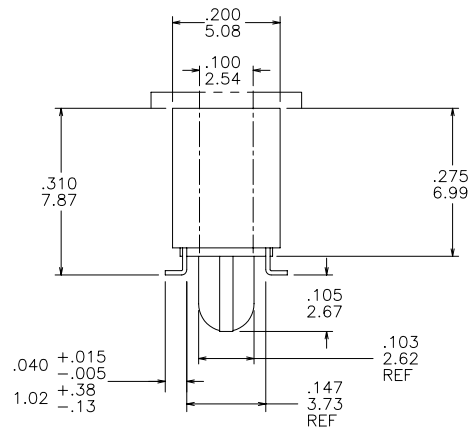
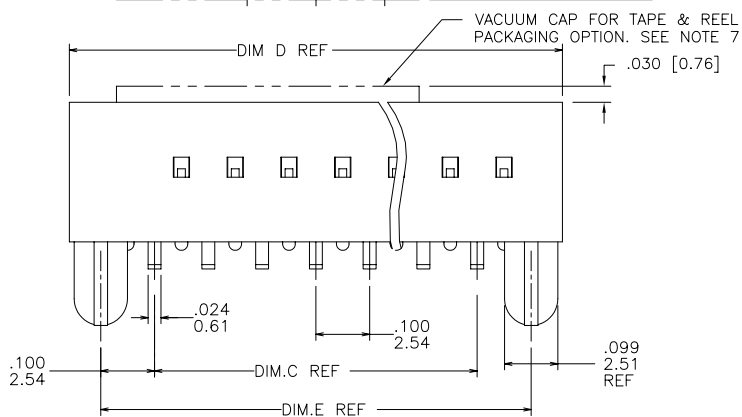
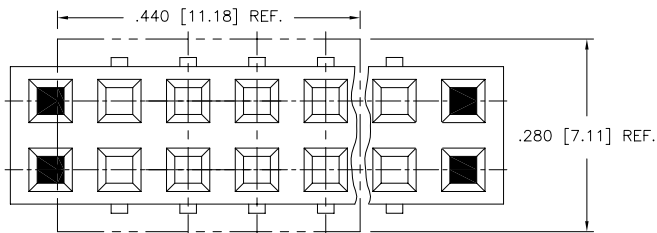


PRODUCT NO.

SEE TABLE

69154 - XXX LF

- LEAD FREE OPTION
- PACKAGING OPTION NOTE 10, OMIT IF NOT REQUIRED.
- NO. OF POSITIONS PER ROW
- PLATING CODE
- BASE PART NUMBER



