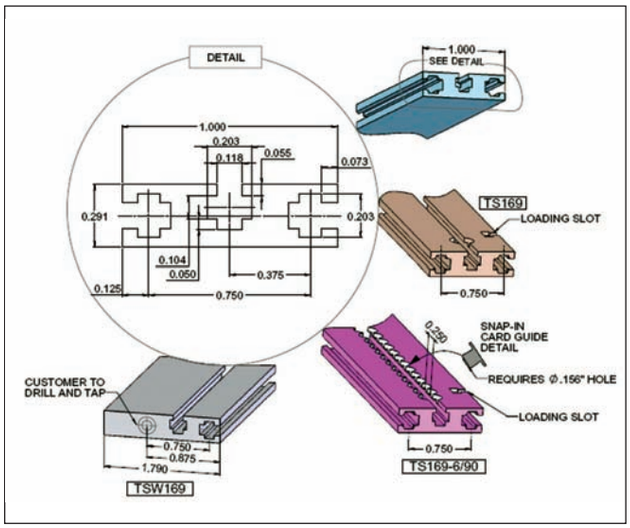
# VectorPak™ T-Struts

Vector T-Struts can be used for custom assemblies or to fit existing cage assemblies. Available with two nut slots. As an alternative, mounting brackets (BR16A, available separately) may be used to attach struts to cages. Strut material is aluminum with clear irridite finish. Struts are attached to side panels with 10-32 screws (Part No. HD90).




Figures showing T-Strut features - see table

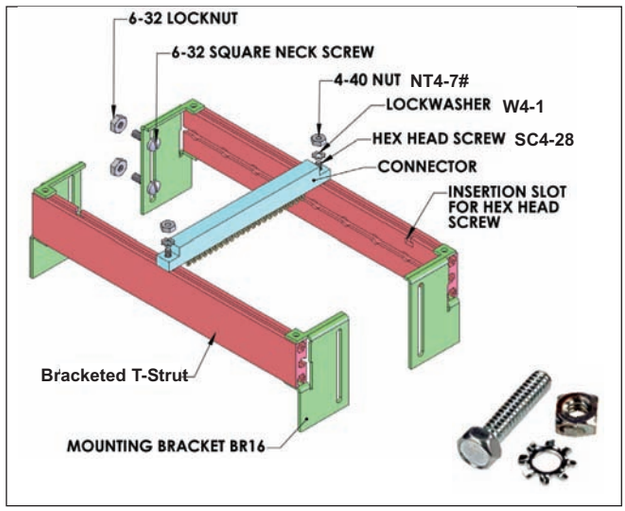
**TS169-6/90**

**BR16A Bracket Kit** includes two each BR16-1 (right) and BR16-2 (left) brackets plus installation hardware. Bracket assemblies are normally used on rear strut, though front strut may use them as well. HD90 Self-tapping Screws (pkg. 12 not shown) may also be used to mount T-struts to sidewalls.

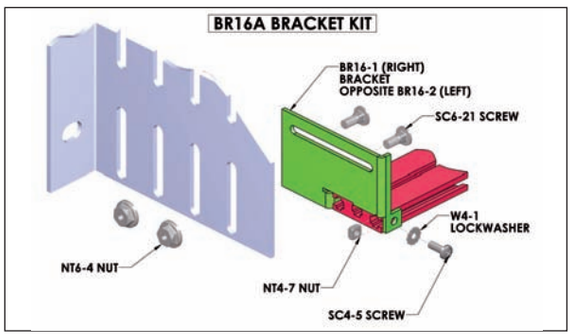
NT4-7PA: Pkg 25 nuts that load into "T-Strut" groove

## T-Strut Hardware Kit - HD34 or HD34B for Connector Mounting

HD34 (1/2" screws) and HD34B (1/4" screws) are complete edge-connector mounting kits for attachment to VectorPak™ 'T'-Struts. Each kit contains:
42, 4-40 locking screws (SC4-28, 1/2"L or SC4-27, 1/4"L)
42, 4-40 locking nuts (NT4-7)
42 lockwashers




To mount connectors, simply slide nut into desired position and fasten with screws and lockwasher as illustrated. SC4-28 screws available in bulk quantities.

