

## Excellent Integrated System Limited

Stocking Distributor

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[FCI](#)  
[68402-607](#)

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PRODUCT NUMBER  
SEE TABLE

68402-XXX-LF

LEAD FREE OPTION  
PACKAGING OPTION NOTE 6. OMIT IF NOT REQUIRED  
NO OF POSITIONS PER ROW  
PLATING CODE  
BASE PART NUMBER

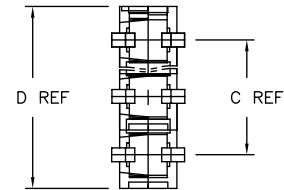
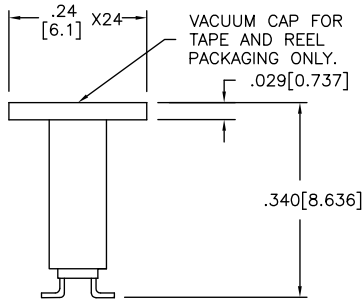
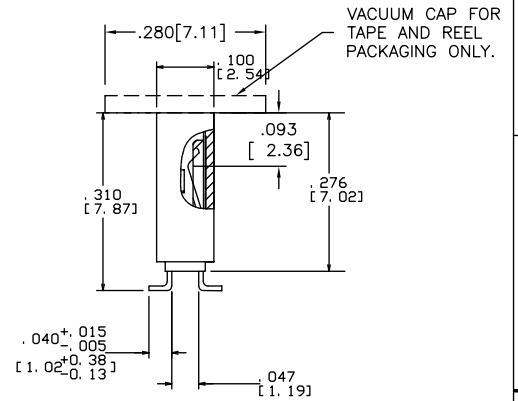
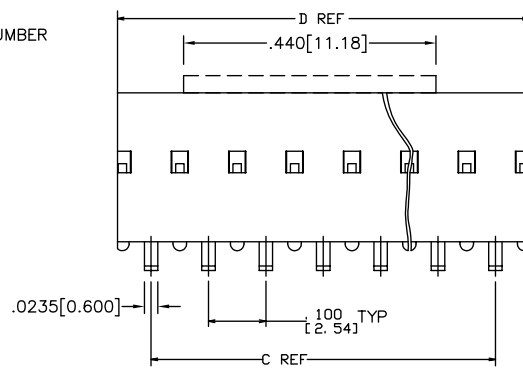


FIGURE 1  
SMALL CAP FOR LESS THAN 6 POSITION

|             |             |       |          |                                       |                     |            |                                                    |  |  |
|-------------|-------------|-------|----------|---------------------------------------|---------------------|------------|----------------------------------------------------|--|--|
| mat'l. code |             |       |          | surface                               | tolerance           | projection | product family                                     |  |  |
|             |             |       |          | ISO 1302                              | ISO 406<br>ISO 1101 |            | DUBOX                                              |  |  |
| ltr         | ecr no      | dr    | date     | tolerances unless otherwise specified |                     | INCH/MM    | title                                              |  |  |
| V           | ELX-N-17328 | ZK    | 03/28/14 | angles                                | .XX±.01/.3          |            |                                                    |  |  |
| W           | ELX-N-18093 | Henry | 06/26/14 | linear                                | .XXX±.005/.13       | scale 5:1  | DUBOX SURFACE MOUNT S/R<br>VERTICAL CARD CONNECTOR |  |  |
|             |             |       |          | 0°±2°                                 | .000±.0020/.051     |            |                                                    |  |  |
| R           | V03-0309    | HTB   | 04/28/03 | dr                                    | J. SHEREINER        | 11/07/90   | dwg no                                             |  |  |
| S           | V05-0463    | DPU   | 06/28/05 | engr                                  | M. HAHN             | 11/07/90   |                                                    |  |  |
| T           | M07-0114    | AGS   | 02/15/07 | chr                                   | M. HAHN             | 11/07/90   | 68402                                              |  |  |
| U           | M07-0198    | MHT   | 4/24/07  | appd                                  | M. HAHN             | 11/07/90   |                                                    |  |  |
| sheet       | revision    | W     | W        | W                                     | W                   |            | type Product Customer Drawing                      |  |  |
| index       | sheet       | 1     | 2        | 3                                     | 4                   | 5          |                                                    |  |  |

