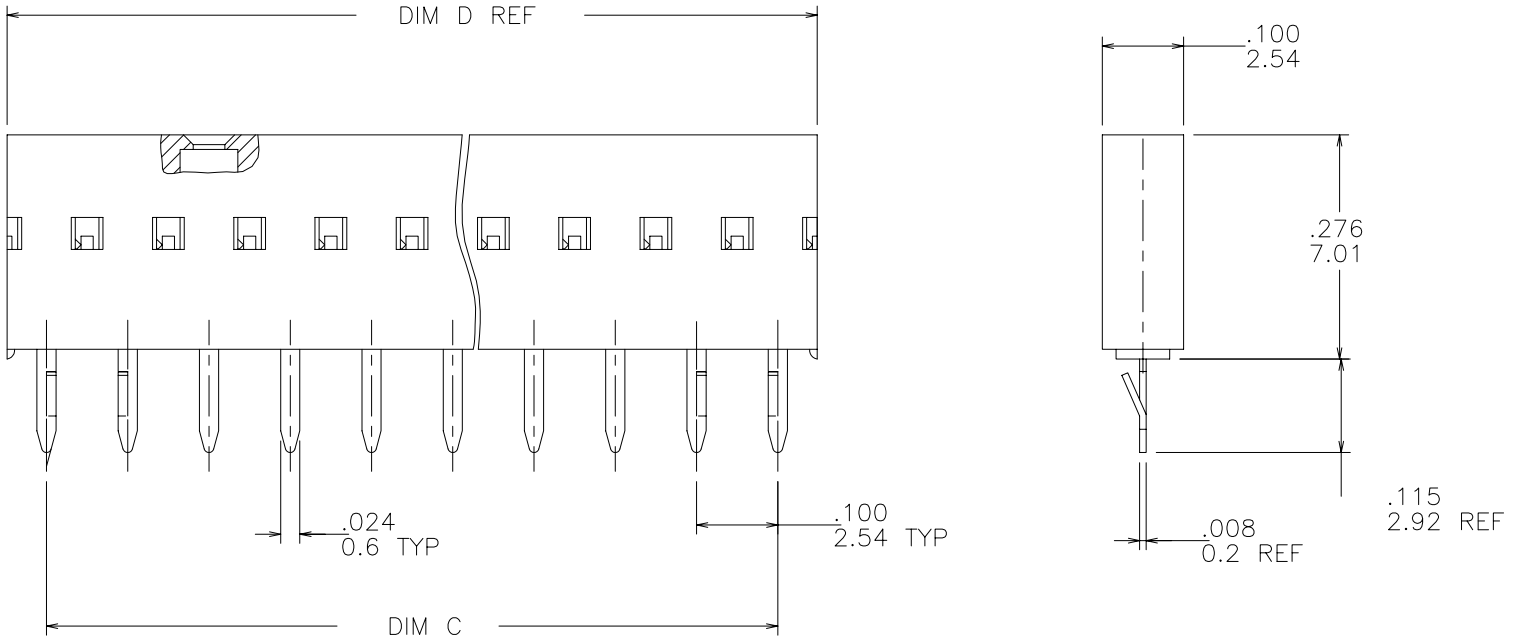
PRODUCT NO.
SEE TABLE

86653 – XXX __ LF

- LF — LEAD FREE OPTION
- __ — PACKAGING OPTIONS OMIT IF NOT REQUIRED.
- XXX — NO. OF POSITIONS PER ROW
- XX — PLATING CODE
- 86653 — BASE PART NUMBER



mat'l. code	surface ISO 1302	tolerance ISO 406 ISO 1101	projection	product family
–				DUBOX

ltr	ecn no	dr	date
C	C23302	MRC	10/26/92
D	V50511	MRC	6/30/95
E	V51431	MDF	1/19/96
F	V03-0310	HTB	5/6/03
G	V05-0463	DPU	06/28/05
H	M06-0237	MN	06/19/06
J	M06-0433	AGS	10/31/06

tolerances unless otherwise specified: angles 0°±2°; linear .XX ±.01/.3, .XXX ±.005/.13, .XXXX ±.0020/.051

dr	J. SHREINER	12/27/90
engr	M. HAHN	12/27/90
chr	M. HAHN	12/27/90
appd	M. HAHN	12/27/90

INCH/MM

scale 8:1

title: DUBOX SINGLE ROW VCC ASS'Y. W/RET. LEGS

dwg no 86653 | sheet 1 of 5 | size A3

type Product Customer Drawing

sheet index	1	2	3	4	5
revision	J	J	J	J	J

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form: A3

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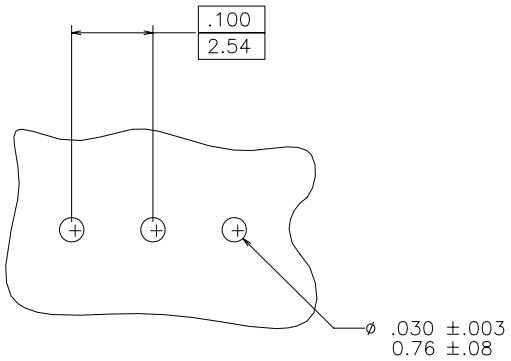

