

ZONE	REV	SCR NUMBER	DESCRIPTION	BY	DATE	APPROVED
	E	DMAG-6BTGK.VER01	ADDED LEAD FREE PLATING OPTION	GKR	05/16/05	S.BAIR
	F	MLEE-6LDQ4W.VER01	MODIFIED NOTE 5, LINE 1 REPLACED DRAWING FORMAT	SG/ML	02/13/06	C.SAMMIS
	G	SBAR-6NLKJT.VER01	MODIFIED TABLES II & III	HCL	05/08/06	K.LEBLANC
	H	JCHG-6YUB5B.VER01	DIM M WAS 19.00 & 49.00 RESP	HCL-BS	03/01/07	K.LEBLANC
C-3 B-2 C-5	J	MHAN-7USNFG.VER01	DIM 11.75 WAS 11.73 DIM 15.75 WAS 15.725 DIM 15.75 WAS 15.73 FIXED ASSEMBLY, NO PRODUCT CHANGE. DRAFTING ERROR	HCL-MH	09/29/2009	M.HANRAHAN

BACKPLANE GUIDANCE/POLARIZING MODULE ASSEMBLY PART NUMBER ASSIGNMENT

MODULE CONFIGURATION
GUIDANCE/POLARIZING TYPE

ASSEMBLY TYPE
2 - CUSTOM LOADED, LEAD FREE
5 - UNIFORM LOAD, 702X
6 - UNIFORM LOAD, BRUSH 60
7 - CUSTOM LOADED, LEADED
8 - ADVANCED MATE, UNIFORM LOAD 702X
9 - ADVANCED MATE, UNIFORM LOAD BRUSH

MODULE ORIENTATION
0 - RIGHT

NUMBER OF COLUMNS (SEE TABLE 1)
10 - 10 COLUMN MODULE
25 - 25 COLUMN MODULE

SIGNAL CONTACT LOAD (PIN LENGTH) (SEE TABLE 2)
1 - 4.75
2 - 6.25
3 - 4.25
4 - 5.15

PLATING CODE (7)
0 - 735
1 - 732
2 - 769
3 - 768

POLARIZING PIN LOCATION CODE (1)

TABLE 5 (17) (18)

GUIDE/POLARIZING PIN	PART NUMBER	N	P
STANDARD GUIDE PIN	564-0385-553	19.3	-
CUSTOM GUIDE PIN	564-0420-553	17.3	-
CUSTOM GUIDE PIN	564-0487-553	13.4	-
STANDARD POL PIN	564-0387-540	-	12.6
CUSTOM POL PIN	564-0457-553	-	12.6

TABLE 6 (16)

ASSEMBLY P/N	REV
499-(5.6.8.9)XXX-XXX	N

TABLE 1

ASSEMBLY PART NUMBER	BACKPLANE GUIDANCE POLARIZING MODULE	K	(L)	M	P	TOTAL NUMBER OF SIGNAL CONTACTS	TOTAL NUMBER OF GROUND SHIELDS
499-(5.6.8.9)010-XXX	499-0010-070	9	(18.00)	18.00	27	60	10
499-(5.6.8.9)025-XXX	499-0025-070	24	(48.00)	48.00	57	150	25

TABLE 2

ASSEMBLY PART NUMBER	SIGNAL CONTACT	CONTACT LENGTH
499-(5.8)0XX-XX1	260-0022-(7)	4.75
499-(5.8)0XX-XX2	260-0021-(7)	6.25
499-(5.8)0XX-XX3	260-0023-(7)	4.25
499-(5.8)0XX-XX4	260-0024-(7)	5.15
499-(6.9)0XX-XX1	260-0002-(7)	4.75
499-(6.9)0XX-XX2	260-0001-(7)	6.25
499-(6.9)0XX-XX3	260-0003-(7)	4.25
499-(6.9)0XX-XX4	260-0004-(7)	5.15

TABLE 3 (SEE DETAIL W, SHT 2)

