126)                                                                                                                                                                                               | .32(.0126)                                                                          | .32(.0126)                                                                          | .40(.0159)                                                                          | .40(.0159)                                                                          | .51(.0201)                                                                          | .51(.0201)                                                                          | .51(.0201)                                                                          | .51(.0201)                                                                          | .51(.0201)                                                                          |
| CURRENT RATING                                                                                                    |                  | 1.0A                                                                                                                                                                                                     | 1.6A                                                                                | 1.6A                                                                                | 2.0A                                                                                | 2.0A                                                                                | 3.0A                                                                                | 3.5A                                                                                | 3.5A                                                                                | 4.0A                                                                                | 4.0A                                                                                |
| VOLTAGE RATING                                                                                                    |                  | 200VAC                                                                                                                                                                                                   | 200VAC                                                                              | 200VAC                                                                              | 200VAC                                                                              | 200VAC                                                                              | 300VAC                                                                              | 300VAC                                                                              | 300VAC                                                                              | 300VAC                                                                              | 300VAC                                                                              |
| MAX NUMBER OF CONDUCTORS PER JUMPER                                                                               |                  | 70                                                                                                                                                                                                       | 70                                                                                  | 70                                                                                  | 50                                                                                  | 50                                                                                  | 48                                                                                  | 30                                                                                  | 25                                                                                  | 20                                                                                  | 13                                                                                  |
| MIN BREAKDOWN VOLTAGE @ 1 MIN                                                                                     |                  | 1025VAC                                                                                                                                                                                                  | 1050VAC                                                                             | 1050VAC                                                                             | 1250VAC                                                                             | 1250VAC                                                                             | 1500VAC                                                                             | 1500VAC                                                                             | 1500VAC                                                                             | 1500VAC                                                                             | 1500VAC                                                                             |
| INSULATION RESISTANCE (GND. SIG. GND)<br>305 (12') SAMPLE @ 500VDC                                                | P<br>N<br>T<br>K |                                                                                                                         |  |  |  |  |  |  |  |  |  |
| CAPACITANCE (pf / 50.8 (12') LENGTH)<br>(GND, SIG, GND)<br>(AVERAGE)                                              | P<br>N<br>T<br>K |                                                                                                                         |  |  |  |  |  |  |  |  |  |
| CHARACTERISTIC IMPEDANCE (GND. SIG. GND)<br>(AVERAGE)                                                             | P<br>N<br>T<br>K |                                                                                                                         |  |  |  |  |  |  |  |  |  |
| APPLICATION TEMP RANGE (C')<br>(FOR SOLDERING)                                                                    | P<br>N<br>T<br>K | 200 / 4 sec<br>200 / 4 sec<br>240 / 4 sec<br>240 / 4 sec                                                                                                                                                 | 200 / 4 sec<br>200 / 4 sec<br>240 / 4 sec<br>240 / 4 sec                            | 200 / 4 sec<br>200 / 4 sec<br>240 / 4 sec<br>240 / 4 sec                            | 200 / 4 sec<br>200 / 4 sec<br>240 / 4 sec<br>240 / 4 sec                            | 200 / 4 sec<br>200 / 4 sec<br>240 / 4 sec<br>240 / 4 sec                            | 250 / 4 sec<br>250 / 4 sec<br>260 / 5 sec<br>260 / 5 sec                            | 250 / 4 sec<br>250 / 4 sec<br>260 / 5 sec<br>260 / 5 sec                            | 250 / 4 sec<br>250 / 4 sec<br>260 / 5 sec<br>260 / 5 sec                            | 250 / 4 sec<br>250 / 4 sec<br>260 / 5 sec<br>260 / 5 sec                            | 250 / 4 sec<br>250 / 4 sec<br>260 / 5 sec<br>260 / 5 sec                            |
| OPERATING TEMPERATURE (C')<br> | P<br>N<br>T<br>K | -40 to 105 (For all Conductor Pitches)<br>-40 to 125 (For all Conductor Pitches)<br>-40 to 150 (For all Conductor Pitches)<br>-40 to 150 (For all Conductor Pitches)                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| MINIMUM BEND RADIUS<br>        | P<br>N<br>T<br>K | 3.18mm (For all Conductor Pitches)<br>3.18mm (For all Conductor Pitches)<br>3.18mm (For all Conductor Pitches)<br>3.18mm (For all Conductor Pitches)                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| UL STYLE NUMBER                                                                                                   | P<br>N<br>T<br>K | 2639 (For all Conductor Pitches .100 and above)<br>5188 (For all Conductor Pitches .100 and above)<br>2928 (For all Conductor Pitches .100 and above)<br>2927 (For all Conductor Pitches .100 and above) |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

| ABR. | MATERIAL    | SPECIFICATION |
|------|-------------|---------------|
|      | COPPER WIRE | 100-1577      |
| P    | POLYESTER   | 100-1575      |
| N    | NOMEX       | 100-1758      |
| T    | TEFLON      | 100-1574      |
| K    | KAPTON      | 100-1576      |

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DIMENSIONS:  
MM [INCHES]



MATERIAL  
—

TOLERANCES UNLESS OTHERWISE SPECIFIED:

0 PLC ± —  
1 PLC ± —  
2 PLC ± —  
3 PLC ± —  
4 PLC ± —  
ANGLES ± 1/2°  
FINISH —

DWN  
J. SCHWARTZ  
28FEB01

CHK  
E. FOX  
28FEB01

APVD  
E. FOX  
28FEB01

PRODUCT SPEC  
—

APPLICATION SPEC  
—

WEIGHT  
—



Tyco Electronics Corporation  
Harrisburg, Pa. 17105

NAME  
FLEXSTRIP PIN CONFIGURATIONS, GENERIC

SIZE  
A3

CAGE CODE  
00779

DRAWING NO  
C-1474339

RESTRICTED TO  
—

CUSTOMER DRAWING

SCALE  
N.T.S.

SHEET  
4 OF 4

REV  
G