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STATUS:Released

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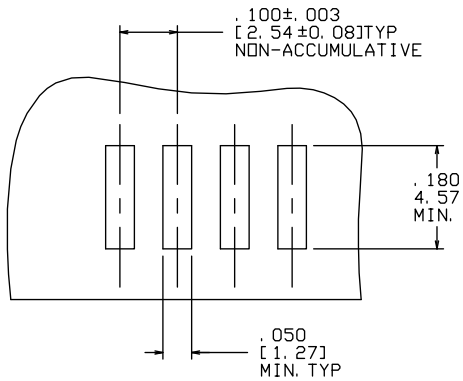


FIGURE A  
TOP ENTRY  
.025/.64 SQ PIN

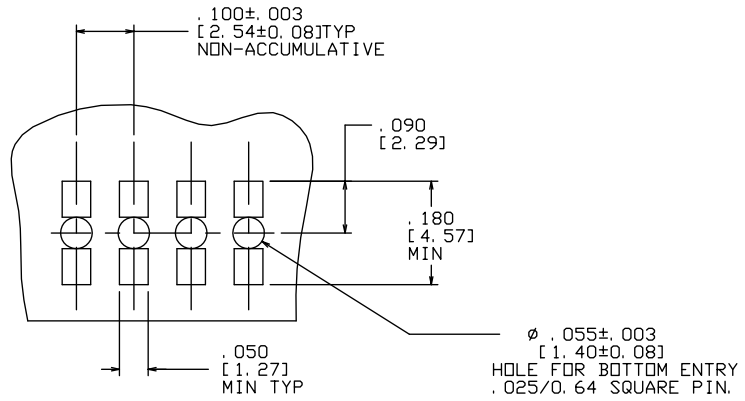


FIGURE B  
BOTTOM ENTRY (THROUGH PWB)  
.025/.64 SQ PIN

|             |          |    |    |                                       |           |                       |                          |  |
|-------------|----------|----|----|---------------------------------------|-----------|-----------------------|--------------------------|--|
| mat'l. code |          |    |    | surface                               | tolerance | projection            | product family           |  |
|             |          |    |    | ISO 1302                              | ISO 406   |                       | DUBOX                    |  |
|             |          |    |    | tolerances unless otherwise specified |           |                       | title                    |  |
| ltr         | ecr      | no | dr | date                                  | linear    | INCH/MM               | DUBOX SURFACE MOUNT S/R  |  |
| W           |          |    |    |                                       | angles    | scale 5:1             | VERTICAL CARD CONNECTOR  |  |
|             |          |    |    |                                       | 0° ± 2°   |                       | dwg no                   |  |
|             |          |    |    |                                       | dr        | J. SHEREINER 11/07/90 | sheet. 2 of 5            |  |
|             |          |    |    |                                       | enrg      | M. HAHN 11/07/90      | size                     |  |
|             |          |    |    |                                       | chr       | M. HAHN 11/07/90      | A3                       |  |
|             |          |    |    |                                       | appd      | M. HAHN 11/07/90      | type                     |  |
|             |          |    |    |                                       |           |                       | Product Customer Drawing |  |
| sheet       | revision |    |    |                                       |           |                       |                          |  |
| index       | sheet    |    |    |                                       |           |                       |                          |  |

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| PRODUCT NO<br>NOTE 14 | PLATING CONTACT AREA<br>NOTE 16                | PLATING SOLDER TAIL             | MATERIAL<br>REF. |
|-----------------------|------------------------------------------------|---------------------------------|------------------|
| 68402-2XX             | 15u"/.38u Au OR GXT MIN OVER 50u"/1.27u NI MIN | 100u"/160u" SN<br>2.54u"/4.06u" | NOTE 3 & 4       |
| 68402-3XX             | 30u"/.76u Au OR GXT MIN OVER 50u"/1.27u NI MIN | 100u"/160u" SN<br>2.54u"/4.06u" | NOTE 3 & 4       |
| 68402-4XX             | 100u"/2.54u Sn MIN OVER 50u"/1.27u NI          | 100u"/160u" SN<br>2.54u"/4.06u" | NOTE 3 & 4       |
| 68402-6XX             | 30u"/.76u Au OR GXT MIN OVER 50u"/1.27u NI MIN | 100u"/160u" SN<br>2.54u"/4.06u" | NOTE 3 & 4       |
| 68402-8XX             | 30u"/.76u Au MIN OVER 50u"/1.27u NI MIN        | 100u"/160u" SN<br>2.54u"/4.06u" | NOTE 3 & 4       |