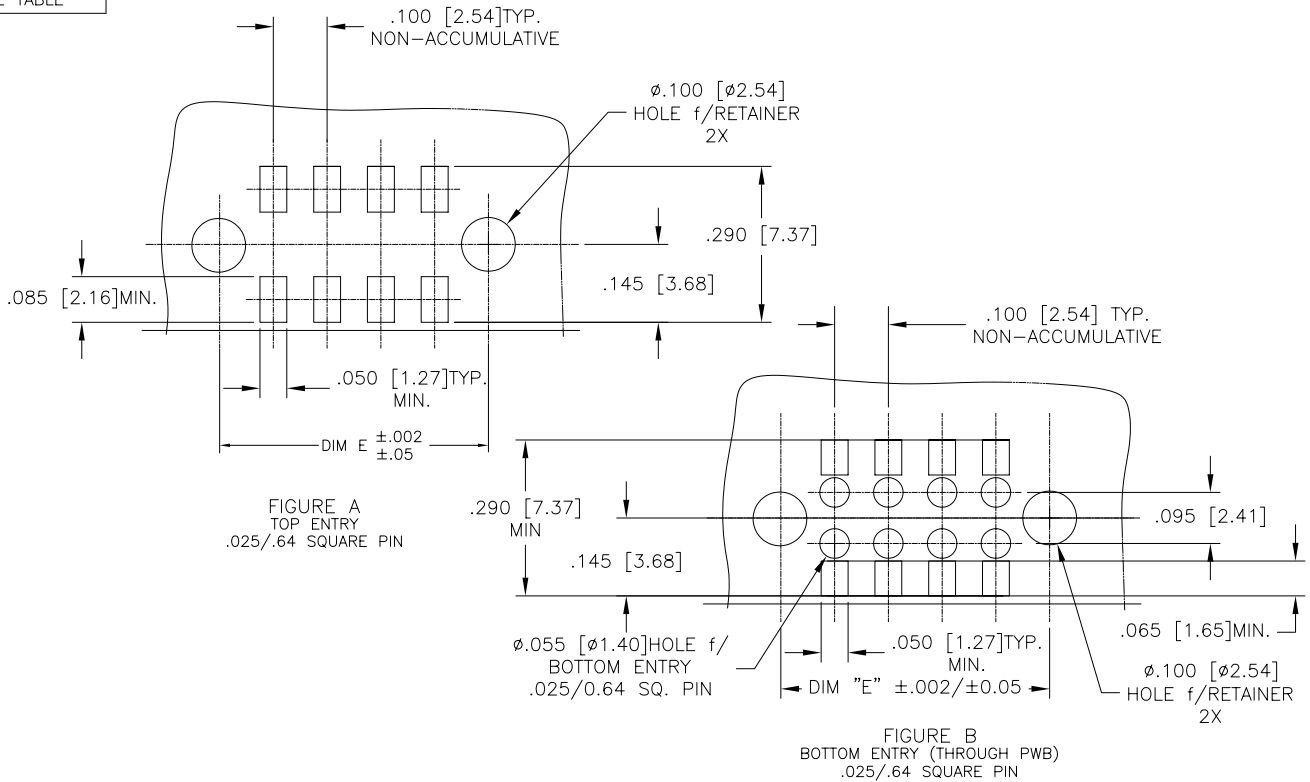
| | | | | |
|-------------------|------------|---------------------|------------|-------------------------|
| mat'l. code | surface | tolerance | projection | product family |
| NOTES 1,3,10 & 14 | ISO 1302 ✓ | ISO 406 ISO 1101 | | DUBOX |
| ltr | ecn | no | dr | date |
| M | V20155 | GIP | 02/04/02 | |
| N | V21654 | GIP | 10/15/08 | |
| P | V03-0310 | HTB | 05/02/03 | 0°±2" |
| R | V03-1246 | PJ | 12/04/03 | dr J. SHREINER 12/31/90 |
| S | V05-0463 | DPU | 06/27/08 | engr M. HAHN 12/31/90 |
| T | M07-0143 | ERE | 03/03/07 | chr M. HAHN 12/31/90 |
| U | M07-0203 | AGS | 05/02/07 | appd M. HAHN 12/31/90 |
| sheet index | revision | U | U | U |
| | sheet | 1 | 2 | 3 |
| | | 4 | 5 | 6 |



| | |
|---|--------------------------------|
| tolerance unless otherwise specified | product family |
| linear .XXx-01/Xx-3 XXXX-0.005/XXXX.13 XXXX-0020/XXXX-051 | DUBOX |
| angles | title |
| scale 1:1 | SMT DOUBLE ROW VCC ASSEMBLY |
| | dwg no |
| | 69154 |
| | sheet 1 of 6 size |
| | A3 |
| | type Product Customer Drawing |