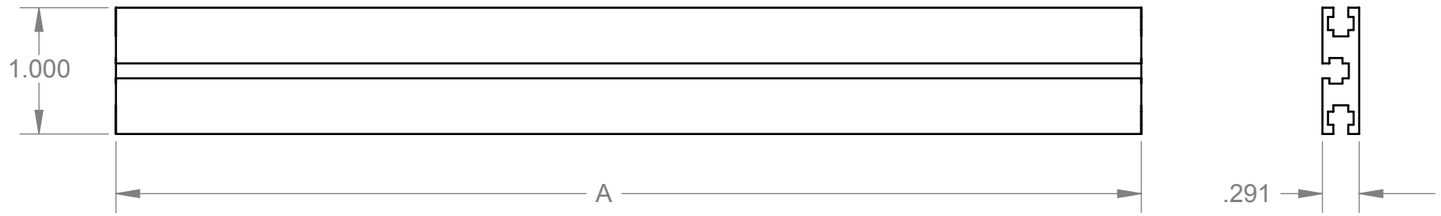



| End Part No. | Length | Width | Method of Fastening | Fig. | Description |
|---|---|---|---|---|---|
| TS81 | 8.12" | 1" | BR16 Brackets or HD90 Screws | 1 | 1" wide T-strut, Pk. of 1 each |
| TS81-5/90 | 8.12" | 1" | BR16 Brackets or HD90 Screws | 4 | 1" wide T-strut, Pk. of 1 each |
| TS169 | 16.85" | 1" | BR16 Brackets or HD90 Screws | 1 | 1" wide T-strut, Pk. of 1 each |
| TSW169 | 16.85" | 1.75" | HD90 Screws | 5 | 1.75" wide T-strut, Pk. of 1 each |
| TS169-6/90 | 16.85" | 1" | HD90 Screws | 4 | 1" wide T-strut, Pk. of 1 each, dimpled for Snap-in guide insertion |
| TS209 | 20.85" | 1" | BR16 Brackets or HD90 Screws | 1 | 1" wide T-strut, Pk. of 1 each |
| TS300 | 30.00" | 1" | Raw Stock | 1 | 1" wide T-strut, Pk. of 1 each |
| TSW300 | 30.00" | 1.75" | Raw Stock | 5 | 1.75" wide T-strut, Pk. of 1 each |
| TS600 | 60.00" | 1" | Raw Stock/pkg. | 3 | 1" wide T-strut, Pk. of 4 pcs. |

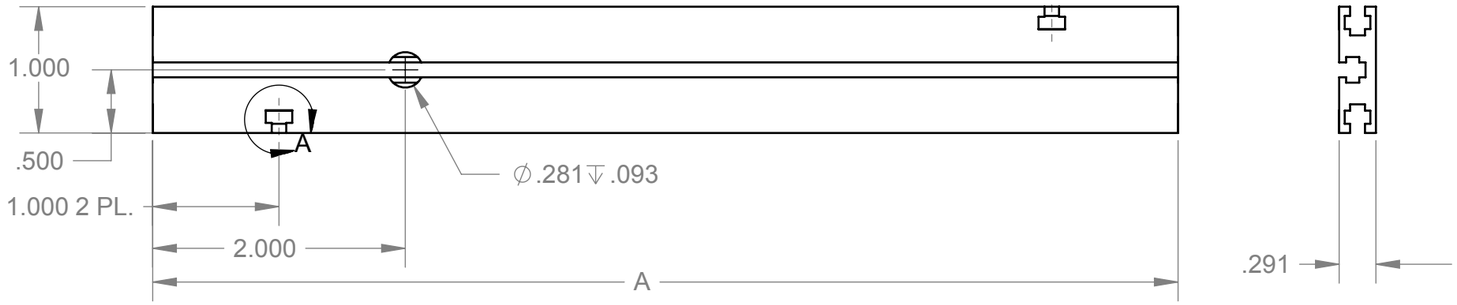
Custom lengths available on request

| REVISIONS | | | | |
|---|---|---|---|---|
| ZONE | REV. | DESCRIPTION | DATE | APPROVED |
| ALL | A | TABLE REDRAWN ECO 3290 | 12/10/86 | |
| | B | REMOVED UNUSED P/N# | 02/10/09 | |