OBSOLETE

|             |     |                |    |                                                                                          |              |                                                                                                     |                                                                                       |                                    |                         |
|-------------|-----|----------------|----|------------------------------------------------------------------------------------------|--------------|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|------------------------------------|-------------------------|
| mat'l. code |     |                |    | surface<br>ISO 1302 <input checked="" type="checkbox"/> tolerance<br>ISO 406<br>ISO 1101 |              | projection<br> |                                                                                       | product family<br>DUBOX            |                         |
| ltr         | ecn | no             | dr | date                                                                                     |              | tolerances unless otherwise specified                                                               |                                                                                       | title                              |                         |
| W           |     |                |    |                                                                                          |              | angles                                                                                              | linear                                                                                | INCH/MM                            | DUBOX SURFACE MOUNT S/R |
|             |     |                |    |                                                                                          |              |                                                                                                     | .XX±.01/.3                                                                            |                                    | VERTICAL CARD CONNECTOR |
|             |     |                |    |                                                                                          |              |                                                                                                     | .XXX±.005/.13                                                                         | scale 5:1                          |                         |
|             |     |                |    |                                                                                          |              |                                                                                                     | .XXX±.0020/.051                                                                       |                                    |                         |
|             |     |                |    | dr                                                                                       | J. SHEREINER | 11/07/90                                                                                            |  |                                    |                         |
|             |     |                |    | enrg                                                                                     | M. HAHN      | 11/07/90                                                                                            |                                                                                       |                                    |                         |
|             |     |                |    | chr                                                                                      | M. HAHN      | 11/07/90                                                                                            |                                                                                       |                                    |                         |
|             |     |                |    | appd                                                                                     | M. HAHN      | 11/07/90                                                                                            |                                                                                       |                                    |                         |
| sheet index |     | revision sheet |    |                                                                                          |              |                                                                                                     |                                                                                       | dwg no 68402 sheet. 3 of 5 size A3 |                         |
|             |     |                |    |                                                                                          |              |                                                                                                     |                                                                                       | type Product Customer Drawing      |                         |

form: A3

PDS: Rev :W

STATUS:Released

Printed: Jun 27, 2014

PRODUCT NUMBER  
SEE TABLE

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NOTES:

- ①. TERMINAL MATERIAL: PHOSPHOR BRONZE.  
EXTRA HARD
2. RECOMMENDED APPLICATION DATA:
  - A. RECOMMENDED SOLDER PAD PATTERN IS SHOWN IN FIGURE A & B.
  - B. ALL MATING PINS TO BE .025/.64 SQUARE ON TRUE CENTER OF GIVEN TERMINAL SPACING. WITHIN .015/.38 DIA.
  - C. SUGGESTED MATING PIN LENGTH .210±.010 [5.33±.51]
- ③. HOUSING MATERIAL: P.P.S., FILLED.  
FLAME RETARDANT PER UL 94 V-0.  
THIS PART WILL WITHSTAND EXPOSURES TO 260°C PEAK TEMPERATURE FOR 20 SECONDS IN WAVE SOLDER, INFRA-RED OR VAPOR PHASE SOLDER PROCESS.
- ④. PRESTAMPED POST PLATED TERMINAL.
5. FCI, FCI PART NUMBER AND DATE CODE TO BE MARKED ON TUBE LABEL.
- ⑥. ADD SUFFIX 'P' TO DASH NUMBER AS FOURTH DIGIT FOR TAPE & REEL PACKAGING.  
ADD SUFFIX 'W' TO DASH NUMBER AS WITHOUT CAP ASSEMBLY FOR TAPE & REEL PACKAGING.
7. TAPE AND REEL PACKAGING PER GES-14-334.
- ⑧. VACUUM CAP MATERIAL: L.C.P., FLAME RETARDANT UL 94 V-0.  
COLOR: BLACK
- ⑨. TAPE AND REEL PACKAGING FOR 24mm WIDE AND BELOW HAVE PILOT HOLES ON ONE SIDE OF TAPE ONLY. SIZES ABOVE 24mm HAVE PILOT HOLES ON BOTH SIDES OF TAPE.
- ⑩. TAPE & REEL PACKAGING 32mm TAPE WIDTH, WITH 12mm POCKET PITCH.
- ⑪. MAXIMUM LENGTH OF CONNECTOR FOR TAPE AND REEL PACKAGING IS 2.50 INCHES LONG /63.5mm
- ⑫. PART NUMBER WITH "U" SUFFIX IS FOR SAWING PURPOSES ONLY.
13. STANDARD TUBE PACKAGE PER BUS-14-097/3.
- ⑭. ADD LF SUFFIX AT THE END OF PART NUMBER FOR LEAD FREE OPTION.
15. THIS PRODUCT MEETS EUROPEAN UNION DIRECTIVES AND OTHER COUNTRY REGULATION AS DESCRIBED IN GS-22-008.
- ⑯. PLATING OPTIONS:  
MAY BE EITHER GOLD OR GXT PLATED AT MANUFACTURER'S OPTION.