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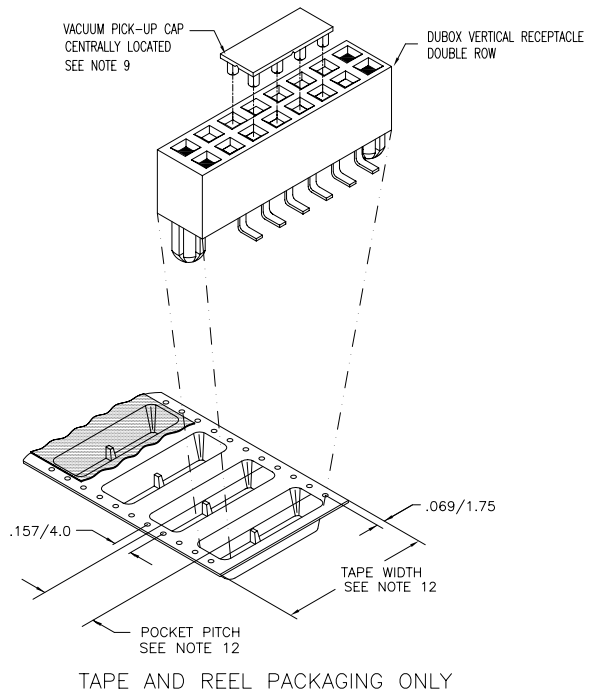
PRODUCT NUMBER
SEE TABLE



| | | | | | | | | | |
|-------------|--|----------------|--|--------------|--|-------------------|--|--------------------------------|--|
| mat'l. code | | surface | | tolerance | | projection | | product family | |
| ISO 1302 | | ISO 406 | | ISO 1101 | | ISO 1101 | | DUBOX | |
| itr | | ecn no | | dr | | date | | title | |
| U | | | | | | | | SMT DOUBLE ROW VCC ASSEMBLY | |
| | | angles | | linear | | INCH/MM | | scale 1:1 | |
| | | 0°±2' | | XXXX.01/XX.3 | | XXXX.0005/XXXX.15 | | sheet 2 of 6 size | |
| | | dr | | J. SHREINER | | 12/31/90 | | 69154 | |
| | | enrg | | M. HAHN | | 12/31/90 | | A3 | |
| | | chr | | M. HAHN | | 12/31/90 | | type Product Customer Drawing | |
| | | appd | | M. HAHN | | 12/31/90 | | | |
| sheet index | | revision sheet | | | | | | | |

PDM: Rev:U STATUS:Released Printed: Dec 01, 2010

PRODUCT NO.
SEE TABLE



| | | | | | |
|-------------|----------------|---------------------------------------|-------------|------------|--------------------------------|
| mat'l. code | | surface | tolerance | projection | product family |
| ISO 1302 | | ISO 406 | ISO 1101 | | DUBOX |
| U | | tolerances unless otherwise specified | | INCH/MM | title |
| | | angles | linear | scale 1:1 | SMT DOUBLE ROW VCC ASSEMBLY |
| | | dr | J. SHREINER | | dwg no |
| | | enr | M. HAHN | | 69154 |
| | | chr | M. HAHN | | sheet 3 of 6 size |
| | | app | M. HAHN | | A3 |
| sheet index | revision sheet | | | | type |
| | | | | | Product Customer Drawing |

PDM: Rev:U STATUS:Released Printed: Dec 01, 2010

| PRODUCT NO NOTE 13 | PLATING CONTACT AREA | PLATING SOLDER TAIL | MATERIAL REF | |
|-----------------------|--|------------------------------|--------------|----------|
| 69154-2XX | 15u"/.38u Au MIN OVER 50u"/1.27u Ni MIN SEE NOTE 16 | 100u"/160u SN 2.54u/4.06u | NOTE 3 & 4 | |
| 69154-3XX | 30u"/.76u Au MIN OVER 50u"/1.27u Ni MIN SEE NOTE 16 | 100u"/160u SN 2.54u/4.06u | NOTE 3 & 4 | |
| 69154-6XX | 30u"/.76u Au MIN OVER 50u"/1.27u Ni MIN SEE NOTE 16 | 100u"/160u SN 2.54u/4.06u | NOTE 3 & 4 | |
| 69154-8XX | 30u"/.76u Au MIN OVER 50u"/1.27u Ni MIN | 100u"/160u SN 2.54u/4.06u | NOTE 3 & 4 | OBSOLETE |

