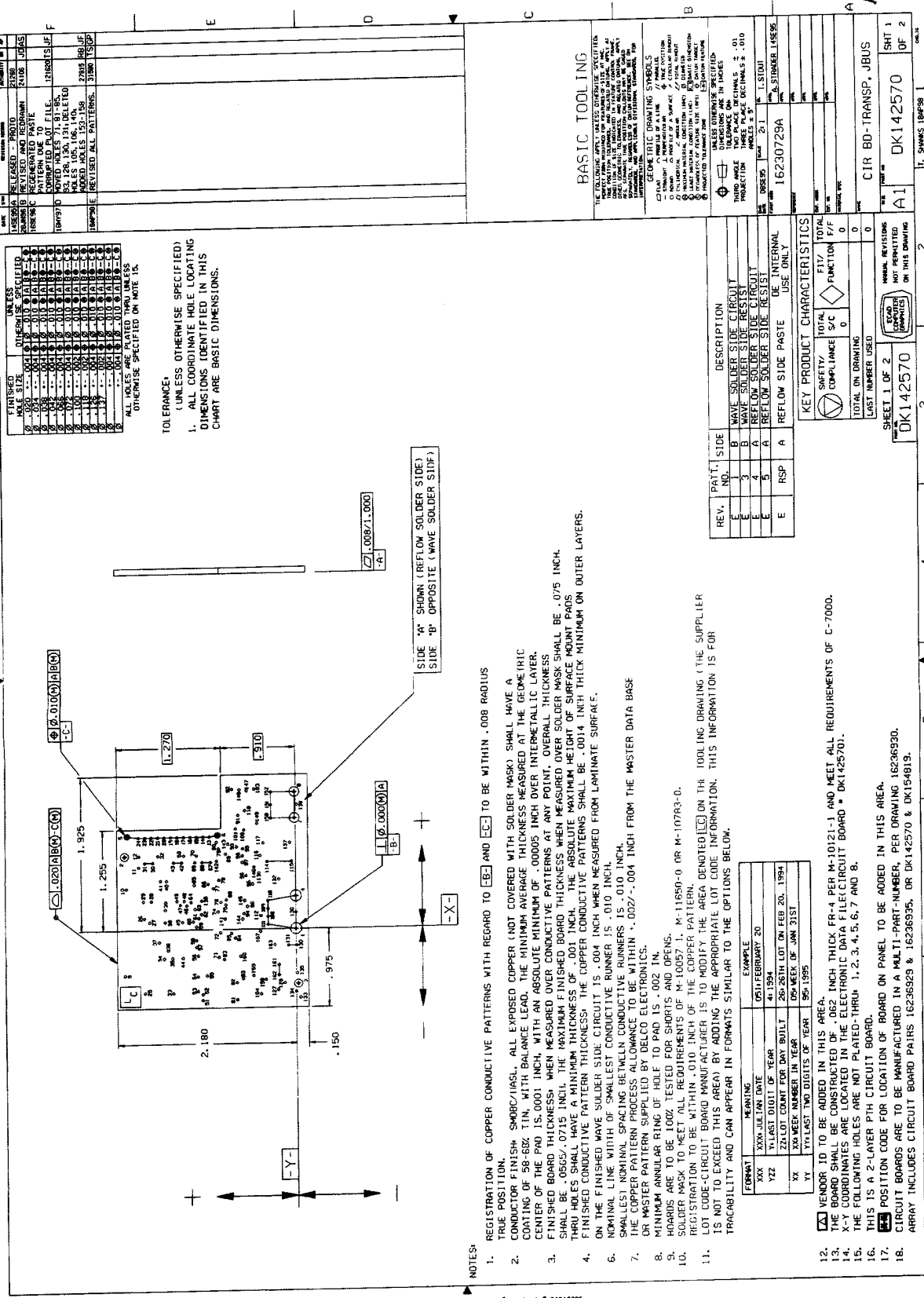
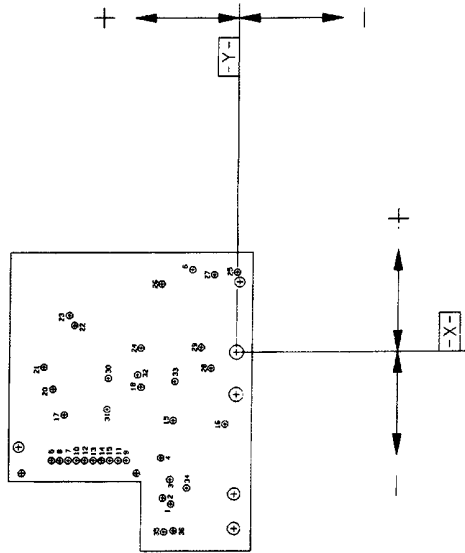






WAVE TEST POINTS

THE FOLLOWING APPLY UNLESS OTHERWISE SPECIFIED.
CORRECT PUMP REQUIRED FOR FEATURES OF SIZE AT MC.
TOLERANCE, AND RELATED DIMENSIONS. APPLY AT
DIMENSION OF SIZE INDICATED IN FEATURE CONTROL FRAME.
OTHER GEOMETRIC TOLERANCES, AND RELATED DIMENSIONS, APPLY
ONLY TO THE FEATURE. DIMENSIONAL TOLERANCES MAY BE OBTAINED
SEPARATELY, REGARDLESS OF DIMENSIONAL TOLERANCES. SEE ON
DIMENSIONS, AND APPLICABLE DIMENSIONAL STANDARDS FOR
DIMENSIONS, AND APPLICABLE DIMENSIONAL STANDARDS FOR

GEOMETRIC DRAWING: SYMBIOSIS

// FLAT
 // STRAIGHT
 // SMOOTH
 // CYLINDRICAL
 // MULTIMATERIAL CONDITION (HPC)
 // LEAST MATERIAL CONDITION (LMC)
 // RECARBOLOSES OF FEATURE SIZE (PFS)
 // PROPOSED TOLERANCE ZONE

// PARALLEL
 // TRUE POSITION
 // CIRCULAR RUN
 // TOTAL SURFACE
 // DIAMETER
 // BASIC DIMENSION
 // DATUM FEATURE
 // DATUM EDGE