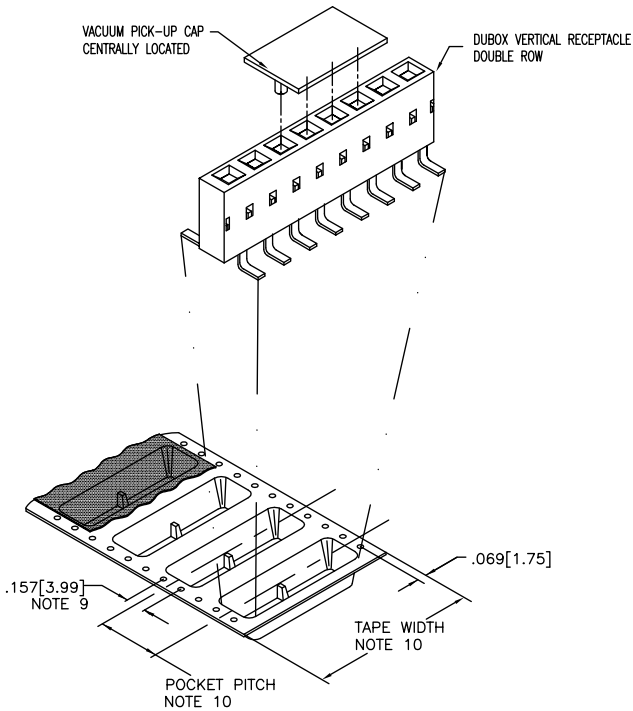


FIGURE 2  
TAPE & REEL PACKAGING

|             |          |    |      |                     |                                       |            |                                                    |  |
|-------------|----------|----|------|---------------------|---------------------------------------|------------|----------------------------------------------------|--|
| mat'l. code |          |    |      | surface<br>ISO 1302 | tolerance<br>ISO 406<br>ISO 1101      | projection | product family<br>DUBOX                            |  |
| ltr         | ecr      | no | dr   | date                | tolerances unless otherwise specified |            | title                                              |  |
| W           |          |    |      |                     | angles                                | linear     | DUBOX SURFACE MOUNT S/R<br>VERTICAL CARD CONNECTOR |  |
|             |          |    |      |                     | 0°±2°                                 | linear     | scale 5:1                                          |  |
|             |          |    | dr   | J. SHEREINER        | 11/07/90                              |            | dwg no                                             |  |
|             |          |    | enr  | M. HAHN             | 11/07/90                              |            | sheet. 4 of 5                                      |  |
|             |          |    | chr  | M. HAHN             | 11/07/90                              |            | size                                               |  |
|             |          |    | appd | M. HAHN             | 11/07/90                              |            | A3                                                 |  |
| sheet       | revision |    |      |                     |                                       |            | type                                               |  |
| index       | sheet    |    |      |                     |                                       |            | Product Customer Drawing                           |  |