- NOTES:
- ① MATERIAL TERMINAL: PHOSPHOR BRONZE,
 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 ±.020/5.33 ±.51.
 - ③ MATERIAL HOUSING: P.P.S. FILLED,COLOR BLACK
FLAME RETARDANT PER UL 94V-0.
COMPATIBLE WITH INFRA-RED SOLDERING.
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 TERMINALS.
 5. FCI, FCI FINAL PART NUMBER AND DATE CODE TO BE MARKED ON TUBE LABEL.
 6. STANDARD PACKAGING PER BUS-14-097.
 7. TAPE AND REEL PACKAGING PER GES-14-334.
 8. CARRIER TAPE WIDTH 24 MIN. & BELOW TO HAVE PILOT HOLES ON ONE SIDE OF TAPE ONLY. SIZES ABOVE 24mm TO HAVE PILOT HOLES ON BOTH SIDES OF TAPE.
 - ⑨ VACUUM CAP MATERIAL FOR TAPE & REEL PACKAGING:
L.C.P., FLAME RETARDANT PER UL 94V-0.
COLOR: BLACK
 - ⑩ ADD SUFFIX "P" TO PART DASH NUMBER FOR TAPE AND REEL PACKAGING.
EXAMPLE: 69154-XXXXP
 11. MAXIMUM LENGTH OF CONNECTOR FOR TAPE AND REEL PACKAGING IS 2.50 INCHES LONG/63.5 MM.
 - ⑫ TAPE & REEL PACKAGING 72mm WIDE TAPE WITH 16mm POCKET PITCH.
 - ⑬ ADD LF SUFFIX AT THE END OF PART NUMBER FOR LEAD FREE OPTION.
 14. THESE PRODUCTS MEETS EUROPEAN UNION DIRECTIVES AND OTHER COUNTRY REGULATION AS DESCRIBED IN GS-22-008.
 - ⑮ "THIS PRODUCT HAS 100% TIN PLATING IN THE INTERFACE AND HAS NOT BEEN TESTED FOR WHISKER GROWTH IN ALL INTERCONNECT ENVIRONMENTS."
 - ⑯ PLATING OPTIONS:
MAY BE EITHER GOLD OR GXT PLATED AT MANUFACTURER'S OPTION.

| | | | | | |
|-------------|-----------|--------------------|---------------|--------------------------------|----------------|
| mat'l. code | | surface | tolerance | projection | product family |
| ISO 1302 | | ISO 406 | ISO 1101 | | DUBOX |
| ltr | ecn no dr | date | | title | |
| U | | | | SMT DOUBLE ROW VCC ASSEMBLY | |
| angles | | linear | .XX±.01/.X±.3 | INCH/MM | |
| 0'±2' | | .XXX±.005/.XXX±.13 | | scale 1:1 | |
| dr | | J. SHREINER | 12/31/90 | FCJ | |
| enrg | | M. HAHN | 12/31/90 | dwg no sheet4 of 6 size | |
| chr | | M. HAHN | 12/31/90 | 69154 A3 | |
| appd | | M. HAHN | 12/31/90 | type Product Customer Drawing | |
| sheet | revision | | | | |
| index | sheet | | | | |