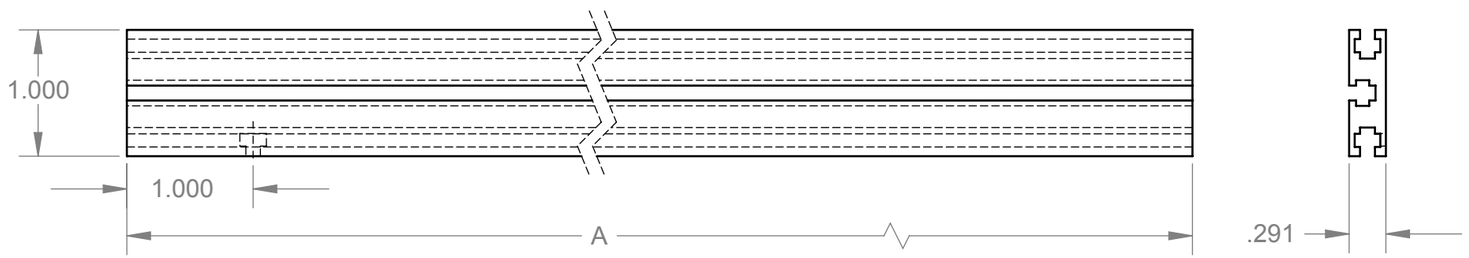
## DETAIL 1



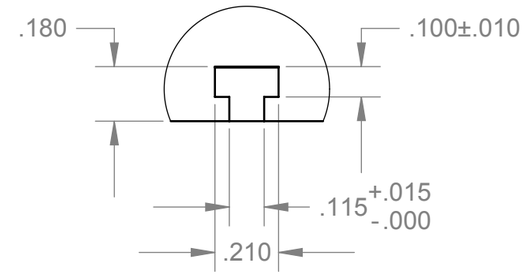

## DETAIL 2




## DETAIL 3




## DETAIL A
SCALE 2 : 1




| PART NO. | "A" DIM. | DETAIL NO. |
|---|---|---|
| TS81 | 8.120 | 2 |
| TS169 | 16.850 | 2 |
| TS209 | 20.850 | 2 |
| TS300 | 30.00 +1.50/-.00 | 1 |
| TS600 | 60.00 +1.50/-.00 | 1 |
| TS169-3 | 16.850 | 3 |

5. DEGREASE
4. STRAIGHT WITHIN .015/10" IN LENGTH
3. CUT ENDS TO BE SQUARE WITHIN .0025/INCH IN WIDTH
2. REMOVE ALL BURRS
1. MAT'L: AL. EXTRUSION, 6063-T6, PRE-ANOD., P/N TS100

NOTES: UNLESS OTHERWISE SPECIFIED.

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DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL ±
ANGULAR: ±.X°
TWO PLACE DECIMAL ±.03
THREE PLACE DECIMAL ±.005
INTERPRET GEOMETRIC TOLERANCING PER:
MATERIAL 1
FINISH
DO NOT SCALE DRAWING

| | NAME | DATE |
|---|---|---|
| DRAWN | TRUSHAR | 02/06/09 |
| CHECKED | | |
| ENG APPR. | | |
| MFG APPR. | | |
| Q.A. | | |