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| PRODUCT NO.   | NO. OF POSITIONS | C DIM        | D DIM        | TAPE & REEL PACKAGING | LF OPTIONS        |
|---------------|------------------|--------------|--------------|-----------------------|-------------------|
| 68402-Y02     | 1 X 2            | .100/2.540   | .217/5.511   | NO                    | NOTE 14           |
| -Y03          | 1 X 3            | .200/5.080   | .317/8.051   | NO                    |                   |
| -Y04          | 1 X 4            | .300/7.620   | .417/10.591  | NO                    |                   |
| -Y05          | 1 X 5            | .400/10.160  | .517/13.131  | NO                    |                   |
| -Y06          | 1 X 6            | .500/12.700  | .617/15.671  | NO                    |                   |
| -Y07          | 1 X 7            | .600/15.240  | .717/18.211  | NO                    |                   |
| -Y08          | 1 X 8            | .700/17.780  | .817/20.751  | NO                    |                   |
| -Y09          | 1 X 9            | .800/20.320  | .917/23.291  | NO                    |                   |
| -Y10          | 1 X 10           | .900/22.860  | 1.017/25.831 | NO                    |                   |
| -Y11          | 1 X 11           | 1.000/25.400 | 1.117/28.371 | NO                    |                   |
| -Y12          | 1 X 12           | 1.100/27.940 | 1.217/30.911 | NO                    |                   |
| -Y13          | 1 X 13           | 1.200/30.480 | 1.317/33.451 | NO                    |                   |
| -Y14          | 1 X 14           | 1.300/33.020 | 1.417/35.991 | NO                    |                   |
| -Y15          | 1 X 15           | 1.400/35.560 | 1.517/38.531 | NO                    |                   |
| -Y16          | 1 X 16           | 1.500/38.100 | 1.617/41.071 | NO                    |                   |
| -Y17          | 1 X 17           | 1.600/40.640 | 1.717/43.611 | NO                    |                   |
| -Y18          | 1 X 18           | 1.700/43.180 | 1.817/46.151 | NO                    |                   |
| -Y19          | 1 X 19           | 1.800/45.720 | 1.917/48.691 | NO                    |                   |
| -Y20          | 1 X 20           | 1.900/48.260 | 2.017/51.231 | NO                    |                   |
| -Y21          | 1 X 21           | 2.000/50.800 | 2.117/53.771 | NO                    |                   |
| -Y22          | 1 X 22           | 2.100/53.340 | 2.217/56.311 | NO                    |                   |
| -Y23          | 1 X 23           | 2.200/55.880 | 2.317/58.851 | NO                    |                   |
| -Y24          | 1 X 24           | 2.300/58.420 | 2.417/61.391 | NO                    |                   |
| -Y25          | 1 X 25           | 2.400/60.960 | 2.517/63.931 | NO                    |                   |
| 68402-Y26     | 1 X 26           | 2.500/63.50  | 2.617/66.47  | NO                    | NOTE 12<br>NOTE 6 |
| 68402-Y26U    | 1 X 26           | 2.500/63.50  | 2.617/66.47  | NO                    |                   |
| 68402-Y06P    | 1 X 6            | .500/12.700  | .617/15.671  | YES                   |                   |
| 68402-Y27-Y50 | ---              | ---          | ---          | NO                    | NOT AVAILABLE     |

|             |                     |                                  |            |                                                    |
|-------------|---------------------|----------------------------------|------------|----------------------------------------------------|
| mat'l. code | surface<br>ISO 1302 | tolerance<br>ISO 406<br>ISO 1101 | projection | product family<br>DUBOX                            |
| ltr         | ecr no              | dr                               | date       | title                                              |
| W           |                     |                                  |            | DUBOX SURFACE MOUNT S/R<br>VERTICAL CARD CONNECTOR |
|             |                     |                                  |            | scale 5:1                                          |
|             |                     |                                  |            | dwg no 68402                                       |
|             |                     |                                  |            | sheet. 5 of 5                                      |
|             |                     |                                  |            | size A3                                            |
|             |                     |                                  |            | type Product Customer Drawing                      |