| PRODUCT NO | NO OF POS | DIM C | DIM D | DIM E | TAPE & REEL PACKAGING | LF OPTION |
|------------|-----------|-------------|-------------|-------------|-----------------------|-----------|
| 69154-Y02 | 2 X 2 | .100/2.54 | .417/10.59 | .300/7.62 | NO | |
| 69154-Y03 | 2 X 3 | .200/5.08 | .517/13.13 | .400/10.16 | NO | |
| 69154-Y04 | 2 X 4 | .300/7.62 | .617/15.67 | .500/12.70 | NO | |
| 69154-Y05 | 2 X 5 | .400/10.16 | .717/18.21 | .600/15.24 | NO | |
| 69154-Y06 | 2 X 6 | .500/12.70 | .817/20.75 | .700/17.78 | NO | |
| 69154-Y07 | 2 X 7 | .600/15.24 | .917/23.29 | .800/20.32 | NO | |
| 69154-Y08 | 2 X 8 | .700/17.78 | 1.017/25.83 | .900/22.86 | NO | |
| 69154-Y09 | 2 X 9 | .800/20.32 | 1.117/28.37 | 1.000/25.40 | NO | |
| 69154-Y10 | 2 X 10 | .900/22.86 | 1.217/30.91 | 1.100/27.94 | NO | |
| 69154-Y11 | 2 X 11 | 1.000/25.40 | 1.317/33.45 | 1.200/30.48 | NO | |
| 69154-Y12 | 2 X 12 | 1.100/27.94 | 1.417/35.99 | 1.300/33.02 | NO | |
| 69154-Y13 | 2 X 13 | 1.200/30.48 | 1.517/38.53 | 1.400/35.56 | NO | |
| 69154-Y14 | 2 X 14 | 1.300/33.02 | 1.617/41.07 | 1.500/38.10 | NO | |
| 69154-Y15 | 2 X 15 | 1.400/35.56 | 1.717/43.61 | 1.600/40.64 | NO | |
| 69154-Y16 | 2 X 16 | 1.500/38.10 | 1.817/46.15 | 1.700/43.18 | NO | |
| 69154-Y17 | 2 X 17 | 1.600/40.64 | 1.917/48.69 | 1.800/45.72 | NO | |
| 69154-Y18 | 2 X 18 | 1.700/43.18 | 2.017/51.23 | 1.900/48.26 | NO | |
| 69154-Y19 | 2 X 19 | 1.800/45.72 | 2.117/53.77 | 2.000/50.80 | NO | |
| 69154-Y20 | 2 X 20 | 1.900/48.26 | 2.217/56.31 | 2.100/53.34 | NO | |
| 69154-Y21 | 2 X 21 | 2.000/50.80 | 2.317/58.85 | 2.200/55.08 | NO | |
| 69154-Y22 | 2 X 22 | 2.100/53.34 | 2.417/61.39 | 2.300/58.42 | NO | |
| 69154-Y23 | 2 X 23 | 2.200/55.88 | 2.517/63.93 | 2.400/60.96 | NO | |
| 69154-Y24 | 2 X 24 | 2.300/58.42 | 2.617/66.47 | 2.500/63.50 | NO | |
| 69154-Y25 | 2 X 25 | 2.400/60.96 | 2.717/69.01 | 2.000/66.04 | NO | |

NOTE 13

| | | | | |
|---------------------------------------|---|----------------------------------|---|-------------------------|
| mat'l. code | surface ISO 1302 <input checked="" type="checkbox"/> | tolerance ISO 406 ISO 1101 | projection | product family DUBOX |
| ltr | ecn | no | dr | date |
| U | | | | |
| tolerances unless otherwise specified | | angles 0°±2' | linear XXX.01/XX.3 XXXX.0/005/XXX.15 XXXX.005/XXXX.051 | INCH/MM |
| scale 1:1 | | | title SMT DOUBLE ROW VCC ASSEMBLY | |
| dr | J. SHREINER | 12/31/90 | dwg no 69154 | |
| enrg | M. HAHN | 12/31/90 | sheet 5 of 6 size A3 | |
| chr | M. HAHN | 12/31/90 | type Product Customer Drawing | |
| appd | M. HAHN | 12/31/90 | | |
| sheet index | revision sheet | | | |