IN-ESS. INTERPRETISE SPECIFICATION

5/16" IN 3/4" UNF 24-26
DIMENSIONS ARE IN INCHES

REQUIRED ANGLE	TOLERANCE UNITS	TWO PLACE DECIMALS	±
90°	0.0001	0.00	0.00
45°	0.0001	0.00	0.00
30°	0.0001	0.00	0.00
15°	0.0001	0.00	0.00
7.5°	0.0001	0.00	0.00
3.75°	0.0001	0.00	0.00
1.875°	0.0001	0.00	0.00
0.9375°	0.0001	0.00	0.00
0.46875°	0.0001	0.00	0.00
0.234375°	0.0001	0.00	0.00
0.1171875°	0.0001	0.00	0.00
0.05859375°	0.0001	0.00	0.00
0.029296875°	0.0001	0.00	0.00
0.0146484375°	0.0001	0.00	0.00
0.00732421875°	0.0001	0.00	0.00
0.003662109375°	0.0001	0.00	0.00
0.0018310546875°	0.0001	0.00	0.00
0.00091552734375°	0.0001	0.00	0.00
0.000457763671875°	0.0001	0.00	0.00
0.0002288818359375°	0.0001	0.00	0.00
0.00011444091796875°	0.0001	0.00	0.00
0.000057220458984375°	0.0001	0.00	0.00
0.0000286102294921875°	0.0001	0.00	0.00
0.00001430511474609375°	0.0001	0.00	0.00
0.000007152557373046875°	0.0001	0.00	0.00
0.0000035762786865234375°	0.0001	0.00	0.00
0.00000178813934326171875°	0.0001	0.00	0.00
0.000000894069671630859375°	0.0001	0.00	0.00
0.0000004470348358154296875°	0.0001	0.00	0.00
0.00000022351741790771484375°	0.0001	0.00	0.00
0.000000111758708953857421875°	0.0001	0.00	0.00
0.0000000558793544769287109375°	0.0001	0.00	0.00
0.00000002793967723846435546875°	0.0001	0.00	0.00
0.000000013969838619232177734375°	0.0001	0.00	0.00
0.0000000069849193096160888671875°	0.0001	0.00	0.00
0.00000000349245965480804443359375°	0.0001	0.00	0.00
0.000000001746229827404022216796875°	0.0001	0.00	0.00
0.0000000008731149137020111083984375°	0.0001	0.00	0.00
0.00000000043655745685100555419921875°	0.0001	0.00	0.00
0.000000000218278728425502777099609375°	0.0001	0.00	0.00
0.0000000001091393642127513885498046875°	0.0001	0.00	0.00
0.00000000005456968210637569427490234375°	0.0001	0.00	0.00
0.000000000027284841053187847137451171875°	0.0001	0.00	0.00
0.0000000000136424205265939235687255859375°	0.0001	0.00	0.00
0.00000000000682121026329696178436279296875°	0.0001	0.00	0.00
0.000000000003410605131648480892181396484375°	0.0001	0.00	0.00
0.0000000000017053025658242404460906982421875°	0.0001	0.00	0.00
0.00000000000085265128291212022304534912209375°	0.0001	0.00	0.00
0.000000000000426325641456060111522674561046875°	0.0001	0.00	0.00
0.0000000000002131628207280300557613372805234375°	0.0001	0.00	0.00
0.00000000000010658141036401502788066864026171875°	0.0001	0.00	0.00
0.000000000000053290705182007513940334320130859375°	0.0001	0.00	0.00
0.0000000000000266453525910037569701671600654296875°	0.0001	0.00	0.00
0.00000000000001332267629550187848508358003271484375°	0.0001	0.00	0.00
0.000000000000006661338147750939242541790016357421875°	0.0001	0.00	0.00
0.0000000000000033306690738754696212708950081787109375°	0.00		

THREE PLACE DECIMALS &
ANGLES $\pm 5^\circ$

005595	211	1. STOUT
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16230729A
A. STRADER

HC3 / MC301

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2004

C18 RO-TRANSP. 1B10

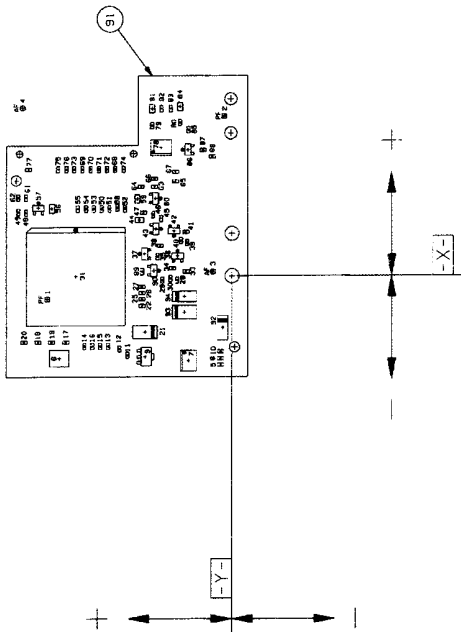
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7	SHAW'S 10000 4
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I do not know :)



NOTES:

1. SMC'S SHALL BE SECURED TO THE REFLOW SOLDER SIDE OF THE CIRCUIT BOARD USING SOLDER PASTE (1:3M 92 PER PROCESS SPECIFICATION).
2. DCL (01) 0, 90, 180 & 270 REFERS TO DEGREES ROTATION OF PIN #1, TRANSISTOR COLLECTOR, DIODE CATHODE, OR CAPACITOR (+) POSITIVE END. 0 EQUALS 3 O'CLOCK, 90 EQUALS 12 O'CLOCK, ETC. NON-POLARIZED COMPONENTS ARE SPECIFIED AS 0 OR 180 FOR HORIZONTAL AND 90 OR 270 FOR VERTICAL.
3. THIS ASSEMBLY IS ELECTROSTATIC DISCHARGE (ESD) SENSITIVE.

ETCL-JBUS

THE FOLLOWING ARE THE REVISIONS TO THE ORIGINAL DRAWING. THE REVISIONS ARE INDICATED BY A CIRCLED NUMBER IN THE RIGHT MARGIN. THE REVISIONS ARE INDICATED BY A CIRCLED NUMBER IN THE RIGHT MARGIN. THE REVISIONS ARE INDICATED BY A CIRCLED NUMBER IN THE RIGHT MARGIN.