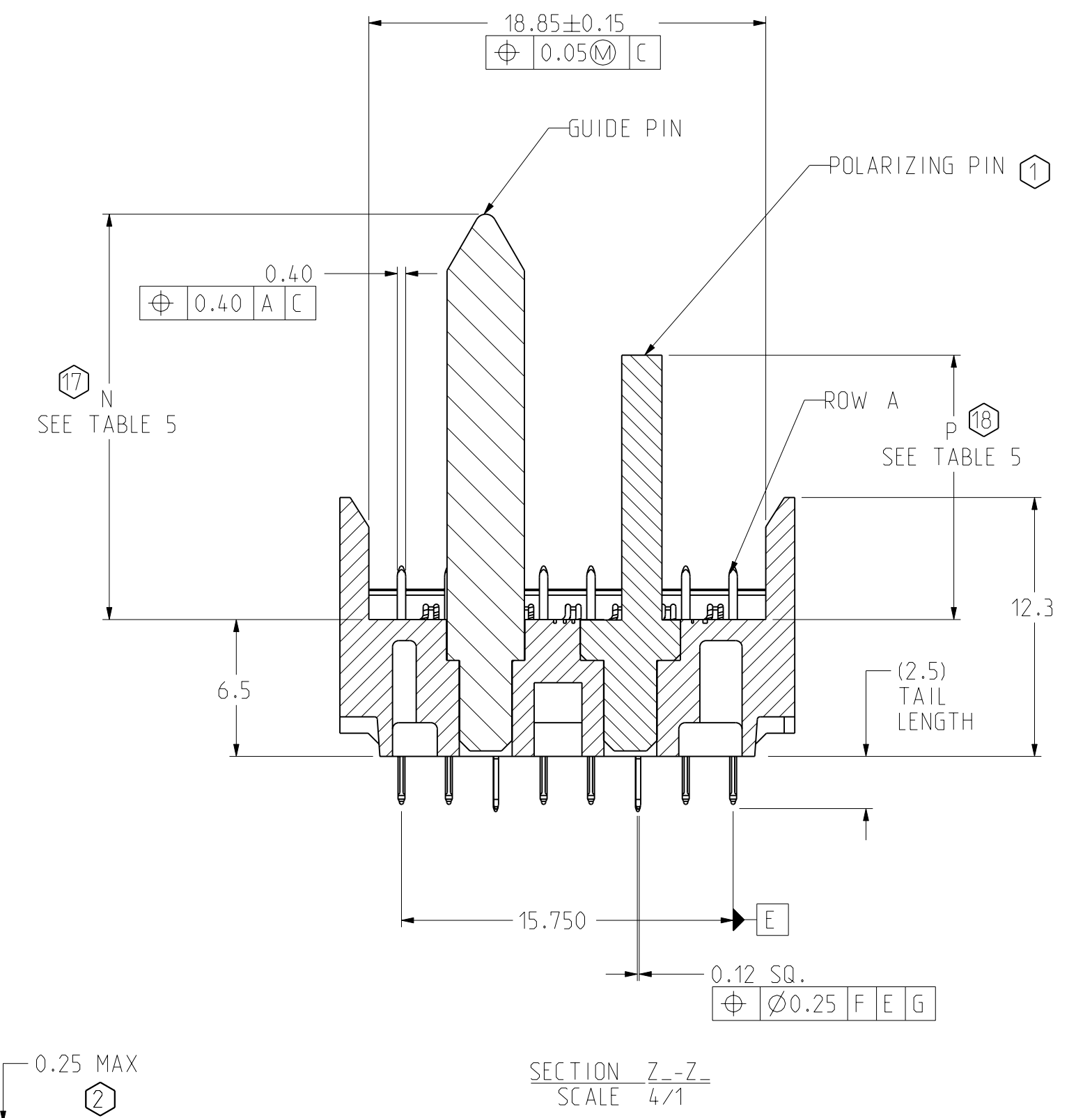
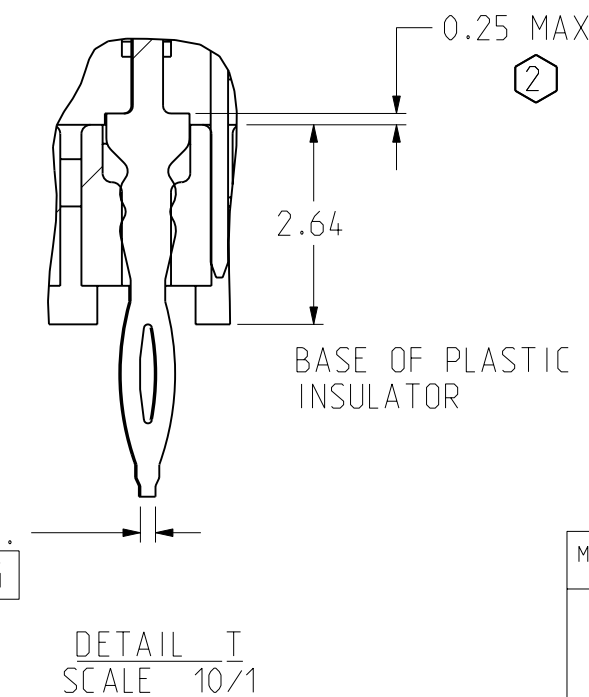