THIRD ANGLE PROJECTION

VECTOR ELECTRONICS & TECHNOLOGY, INC
11115 VANOWEN ST., NORTH HOLLYWOOD, CA 91605

# T-STRUT W/O INSERTS

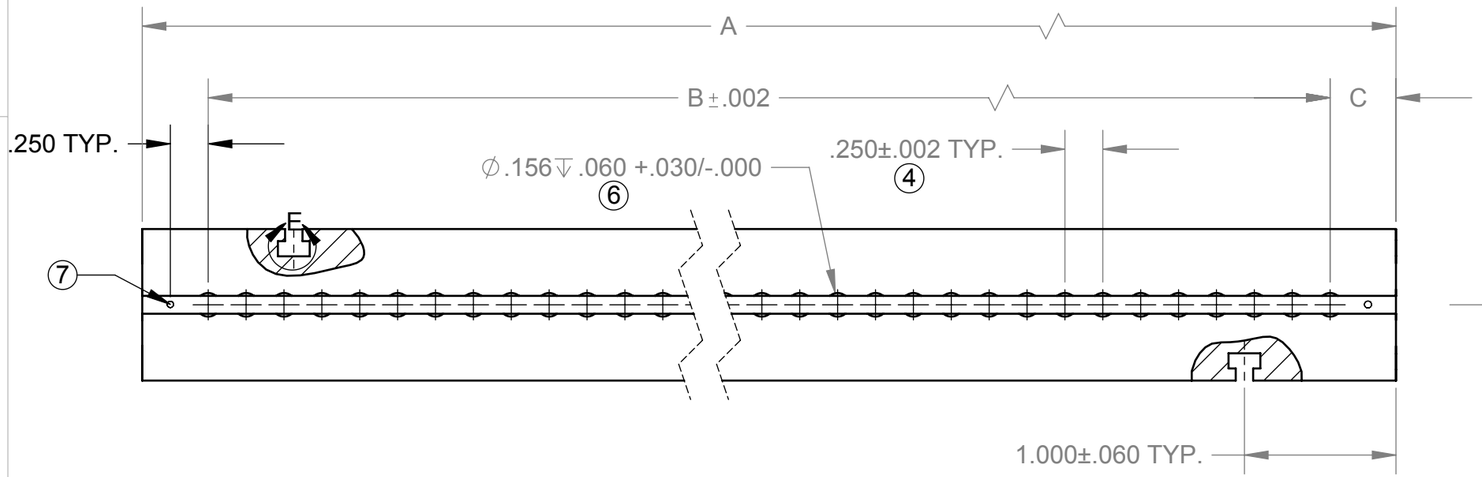
| SIZE | DWG. NO. | REV |
|---|---|---|
| B | 5280006 | B |

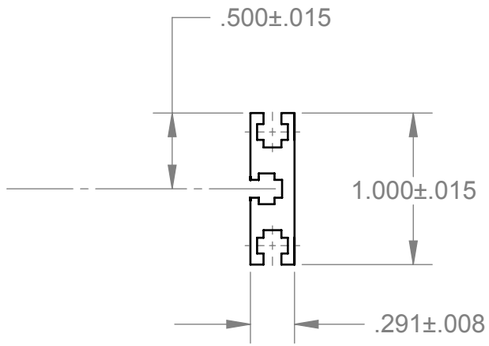
SCALE: 1:1 | WEIGHT: | SHEET 1 OF 1

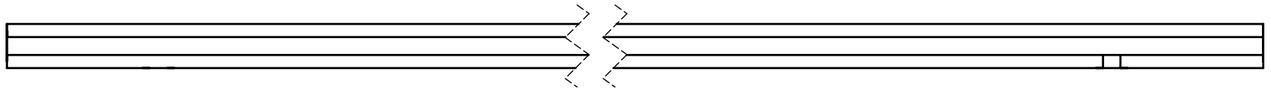
| INSPECTION REQUIREMENTS | |
|---|---|
| 1 | CHECK OVERALL LENGTH |
| 2 | CHECK "C" DIMENSION |
| 3 | VERIFY .156 DIA. WILL FIT INTO PUNCHED RADII & .160 DIA. WILL NOT FIT INTO PUNCHED RADII |
| 4 | CHECK "B" DIMENSION |
| 5 | NO CHIPS IN THE BOTTOM OF SLOT |

REVISIONS

| ZONE | REV. | DESCRIPTION | DATE | APPROVED |
|---|---|---|---|---|
| ALL | - | RELEASED FOR PROTOTYPE<br>100 UNITS OF CCK13S<br>50 CCM14S & 50 CCK13S | 02/14/80 | |
| | A1 | P/N TS81-5 NO. OF HOLES WAS 30<br>ACTUAL STOCK PARTS HAVE 31 | 07/31/80 | |
| | B | P/N TS81-5 "B" DIM. WAS 7.500<br>NO. OF HOLES WERE 31/ ECO2013 | 03/26/81 | |
| | C | MOVED 1.000 DIM. LOCATION<br>CALLOUT FOR CLARITY NO ECO | | |
| | D | ADDED TS81-6 &-7 | | |
| | D | INC ECO 2628 | 12/17/84 | |
| | E | INC ECO 3924 | | |
| | F | REMOVED P/N# TS81-6, -7<br>TS169-6,TS209-5 | 02/10/09 | |