FIGURE A

NOTES:

1. MATERIAL HOUSING:THERMOPLASTIC POLYESTER
   FILLED COLOR BLACK, FLAME RETARDENT PER
   UL-94-VO.
   PARTS WILL WITHSTAND EXPOSURES TO 260°C
   PEAK TEMPERATURE FOR 20 SECONDS IN WAVE SOLDER,
   INFRA-RED REFLOW OR VAPOR PHASE REFLOW SOLDER PROCESS.
2. MATERIAL TERMINAL: PHOSPHOR BRONZE,
   EXTRA HARD
3. RECOMMENDED APPLICATION DATA:
   A. RECOMMENDED HOLE PATTERN IS SHOWN
      IN FIGURE A.
   B. ALL MATING PINS TO BE .025/.64.
      SQUARE ON TRUE CENTER OF GIVEN TERMINAL
      SPACINGS WITHIN .015/.38 DIA.
   C. SUGGESTED MATING PIN LENGTH
      .210±.020/5.33±.51.
   D. TERMINALS CAN ONLY BE USED FOR PC BOARD
      WITH NON PLATED THROUGH HOLES.
   E. RECCOMENDED PC BOARD THICKNESS:
      .062/1.58.
4. MATERIAL HOUSING: P.P.S.
   FILLED COLOR BLACK, FLAME RETARDENT PER
   UL-94-VO.
   PARTS WILL WITHSTAND EXPOSURES TO 260°C
   PEAK TEMPERATURE FOR 20 SECONDS IN WAVE SOLDER,
   INFRA-RED REFLOW OR VAPOR PHASE REFLOW SOLDER PROCESS.

(5) PREPLATED, STAMPED TERMINALS.

6. "FCI", FCI FINAL PART NUMBER AND DATE CODE
   TO BE MARKED ON TUBE LABEL.

(7.) ADD LF SUFFIX AT THE END OF PART NUMBER FOR LEAD FREE OPTION.

8. THESE PRODUCTS MEETS EUROPEAN UNION DIRECTIVES AND OTHER COUNTRY
   REGULATION AS DESCRIBED IN GS-22-008.

9. "THIS PRODUCT HAS 100% TIN PLATING IN THE
   INTERFACE AND HAS NOT BEEN TESTED FOR WHISKER
   GROWTH IN ALL INTERCONNECT ENVOIRNMENTS".

| | | |

PRODUCT NO NOTE 7	PLATING CONTACT AREA	PLATING SOLDER TAIL	MATERIAL DATA
86653-2XXLF	15u"/.38u Au MIN OVER 50u"/1.27u Ni MIN	100u"/160u" SN 2.54u/4.06u	----
86653-3XXLF	30u"/.76u Au MIN OVER 50u"/1.27u Ni MIN	100u"/160u" SN 2.54u/4.06u	----
86653-4XXLF	100u"/160u" SN 2.54u/4.06u	100u"/160u" SN 2.54u/4.06u	----
86653-6XXLF	30u"/.76u Au MIN OVER 50u"/1.27u Ni MIN	100u"/160u" SN 2.54u/4.06u	NOTE 5

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mat'l. code –	surface ISO 1302	tolerance ISO 406 ISO 1101	projection
ltr ecn no dr date	tolerances unless otherwise specified		
J	angles 0°±2°	linear .XX ±.01/.3 .XXX ±.005/.13 .XXXX ±.0020/.051	INCH/MM
			scale 8:1
	dr J. SHREINER 12/27/90		
	engr M. HAHN 12/27/90		
	chr M. HAHN 12/27/90		
	appd M. HAHN 12/27/90		
sheet index / revision sheet			

product family	DUBOX
title	DUBOX SINGLE ROW VCC ASS'Y. W/RET. LEGS
dwg no	86653
sheet	3 of 5
size	A3
type	Product Customer Drawing