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| PRODUCT NO | NO OF POS | DIM C | DIM D | DIM E | TAPE & REEL PACKAGING | LF OPTION |
|------------|-----------|--------------|--------------|--------------|-----------------------|-----------|
| 69154-Y26 | 2 X 26 | 2.500/63.50 | 2.817/71.55 | 2.700/68.58 | NO | |
| 69154-Y27 | 2 X 27 | 2.600/66.04 | 2.917/74.09 | 2.800/71.12 | NO | |
| 69154-Y28 | 2 X 28 | 2.700/68.58 | 3.017/76.63 | 2.900/73.66 | NO | |
| 69154-Y29 | 2 X 29 | 2.800/71.12 | 3.117/79.17 | 3.000/76.20 | NO | |
| 69154-Y30 | 2 X 30 | 2.900/73.66 | 3.217/81.71 | 3.100/78.74 | NO | |
| 69154-Y31 | 2 X 31 | 3.000/76.20 | 3.317/84.25 | 3.200/81.28 | NO | |
| 69154-Y32 | 2 X 32 | 3.100/78.74 | 3.417/86.79 | 3.300/83.32 | NO | |
| 69154-Y33 | 2 X 33 | 3.200/81.28 | 3.517/89.33 | 3.400/86.36 | NO | |
| 69154-Y34 | 2 X 34 | 3.300/83.32 | 3.617/91.87 | 3.500/88.90 | NO | |
| 69154-Y35 | 2 X 35 | 3.400/86.36 | 3.717/94.41 | 3.600/91.44 | NO | |
| 69154-Y36 | 2 X 36 | 3.500/88.90 | 3.817/96.95 | 3.700/93.98 | NO | |
| 69154-Y37 | 2 X 37 | 3.600/91.44 | 3.917/99.49 | 3.800/96.52 | NO | |
| 69154-Y38 | 2 X 38 | 3.700/93.98 | 4.017/102.03 | 3.900/99.06 | NO | |
| 69154-Y39 | 2 X 39 | 3.800/96.52 | 4.117/104.57 | 4.000/101.60 | NO | |
| 69154-Y40 | 2 X 40 | 3.900/99.06 | 4.217/107.11 | 4.100/104.14 | NO | |
| 69154-Y41 | 2 X 41 | 4.000/101.60 | 4.317/109.65 | 4.200/106.68 | NO | |
| 69154-Y42 | 2 X 42 | 4.100/104.14 | 4.417/112.19 | 4.300/109.22 | NO | |
| 69154-Y43 | 2 X 43 | 4.200/106.68 | 4.517/114.73 | 4.400/111.76 | NO | |
| 69154-Y44 | 2 X 44 | 4.300/109.22 | 4.617/117.27 | 4.500/114.30 | NO | |
| 69154-Y45 | 2 X 45 | 4.400/111.76 | 4.717/119.81 | 4.600/116.84 | NO | |
| 69154-Y46 | 2 X 46 | 4.500/114.30 | 4.817/122.35 | 4.700/119.38 | NO | |
| 69154-Y47 | 2 X 47 | 4.600/116.84 | 4.917/124.89 | 4.800/121.92 | NO | |
| 69154-Y48 | 2 X 48 | 4.700/119.38 | 5.017/127.43 | 4.900/124.46 | NO | |
| 69154-Y49 | 2 X 49 | 4.800/121.92 | 5.117/129.97 | 5.000/127.00 | NO | |
| 69154-Y50 | 2 X 50 | 4.900/124.46 | 5.217/132.51 | 5.100/129.54 | NO | |
| 69154-Y16P | 2 X 16 | 1.500/38.10 | 1.817/46.15 | 1.700/43.18 | YES - NOTE 10 & 12 | |

NOTE 13

| | | | | |
|---------------------------------------|---|----------------------------------|----------------|---|
| mat'l. code | surface ISO 1302 <input checked="" type="checkbox"/> | tolerance ISO 406 ISO 1101 | projection | product family DUBOX |
| ltr | ecn | no | dr | date |
| U | | | | |
| tolerances unless otherwise specified | | angles linear | INCH/MM | title SMT DOUBLE ROW VCC ASSEMBLY |
| | | 0'±2' | scale 1:1 | dwg no 69154 |
| | | dr J. SHREINER 12/31/90 | | sheet 6 of 6 size A3 |
| | | enrg M. HAHN 12/31/90 | | type Product Customer Drawing |
| | | chr M. HAHN 12/31/90 | | |
| | | appd M. HAHN 12/31/90 | | |
| sheet index | revision sheet | | | |

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