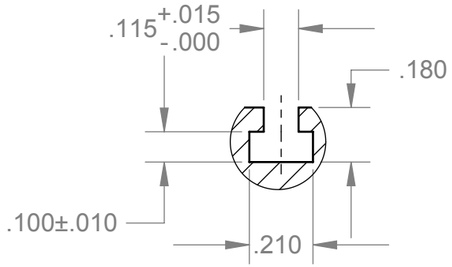


| PART NO. | A | B | C | NO. OF HOLES |
|---|---|---|---|---|
| TS81-5/90 | 8.120 | 7.250 | .435 | 30 |
| TS169-6/90 | 16.850 | 15.750 | .675 | 64 |

DETAIL E
SCALE 2 : 1




⑦. TOOLING MARK MAY APPEAR
⑥. USE .1565 DIA. PUNCH TO FORM RADIUS EQUAL WITHIN ±.005 FROM ℄ OF SLOT
5. PART TO BE FREE OF BURRS AND SURFACE SCRATCHES
④. NON CUMULATIVE TOLERANCE
3. PART TO BE STRAIGHT WITHIN .015/10 INCHES IN LENGTH
2. CUT ENDS TO BE SQUARE WITHIN .0025/INCH IN WIDTH
1. MAT'L: AL. EXTRUSION, 6063-T6, PRE-ANOD., P/N TS100

NOTES: UNLESS OTHERWISE SPECIFIED.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ANGULAR: ±.X°
TWO PLACE DECIMAL ±.03
THREE PLACE DECIMAL ±.005
INTERPRET GEOMETRIC TOLERANCING PER:
MATERIAL 1
FINISH
DO NOT SCALE DRAWING

| | NAME | DATE |
|---|---|---|
| DRAWN | TRUSHAR | 02/10/09 |
| CHECKED | | |
| ENG APPR. | | |
| MFG APPR. | | |
| Q.A. | | |