form: A3

PDM: Rev:J STATUS:Released Printed: Dec 12, 2008

PRODUCT NUMBER	NO. OF POSITION	C DIM	D DIM	HOUSING MATERIAL	LF OPTION
86653-Y02	1 X 2	.100/2.54	.217/5.51	NOTE 4	
-Y03	1 X 3	.200/5.08	.317/8.05		
-Y04	1 X 4	.300/7.62	.417/10.59		
-Y05	1 X 5	.400/10.16	.517/13.13		
-Y06	1 X 6	.500/12.70	.617/15.67		
-Y07	1 X 7	.600/15.24	.717/18.21		
-Y08	1 X 8	.700/17.78	.817/20.75		
-Y09	1 X 9	.800/20.32	.917/23.29		
-Y10	1 X 10	.900/22.86	1.017/25.83		
-Y11	1 X 11	1.000/25.40	1.117/28.37		
-Y12	1 X 12	1.100/27.94	1.217/30.91		
-Y13	1 X 13	1.200/30.48	1.317/33.45		NOTE 7
-Y14	1 X 14	1.300/33.02	1.417/35.99		
-Y15	1 X 15	1.400/35.56	1.517/38.53		
-Y16	1 X 16	1.500/38.10	1.617/41.07		
-Y17	1 X 17	1.600/40.64	1.717/43.61		
-Y18	1 X 18	1.700/43.18	1.817/46.15		
-Y19	1 X 19	1.800/45.72	1.917/48.69		
-Y20	1 X 20	1.900/48.26	2.017/51.23		
-Y21	1 X 21	2.000/50.80	2.117/53.77		
-Y22	1 X 22	2.100/53.34	2.217/56.31		
-Y23	1 X 23	2.200/55.88	2.317/58.85		
-Y24	1 X 24	2.300/58.42	2.417/61.39		
86653-Y25	1 X 25	2.400/60.96	2.517/63.93	NOTE 4	

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mat'l. code	surface	tolerance	projection	product family
–	ISO 1302	ISO 406 ISO 1101		DUBOX

ltr	ecn no	dr	date
J			

tolerances unless otherwise specified

angles 0°±2° | linear .XX ±.01/.3, .XXX ±.005/.13, .XXXX ±.0020/.051

INCH/MM

scale 8:1

dr	J. SHREINER	12/27/90
engr	M. HAHN	12/27/90
chr	M. HAHN	12/27/90
appd	M. HAHN	12/27/90

title: DUBOX SINGLE ROW VCC ASS'Y. W/RET. LEGS

dwg no 86653 | sheet 4 of 5 | size A3

type Product Customer Drawing

sheet index | revision sheet

form: A3

PDM: Rev:J STATUS:Released Printed: Dec 12, 2008

PRODUCT NUMBER	NO. OF POSITION	C DIM	D DIM	HOUSING MATERIAL	LF OPTION
86653–Y26	1 X 26	2.500/63.50	2.617/66.47	NOTE 1	NOTE 7
–Y27	1 X 27	2.600/66.04	2.717/69.01		
–Y28	1 X 28	2.700/68.58	2.817/71.55		
–Y29	1 X 29	2.800/71.12	2.917/74.09		
–Y30	1 X 30	2.900/73.66	3.017/76.63		
–Y31	1 X 31	3.000/76.20	3.117/79.17		
–Y32	1 X 32	3.100/78.74	3.217/81.71		
–Y33	1 X 33	3.200/81.28	3.317/84.25		
–Y34	1 X 34	3.300/83.82	3.417/86.79		
–Y35	1 X 35	3.400/86.36	3.517/89.33		
–Y36	1 X 36	3.500/88.90	3.617/91.87		
–Y37	1 X 37	3.600/91.44	3.717/94.41		
–Y38	1 X 38	3.700/93.98	3.817/96.95		
–Y39	1 X 39	3.800/96.52	3.917/99.49		
–Y40	1 X 40	3.900/99.06	4.017/102.03		
–Y41	1 X 41	4.000/101.60	4.117/104.57		
–Y42	1 X 42	4.100/104.14	4.217/107.11		
–Y43	1 X 43	4.200/106.68	4.317/109.65		
–Y44	1 X 44	4.300/109.22	4.417/112.19		
–Y45	1 X 45	4.400/111.76	4.517/114.73		
–Y46	1 X 46	4.500/114.30	4.617/117.27		
–Y47	1 X 47	4.600/116.84	4.717/119.81		
–Y48	1 X 48	4.700/119.38	4.817/122.35		
–Y49	1 X 49	4.800/121.92	4.917/124.89		
86653–Y50	1 X 50	4.900/124.46	5.017/127.43	NOTE 1	

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mat'l. code	–	surface ISO 1302	tolerance ISO 406 ISO 1101	projection	product family	DUBOX	
ltr	ecn no	dr	date	tolerances unless otherwise specified		title	DUBOX SINGLE ROW VCC ASS'Y. W/RET. LEGS
H				angles 0°±2°	linear .xx ±.01/.3 .xxx ±.005/.13 .xxxx ±.0020/.051	INCH/MM scale 8:1	
				dr	J. SHREINER	12/27/90	dwg no 86653 sheet 5 of 5 size A3
				engr	M. HAHN	12/27/90	
				chr	M. HAHN	12/27/90	type Product Customer Drawing
				appd	M. HAHN	12/27/90	
sheet index	revision sheet						

form: A3

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