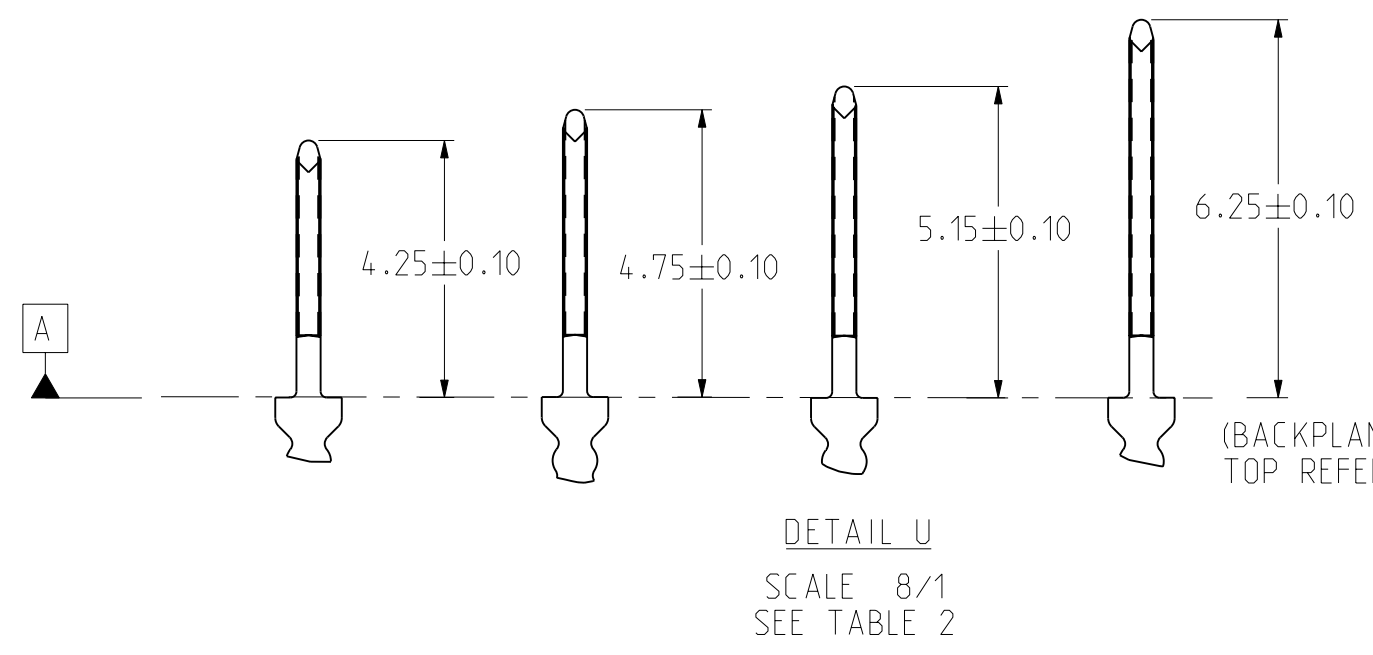