GEOMETRIC DRAWING SYMBOLS
 1. DIMENSION LINE
 2. DIMENSION VALUE
 3. DIMENSION LINE
 4. DIMENSION VALUE
 5. DIMENSION LINE
 6. DIMENSION VALUE
 7. DIMENSION LINE
 8. DIMENSION VALUE
 9. DIMENSION LINE
 10. DIMENSION VALUE

METRIC VALUES (UNLESS OTHERWISE SPECIFIED)
 DIMENSIONS ARE IN MILLIMETERS
 DECIMALS ARE 0.1
 FRACTIONS ARE 1/16
 ANGLES ARE 1°

KEY PRODUCT CHARACTERISTICS			
SAFETY	COMPLIANCE	ENVIRONMENTAL	FUNCTION
0	0	0	0
TOTAL ON DRAWING			
LAST NUMBER USED			

SHEET 1 OF 2

DK142571

REVISIONS NOT PERMITTED ON THIS DRAWING

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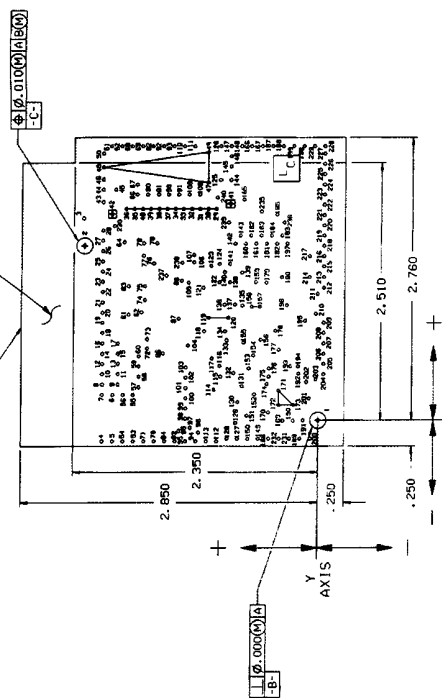
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CHIP NO.	DEG NOT	REF DES	DIM	X	Y	PART NUMBER	DESCRIPTION
1	0	VFR1	-5.71	45.34	FIDUCIAL	VISION FIDUCIAL REF	
2	0	VFR2	38.13	1.57	FIDUCIAL	VISION FIDUCIAL REF	
3	0	VFR3	1.02	4.70	FIDUCIAL	VISION FIDUCIAL REF	
4	0	VFR4	-21.64	51.44	FIDUCIAL	VISION FIDUCIAL REF	
5	30	C21	41.15	2.73	10200.50	CAP-5A 0.1UF	
6	90	V1	-20.19	42.42	16219897	RESISTOR 20.0MΩ/5M	
7	90	V2	10.70	16200541	IC-ADJ HI-RES-5V		
8	90	V3	10.70	16200541	IC-ADJ HI-RES-5V		
9	90	V4	10.70	16200541	IC-ADJ HI-RES-5V		
10	90	V5	-18.84	21.28	1617269	RES-SM 2.7K, 0.5W	
11	0	R17	-15.43	25.65	1617269	RES-SM 2.7K, 0.5W	
12	180	R18	-17.27	27.03	1617269	RES-SM 1.0K, 0.5W	
13	180	C30	-17.27	30.48	1617269	CAP-5A 0.003, 100PF	
14	180	C31	-17.27	36.13	1617269	CAP-5A 0.003, 100PF	
15	180	C32	-17.27	42.38	1617269	CAP-5A 0.003, 100PF	
16	180	C33	-17.27	48.63	1617269	CAP-5A 0.003, 100PF	
17	180	C34	-16.26	40.77	1617269	CAP-5A 0.003, 100PF	
18	30	C24	16.26	47.83	1617269	CAP-5A 0.003, 100PF	
19	30	C25	16.26	44.32	1617269	CAP-5A 0.003, 100PF	
20	270	L3	-16.26	51.05	1617269	FERRITE 5A 0.003, 5.0T	
21	270	C22	-13.83	21.40	1617269	CAP-5A 0.003, 100PF	
22	90	L1	-17.27	30.48	1617269	FERRITE 5A 0.003, 5.0T	
23	90	L2	-17.27	36.13	1617269	FERRITE 5A 0.003, 5.0T	
24	90	L3	-17.27	42.38	1617269	FERRITE 5A 0.003, 5.0T	
25	90	L4	-17.27	48.63	1617269	FERRITE 5A 0.003, 5.0T	
26	90	L5	-17.27	54.88	1617269	FERRITE 5A 0.003, 5.0T	
27	90	L6	-17.27	61.13	1617269	FERRITE 5A 0.003, 5.0T	
28	90	L7	-17.27	67.38	1617269	FERRITE 5A 0.003, 5.0T	
29	90	L8	-17.27	73.63	1617269	FERRITE 5A 0.003, 5.0T	
30	90	L9	-17.27	79.88	1617269	FERRITE 5A 0.003, 5.0T	
31	90	L10	-17.27	86.13	1617269	FERRITE 5A 0.003, 5.0T	
32	90	L11	-17.27	92.38	1617269	FERRITE 5A 0.003, 5.0T	
33	90	L12	-17.27	98.63	1617269	FERRITE 5A 0.003, 5.0T	
34	90	L13	-17.27	104.88	1617269	FERRITE 5A 0.003, 5.0T	
35	90	L14	-17.27	111.13	1617269	FERRITE 5A 0.003, 5.0T	
36	90	L15	-17.27	117.38	1617269	FERRITE 5A 0.003, 5.0T	
37	90	L16	-17.27	123.63	1617269	FERRITE 5A 0.003, 5.0T	
38	90	L17	-17.27	129.88	1617269	FERRITE 5A 0.003, 5.0T	
39	90	L18	-17.27	136.13	1617269	FERRITE 5A 0.003, 5.0T	
40	90	L19	-17.27	142.38	1617269	FERRITE 5A 0.003, 5.0T	
41	90	L20	-17.27	148.63	1617269	FERRITE 5A 0.003, 5.0T	
42	90	L21	-17.27	154.88	1617269	FERRITE 5A 0.003, 5.0T	
43	90	L22	-17.27	161.13	1617269	FERRITE 5A 0.003, 5.0T	
44	90	L23	-17.27	167.38	1617269	FERRITE 5A 0.003, 5.0T	
45	90	L24	-17.27	173.63	1617269	FERRITE 5A 0.003, 5.0T	
46	90	L25	-17.27	179.88	1617269	FERRITE 5A 0.003, 5.0T	
47	90	L26	-17.27	186.13	1617269	FERRITE 5A 0.003, 5.0T	
48	90	L27	-17.27	192.38	1617269	FERRITE 5A 0.003, 5.0T	
49	90	L28	-17.27	198.63	1617269	FERRITE 5A 0.003, 5.0T	
50	90	L29	-				