THIRD ANGLE PROJECTION


VECTOR ELECTRONICS & TECHNOLOGY, INC
11115 VANOWEN ST., NORTH HOLLYWOOD, CA 91605

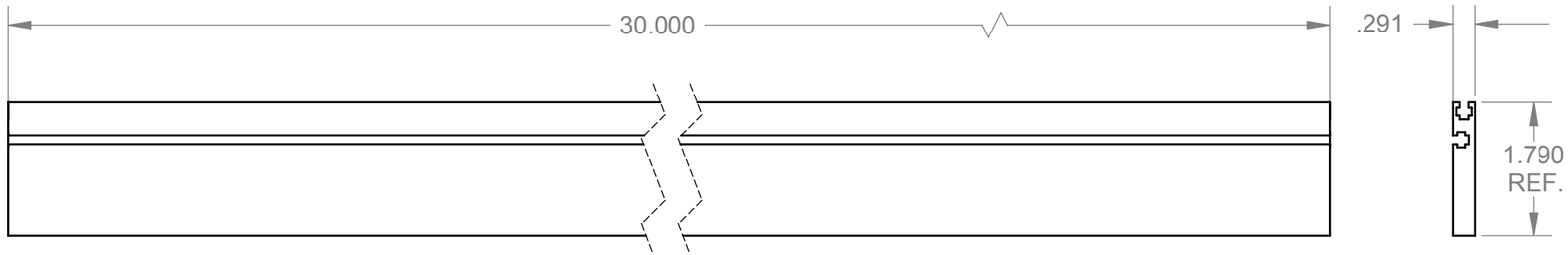

# T-STRUT FOR SNAP-IN CARD GUIDE

| SIZE | DWG. NO. | REV |
|---|---|---|
| B | M6336D4.2 | F |

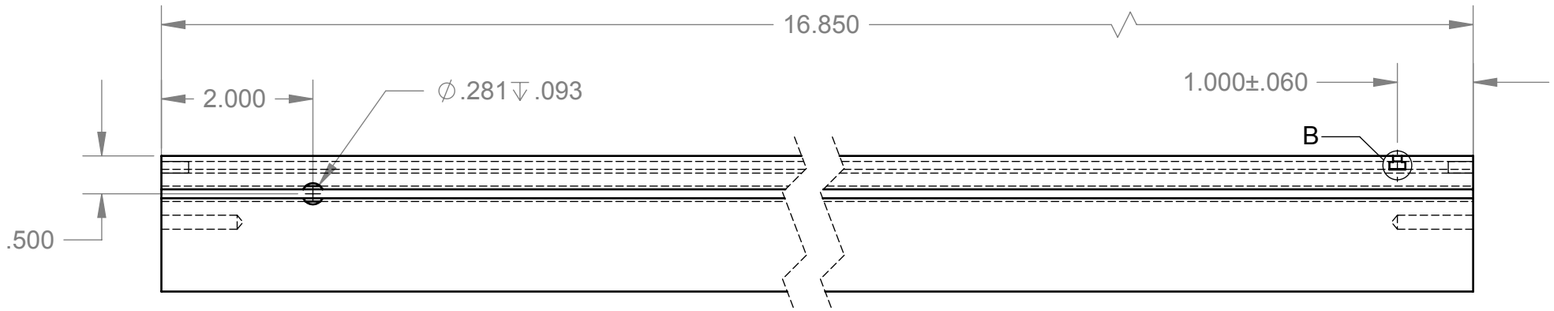
SCALE: 1:1 | WEIGHT: | SHEET 1 OF 1

| REVISIONS | | | | |
|---|---|---|---|---|
| ZONE | REV. | DESCRIPTION | DATE | APPROVED |
| ALL | C | ADDED DET. NO. 4 ECO 1481<br>ADDED P/N TSW169-4 | 06/05/74 | |
| | C1 | ADDED CAT NO. TSW-81N-4 | 09/22/74 | |
| | C2 | DIM .875 WAS .825 | | |
| | D | REV'D ∅.281HOLE POS. ECO 1682 | | |
| | D1 | ADDED Z4424-30-4 & -5 TO TABLE | | |
| | E | ECO 1926 | 01/07/80 | |
| | E1 | P/N M4424-30-1 WAS DETAIL 3<br>& INSERT WAS NONE (ERROR) | 12/08/81 | |
| | E2 | DELETED P/N M4424-30-1 | 12/15/81 | |
| | F | INC ECO 3924 | | |
| | F1 | DETAIL 4 HOLE SIZE WAS<br>∅.1875 +.003/-.000 x<br>.312 +.020/-.000 DEEP | | |
| | F2 | INC ECO 3949 | | |
| | F3 | ADDED NOTE 10 | | |
| | F4 | REMOVED NO LONGER USED P/N# | 02/10/09 | |

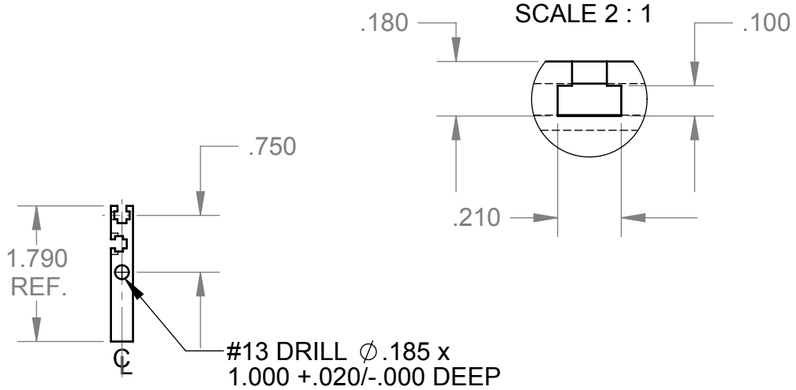
## TSW 300




## TSW169




## DETAIL B
SCALE 2 : 1




6. USE SQUARE ENDED CLOSE FITTING GUAGE PIN TO CHECK DEPTH OF HOLE
5. PARTS TO BE DEGREASED AFTER FABRICATION
4. PARTS TO BE FREE OF BURRS & SURFACE SCRATCHES REMOVE ALL BURRS FROM EXTRUDED T-SLOTS
3. PART TO BE STRAIGHT WITHIN .015/10 INCHES IN LENGTH
2. CUT ENDS TO BE SQUARE WITHIN .0025/INCH IN WIDTH
1. MAT'L: AL. EXTRUSION, 6063-T6

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| DRAWN | TRUSHAR | 02/10/09 |
| CHECKED | | |
| ENG APPR. | | |
| MFG APPR. | | |
| Q.A. | | |

THIRD ANGLE PROJECTION

VECTOR ELECTRONICS & TECHNOLOGY, INC
11115 VANOWEN ST., NORTH HOLLYWOOD, CA 91605

# T-STRUT DETAIL TSW-SER.

| SIZE | DWG. NO. | REV |
|---|---|---|
| B | M4424D5.30 | F |

SCALE: 1:2 | WEIGHT: | SHEET 1 OF 1