CHIP NO.	DEG NOT	REF DES	DIM	X	Y	PART NUMBER	DESCRIPTION	
1	77	270	822	26.03	1610280	RES-SM 10K, 35W, 5%		
1	78	160	50	31.97	1610280	RES-SM 10K, 35W, 5%		
1	79	160	50	36.70	1610280	RES-SM 4.7K, 0.5W, 5%		
1	80	0	R28	37.47	12.03	1617274	RES-SM 4.7K, 0.5W, 5%	
1	81	180	0	40.89	13.68	1617274	CAP-5A 2200PF, 5%	
1	82	180	R29	40.89	17.40	1617378	RES-SM 0.05W/5V 470MΩ	
1	83	180	R27	40.89	15.11	1617378	RES-SM 0.05W/5V 470MΩ	
1	84	180	0	41.40	12.83	1617274	CAP-5A 2200PF, 5%	
1	85	180	0	41.40	16.38	1617378	RES-SM 10K, 35W, 5%	
1	86	90	0	30.84	10.67	1617378	RES-SM 10K, 35W, 5%	
1	87	90	R33	30.82	7.08	1617378	RES-SM 1.0K, 0.5W, 5%	
1	88	90	R32	28.14	4.83	1617383	RES-SM 10K, 0.5W, 5%	
1	89	180	R31	1.02	22.11	1616268	RES-SM 10K, 0.5W, 5%	
1	90	270	0	1.26	19.21	1609236	ASTR-PNP 50T23	
1	92	0	0	0	0	1603449	DIODE ZENER	
1	93	90	R35	-8.09	11.68	1607128	RES-SM 200 1/2W, 5%	
1	94	30	0	-5.08	11.82	1603584	DIO-5C, 5A, 0.75, 1.44	
1	91	0	0	0	0	0	0	
1	92	0	0	0	0	0	0	
1	93	0	0	0	0	0	0	
1	94	0	0	0	0	0	0	
1	95	0	0	0	0	0	0	
1	96	0	0	0	0	0	0	
1	97	0	0	0	0	0	0	
1	98	0	0	0	0	0	0	
1	99	0	0	0	0	0	0	
1	100	0	0	0	0	0	0	
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1	203	0	0	0	0	0	0	
1	204	0	0	0	0	0	0	
1	205	0	0	0	0	0	0	
1	206	0	0	0	0	0	0	
1	207	0	0	0	0	0	0	
1	208	0	0	0	0	0	0	

SIDE 'A' SHOWN (REFLOW SOLDER SIDE)
SIDE 'B' OPPOSITE (WAVE SOLDER SIDE)



NOTES:

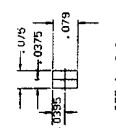
1. REGISTRATION OF COPPER CONDUCTIVE PATTERNS WITH REGARD TO [B] AND [C] TO BE WITHIN .008 RADIUS TIE POSITION.
2. CONDUCTOR FINISH: 90/10 Cu/Sn. ALL EXPOSED COPPER (NOT COVERED WITH SOLDER MASK) SHALL HAVE A CENTER OF THE PAD IS .0001 INCH, WITH AN ABSOLUTE MINIMUM OF .0005 INCH OVER INTERMETALLIC LAYER.
3. FINISHED BOARD THICKNESS: WHEN MEASURED OVER CONDUCTIVE PATTERNS AT ANY POINT, OVERALL THICKNESS SHALL BE .065 ± .015 INCH. THE MAXIMUM FINISHED BOARD THICKNESS WHEN MEASURED OVER SOLDER MASK SHALL BE .075 INCH.
4. FINISHED CONDUCTIVE PATTERN THICKNESS: THE COPPER CONDUCTIVE PATTERNS SHALL BE .0014 INCH THICK MINIMUM ON OUTER LAYERS. THRU HOLES SHALL HAVE A MINIMUM THICKNESS OF .001 INCH. THE ABSOLUTE MAXIMUM HEIGHT OF SURFACE MOUNT PADS SHALL HAVE A MINIMUM THICKNESS OF .004 INCH.
5. HOLE SIZE SHALL HAVE A MINIMUM THICKNESS OF .010 INCH.
6. SHALLOWEST NOMINAL SPACING BETWEEN CONDUCTIVE PATTERNS IS .010 INCH.
7. COPPER PATTERN PROCESS ALLOWANCE TO BE WITHIN .002 ± .004 INCH FROM THE MASTER DATA BASE OR MASTER PATTERN SUPPLIED BY DELCO ELECTRONICS.
8. BOARDS ARE TO BE 100% TESTED FOR SHORTS AND OPENS.
9. SOLDER MASK TO MEET ALL REQUIREMENTS OF M-11650-0, M-10057-1 OR M-10783-0, REGISTRATION TO BE WITHIN .010 INCH OF THE COPPER PATTERN.
10. LOT CODE - CIRCUIT BOARD MANUFACTURER IS TO MODIFY AREA DEROTED [] ON THE TOOLING DRAWING. THIS INFORMATION IS FOR UNRELIABILITY AND CAN APPEAR IN FORMATS SIMILAR TO THE OPTIONS BELOW:

FORM	DATE	EXAMPLE
V22	201 FEBRUARY 20	
V23	201 FEBRUARY 20	
V24	201 FEBRUARY 20	
V25	201 FEBRUARY 20	
V26	201 FEBRUARY 20	
V27	201 FEBRUARY 20	
V28	201 FEBRUARY 20	
V29	201 FEBRUARY 20	
V30	201 FEBRUARY 20	
V31	201 FEBRUARY 20	
V32	201 FEBRUARY 20	
V33	201 FEBRUARY 20	
V34	201 FEBRUARY 20	
V35	201 FEBRUARY 20	
V36	201 FEBRUARY 20	
V37	201 FEBRUARY 20	
V38	201 FEBRUARY 20	
V39	201 FEBRUARY 20	
V40	201 FEBRUARY 20	
V41	201 FEBRUARY 20	
V42	201 FEBRUARY 20	
V43	201 FEBRUARY 20	
V44	201 FEBRUARY 20	
V45	201 FEBRUARY 20	
V46	201 FEBRUARY 20	
V47	201 FEBRUARY 20	
V48	201 FEBRUARY 20	
V49	201 FEBRUARY 20	
V50	201 FEBRUARY 20	
V51	201 FEBRUARY 20	
V52	201 FEBRUARY 20	
V53	201 FEBRUARY 20	
V54	201 FEBRUARY 20	
V55	201 FEBRUARY 20	
V56	201 FEBRUARY 20	
V57	201 FEBRUARY 20	
V58	201 FEBRUARY 20	
V59	201 FEBRUARY 20	
V60	201 FEBRUARY 20	
V61	201 FEBRUARY 20	
V62	201 FEBRUARY 20	
V63	201 FEBRUARY 20	
V64	201 FEBRUARY 20	
V65	201 FEBRUARY 20	
V66	201 FEBRUARY 20	
V67	201 FEBRUARY 20	
V68	201 FEBRUARY 20	
V69	201 FEBRUARY 20	
V70	201 FEBRUARY 20	
V71	201 FEBRUARY 20	
V72	201 FEBRUARY 20	
V73	201 FEBRUARY 20	
V74	201 FEBRUARY 20	
V75	201 FEBRUARY 20	
V76	201 FEBRUARY 20	
V77	201 FEBRUARY 20	
V78	201 FEBRUARY 20	
V79	201 FEBRUARY 20	
V80	201 FEBRUARY 20	
V81	201 FEBRUARY 20	
V82	201 FEBRUARY 20	
V83	201 FEBRUARY 20	
V84	201 FEBRUARY 20	
V85	201 FEBRUARY 20	
V86	201 FEBRUARY 20	
V87	201 FEBRUARY 20	
V88	201 FEBRUARY 20	
V89	201 FEBRUARY 20	
V90	201 FEBRUARY 20	
V91	201 FEBRUARY 20	
V92	201 FEBRUARY 20	
V93	201 FEBRUARY 20	
V94	201 FEBRUARY 20	
V95	201 FEBRUARY 20	
V96	201 FEBRUARY 20	
V97	201 FEBRUARY 20	
V98	201 FEBRUARY 20	
V99	201 FEBRUARY 20	
V100	201 FEBRUARY 20	

11. [X] VENDOR ID TO BE ADDED IN THIS AREA.
12. THE BOARD SHALL BE CONSTRUCTED OF .062 INCH THICK FR-4 PER M-10121-1 AND MEET ALL REQUIREMENTS OF C-7000.
13. X-Y COORDINATES ARE LOCATED IN THE ELECTRONIC DATA FILE (CIRCUIT BOARD DK154819).
14. THE FOLLOWING HOLES ARE NOT PLATED-THRU: 1, 2, 41, 42, 171, 172.
15. CIRCUIT BOARDS ARE TO BE MANUFACTURED IN A MULTI-PART-NUMBER ARRAY, PER DRAWING 16236930. ARRAY INCLUDES BOARD PARTS 16236929 & 16236935, OR DK142570 & DK154819.
16. BOARD PARTS 16236929 & 16236935, OR DK142570 & DK154819.
17. THIS IS A 2-LAYER PTH CIRCUIT BOARD.

FINISHED HOLE SIZE	OTHERWISE SPECIFIED
Ø .005	Ø .005
Ø .006	Ø .006
Ø .007	Ø .007
Ø .008	Ø .008
Ø .009	Ø .009
Ø .010	Ø .010
Ø .011	Ø .011
Ø .012	Ø .012
Ø .013	Ø .013
Ø .014	Ø .014
Ø .015	Ø .015
Ø .016	Ø .016
Ø .017	Ø .017
Ø .018	Ø .018
Ø .019	Ø .019
Ø .020	Ø .020
Ø .021	Ø .021
Ø .022	Ø .022
Ø .023	Ø .023
Ø .024	Ø .024
Ø .025	Ø .025
Ø .026	Ø .026
Ø .027	Ø .027
Ø .028	Ø .028
Ø .029	Ø .029
Ø .030	Ø .030
Ø .031	Ø .031
Ø .032	Ø .032
Ø .033	Ø .033
Ø .034	Ø .034
Ø .035	Ø .035
Ø .036	Ø .036
Ø .037	Ø .037
Ø .038	Ø .038
Ø .039	Ø .039
Ø .040	Ø .040
Ø .041	Ø .041
Ø .042	Ø .042
Ø .043	Ø .043
Ø .044	Ø .044
Ø .045	Ø .045
Ø .046	Ø .046
Ø .047	Ø .047
Ø .048	Ø .048
Ø .049	Ø .049
Ø .050	Ø .050
Ø .051	Ø .051
Ø .052	Ø .052
Ø .053	Ø .053
Ø .054	Ø .054
Ø .055	Ø .055
Ø .056	Ø .056
Ø .057	Ø .057
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Ø .061	Ø .061
Ø .062	Ø .062
Ø .063	Ø .063
Ø .064	Ø .064
Ø .065	Ø .065
Ø .066	Ø .066
Ø .067	Ø .067
Ø .068	Ø .068
Ø .069	Ø .069
Ø .070	Ø .070
Ø .071	Ø .071
Ø .072	Ø .072
Ø .073	Ø .073
Ø .074	Ø .074
Ø .075	Ø .075
Ø .076	Ø .076
Ø .077	Ø .077
Ø .078	Ø .078
Ø .079	Ø .079
Ø .080	Ø .080
Ø .081	Ø .081
Ø .082	Ø .082
Ø .083	Ø .083
Ø .084	Ø .084
Ø .085	Ø .085
Ø .086	Ø .086
Ø .087	Ø .087
Ø .088	Ø .088
Ø .089	Ø .089
Ø .090	Ø .090
Ø .091	Ø .091
Ø .092	Ø .092
Ø .093	Ø .093
Ø .094	Ø .094
Ø .095	Ø .095
Ø .096	Ø .096
Ø .097	Ø .097
Ø .098	Ø .098
Ø .099	Ø .099
Ø .100	Ø .100

TOLERANCE:
(UNLESS OTHERWISE SPECIFIED)
1. ALL COORDINATE HOLE LOCATING DIMENSIONS IDENTIFIED IN THIS CHART ARE BASIC DIMENSIONS.



DETAIL DUE

1.006/1.000
A

BASIC TOOLING

THE FOLLOWING APPLY UNLESS OTHERWISE SPECIFIED:
1. ALL DIMENSIONS ARE IN INCHES.
2. ALL DIMENSIONS ARE TO BE WITHIN .002 INCH.
3. ALL DIMENSIONS ARE TO BE WITHIN .002 INCH.
4. ALL DIMENSIONS ARE TO BE WITHIN .002 INCH.
5. ALL DIMENSIONS ARE TO BE WITHIN .002 INCH.
6. ALL DIMENSIONS ARE TO BE WITHIN .002 INCH.
7. ALL DIMENSIONS ARE TO BE WITHIN .002 INCH.
8. ALL DIMENSIONS ARE TO BE WITHIN .002 INCH.
9. ALL DIMENSIONS ARE TO BE WITHIN .002 INCH.
10. ALL DIMENSIONS ARE TO BE WITHIN .002 INCH.

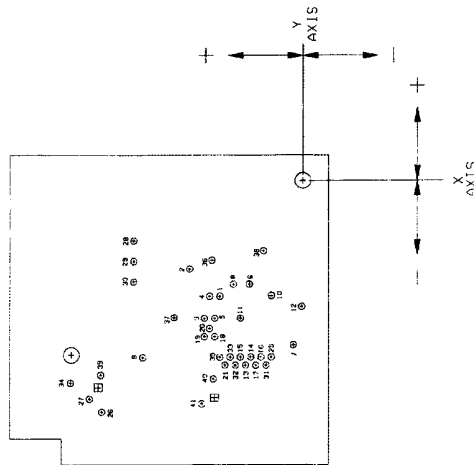
GEOMETRIC DRAWING SYMBOLS:
1. HOLE POSITION
2. HOLE POSITION
3. HOLE POSITION
4. HOLE POSITION
5. HOLE POSITION
6. HOLE POSITION
7. HOLE POSITION
8. HOLE POSITION
9. HOLE POSITION
10. HOLE POSITION

UNLESS OTHERWISE SPECIFIED:
1. HOLE POSITION
2. HOLE POSITION
3. HOLE POSITION
4. HOLE POSITION
5. HOLE POSITION
6. HOLE POSITION
7. HOLE POSITION
8. HOLE POSITION
9. HOLE POSITION
10. HOLE POSITION

KEY PRODUCT CHARACTERISTICS:
1. HOLE POSITION
2. HOLE POSITION
3. HOLE POSITION
4. HOLE POSITION
5. HOLE POSITION
6. HOLE POSITION
7. HOLE POSITION
8. HOLE POSITION
9. HOLE POSITION
10. HOLE POSITION

1. SHANKS (80/20) 1

DK154819
A1
DK154819
SHT 1 OF 2



VIEWED FROM WAVE SOLDER SIDE

WS TEST POINTS

THE FOLLOWING APPLY UNLESS OTHERWISE SPECIFIED:
 PERFECT FORM REQUIRED FOR FEATURES OF SIZE AT THE
 TRUE POSITION TO FEATURE, AND RELATED DATUMS. APPLY AT
 CONDITION OF SIZE INDICATED IN FEATURE CONTROL FRAME.
 OTHER GEOMETRIC TOLERANCES, AND RELATED DATUMS, APPLY
 TO S. SEPARATELY. THE POSITION CALLOUT MAY BE USED
 SEPARATELY, INSTEAD OF OR IN ADDITION TO THE
 STANDARDS, AND APPLICABLE DIVISIONAL STANDARDS, FOR
 INTERFERENCE.

GEOMETRIC DRAWING SYMBOLS

[illegible]

UNLESS OTHERWISE SPECIFIED,
DIMENSIONS ARE IN INCHES

TOLERANCE ON
TWO PLACE DECIMALS $\pm .01$
THREE PLACE DECIMALS $\pm .010$

14MY97	WEEK 2:1	ON R. BADGERS
--------	----------	---------------

16230729C

Country	1950	1955	1960	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Japan	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0
Germany	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0
France	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0
Italy	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0
Spain	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0
Sweden	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0
United Kingdom	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0
United States	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0
Canada	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0
Australia	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0
South Korea	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0
China	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0
India	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0
Brazil	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0
Argentina	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0
South Africa	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0
Indonesia	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5</			

1000

2245 W	
2246 W	2246 W

CIR BD..RF

DK154819 SHT 2

No	Folio	
2	30	T

ECAD
COMPUTER
GRAPHICS

SHEET 2 OF 2
DK154819

* TP22, 23, AND 24 ARE NOT USED.

IN THIS DRAWING

UK104019

[illegible]

1

1

1

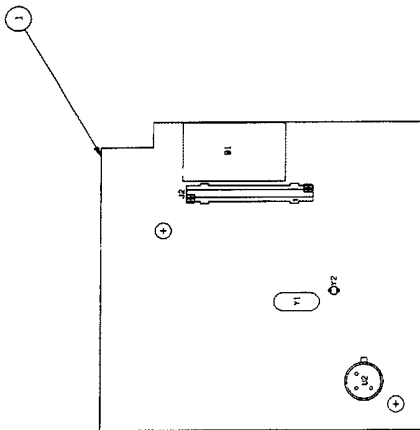
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100

Abstract

1

1. ALL IC'S & CONNECTORS ARE MOUNTED WITH PIN 1 OR POLARITY AS SHOWN.
2. SOLDER COMPONENT LEADS SECURELY TO CIRCUIT BOARD WITH SOLDER ITEM 2. TOUCH UP AS REQUIRED WITH SOLDER ITEM 3. SOLDERING TO BE PERFORMED PER PROCESS SPECIFICATION.
3. THIS ASSEMBLY IS ELECTROSTATIC DISCHARGE (ESD) SENSITIVE.



THIS ASSEMBLY SHALL CONSIST OF THE FOLLOWING:

ITEM	R	REFERENCE	0 = OPTIONAL	DESCRIPTION
1	Q	162115/2		CONN-12 COND
1	U2	16200768		RESONATOR SAW 15MHz
1	Y1	16200769		CRYSTAL-4.0MHz,MINI
1	Y2	16221018		CRYSTAL-32.768kHz
1	B1	16219569		BATTERY 3V/TEMP, 3V

THE FOLLOWING APPLY UNLESS OTHERWISE SPECIFIED

GEOMETRIC DRAWING SYMBOLS			
□	FLAT	PROFILE OF A LINE	
○	ROUND	◊	TRUE POSITION
◊	ROUND	○	CIRCULAR RUNOUT
◊	ROUND	○	TOTAL RUNOUT
◊	ROUND	○	DIAMETER
◊	ROUND	○	ISOMETRIC DIMENSION
◊	ROUND	○	DIMENSION TARGET

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCE ON:
THIRD ANGLE
PROJECTION
TWO PLACE DECIMALS ± 0.3
THREE PLACE DECIMALS ± 0.12

14M97	211	R. BADGERS	16230729C
		10/10/97	16230729C

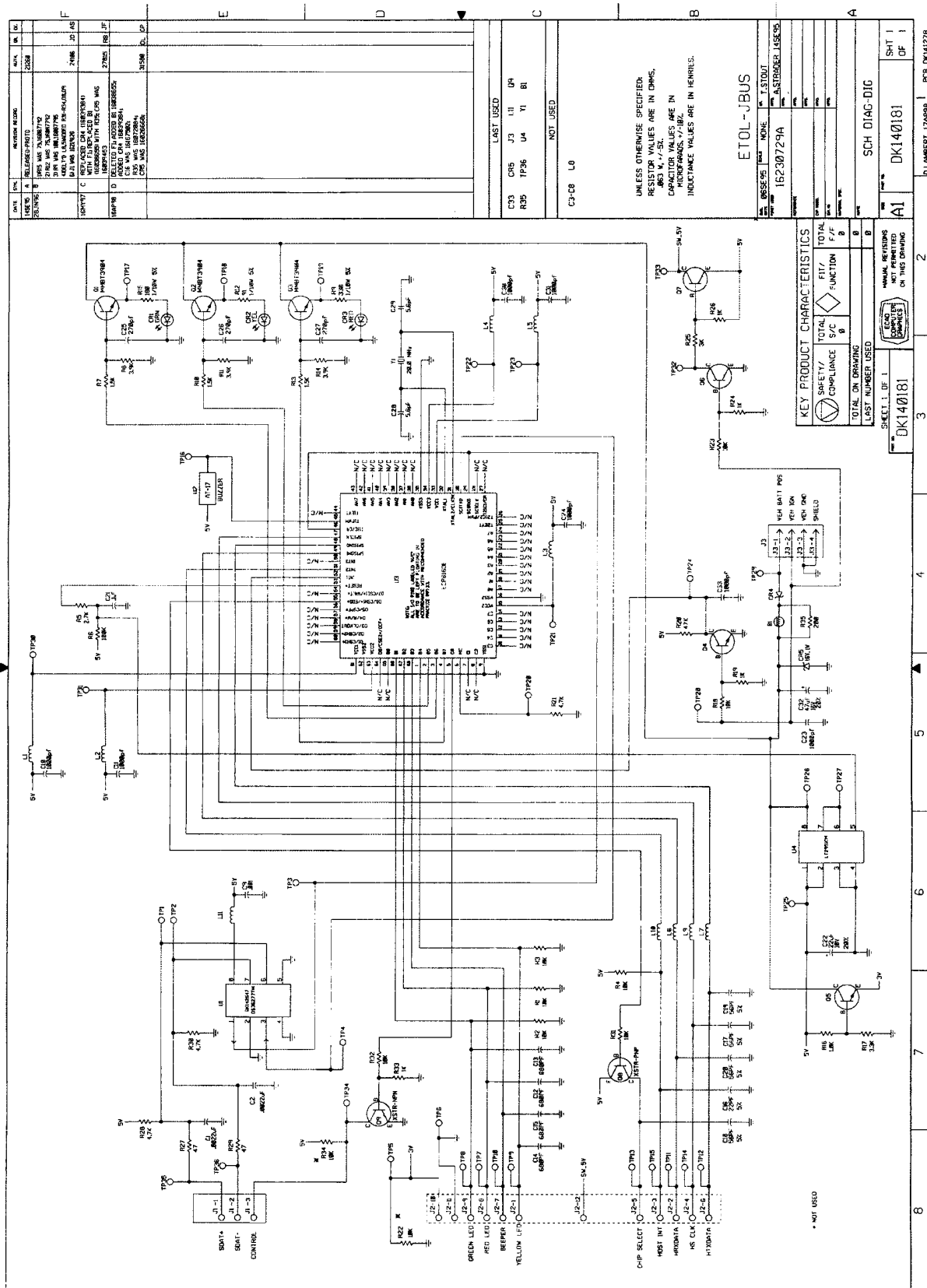
KEY PRODUCT CHARACTERISTICS

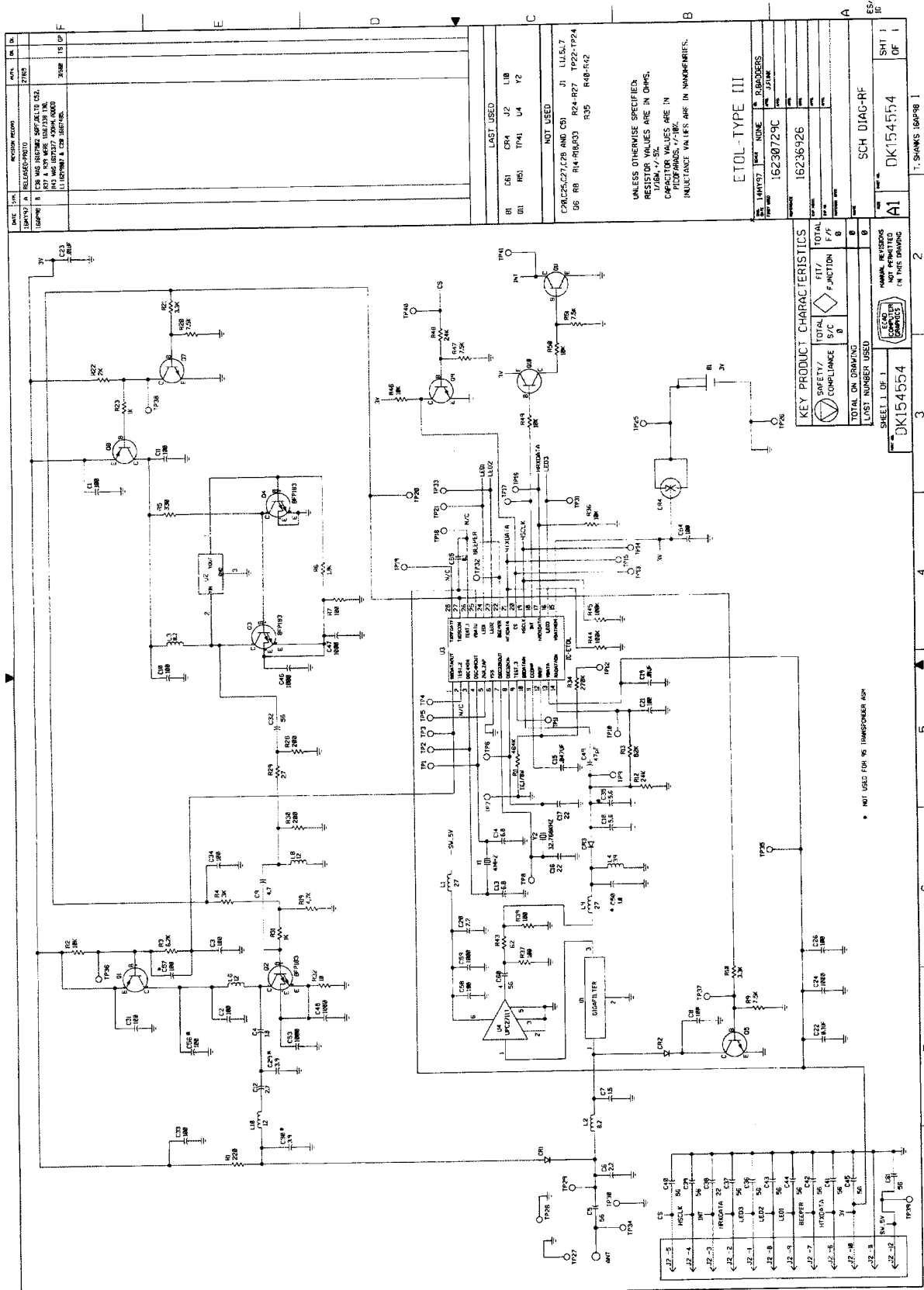
	SAFETY/ COMPLIANCE	TOTAL S/C 0		FIT/ FUNCTION	TOTAL F/F 0
TOTAL ON DRAWING					
LAST NUMBER USED					

ET 1 OF 1
154552

2

100





LAST USED	
001	C61
001	R51
	CR4
	TP41
	J2
	U4

UNLESS OTHERWISE SPECIFIED:
RESISTOR VALUES ARE IN OHMS,
1/16W, $\pm 5\%$.
CAPACITOR VALUES ARE IN
PICTOGRAMS, $\pm 10\%$.
INDUCTANCE VALUES ARE IN MILLIHENRYS.

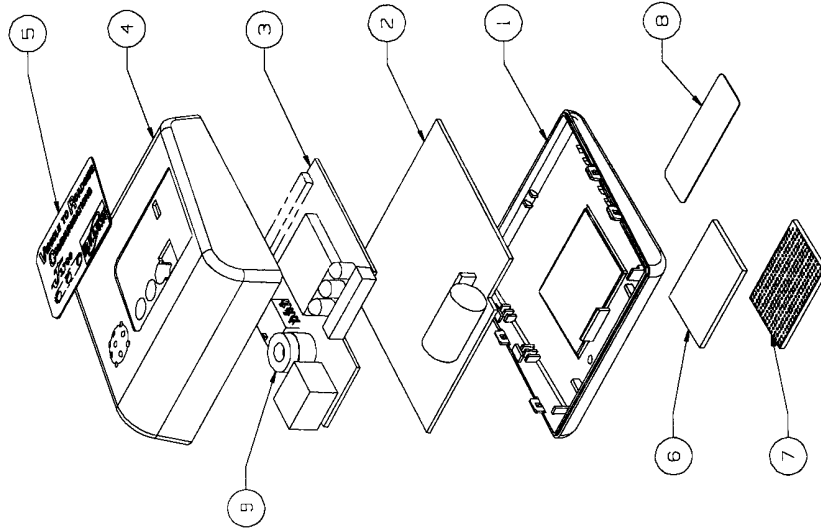
E T O L - T Y P E I I I

DATE	TIME	NAME	NO.	R. BADGERS
14 MAY 97		NONE		
16230729C				
16236426				

KEY PRODUCT CHARACTERISTICS			
	SAFETY/ COMPLIANCE	TOTAL S/C Ø	FIT/ FUNCTION 
TOTAL			F/F Ø
TOTAL ON DRAWING			Ø

LAST NUMBER USED	SHEET 1 OF 1	 MANUAL REVISIONS NOT PERMITTED ON THIS DRAWING	0
	K154554		

● NOT USED FOR 95 TRANSPONDER ASM



THIS ASSEMBLY SHALL CONSIST OF THE FOLLOWING		
ITEM	PART NO.	DESCRIPTION
1	16205033	CASE
2	DK154551	CIR BD ASM-RE-PROG
3	DK142572	CIR BD ASM-BUS
4	16205501	COVER
5	DK144200	APPLIQUE
6	16220357	FASTENER-WS
7	16220356	FASTENER-TA
8	DK150055	LABEL-ID.END
9	16261522	GASKET

DATE	BY	REVISION RECORD	AUTHORITY	OR	AP
30 APR 81	A	RELEASE PROTOTYPE	3088		

SCALE 1/1

METRIC
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN MILLIMETERS, AND THE TOLERANCES ARE:
ONE PLACE DECIMALS ± 0.3
TWO PLACE DECIMALS ± 0.1
THREE PLACE DECIMALS ± 0.05
DRAFT ANGLES = $10^{\circ} 30'$
SHARP CORNERS = $R 0.25$

SEE ASME Y14.5M-84
FOR GD&T INTERPRETATION
CHANGES ALLOWED ONLY BY
PDM DOCUMENT PROCEDURES
DO NOT SCALE
THIRD ANGLE
PROJECTION

FIRST USED	162307290	DES A. TIBBETTS	1915
REFERENCE	162307290	APPROX TIBBETTS	30 APR 81
EXP. DATE	162307290	APR	APR
EXP. DATE	162307290	APR	APR
EXP. DATE	162307290	APR	APR

RESTRICTED AND
REPORTED PER C.O.D.

KEY PRODUCT CHARACTERISTICS	
SAFETY/COMPLIANCE	DIAMOND
FIT/FUNCTION	
TOTAL ON DRAWING	0
LAST NUMBER USED	0

DRAWING NAME	TRANSPONDER ASM
PART NUMBER	162307290
SHT OF	1

SIZE A2