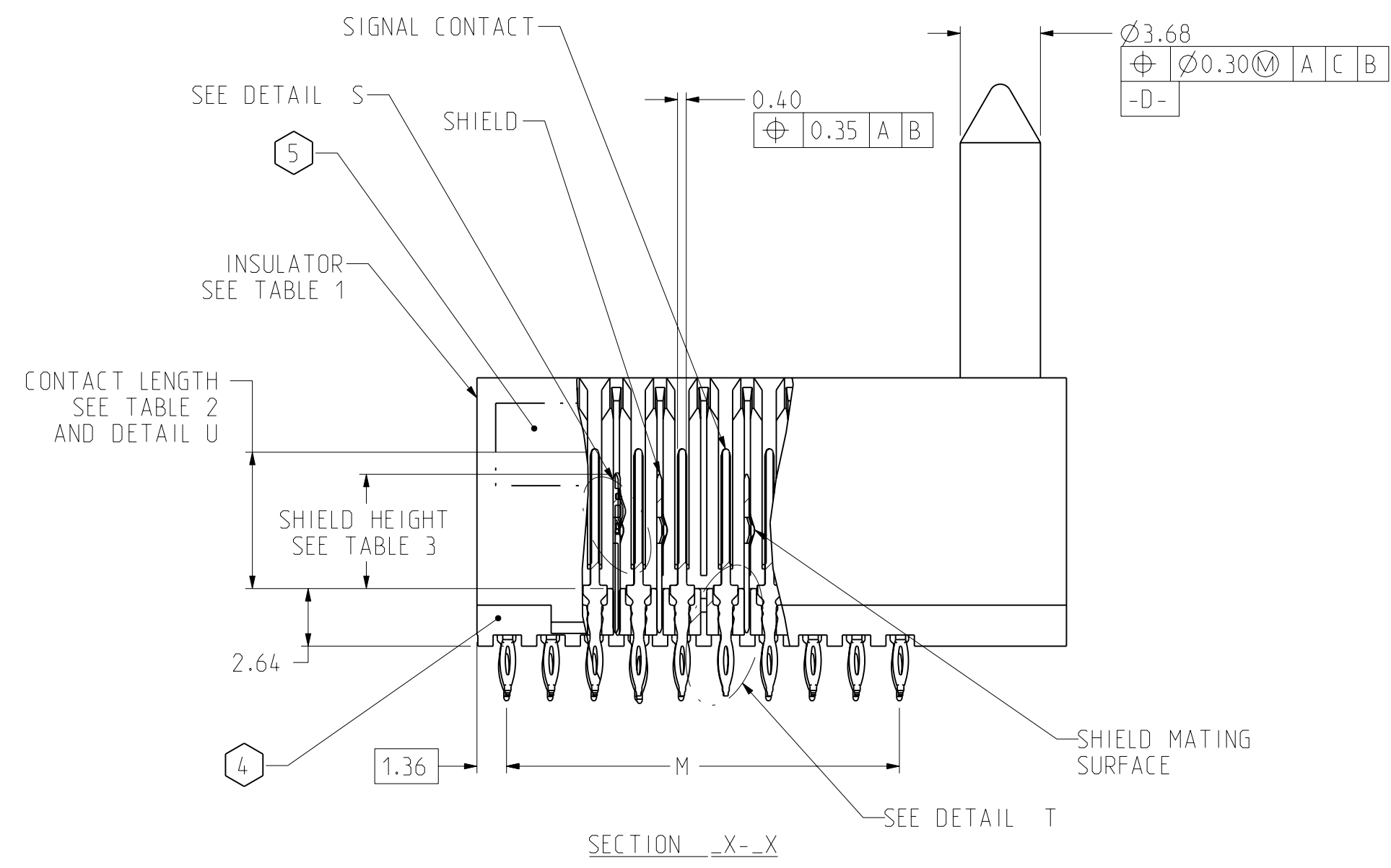
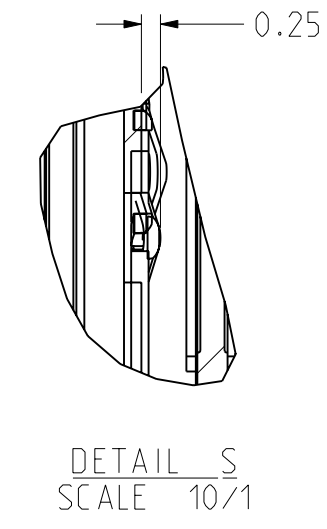
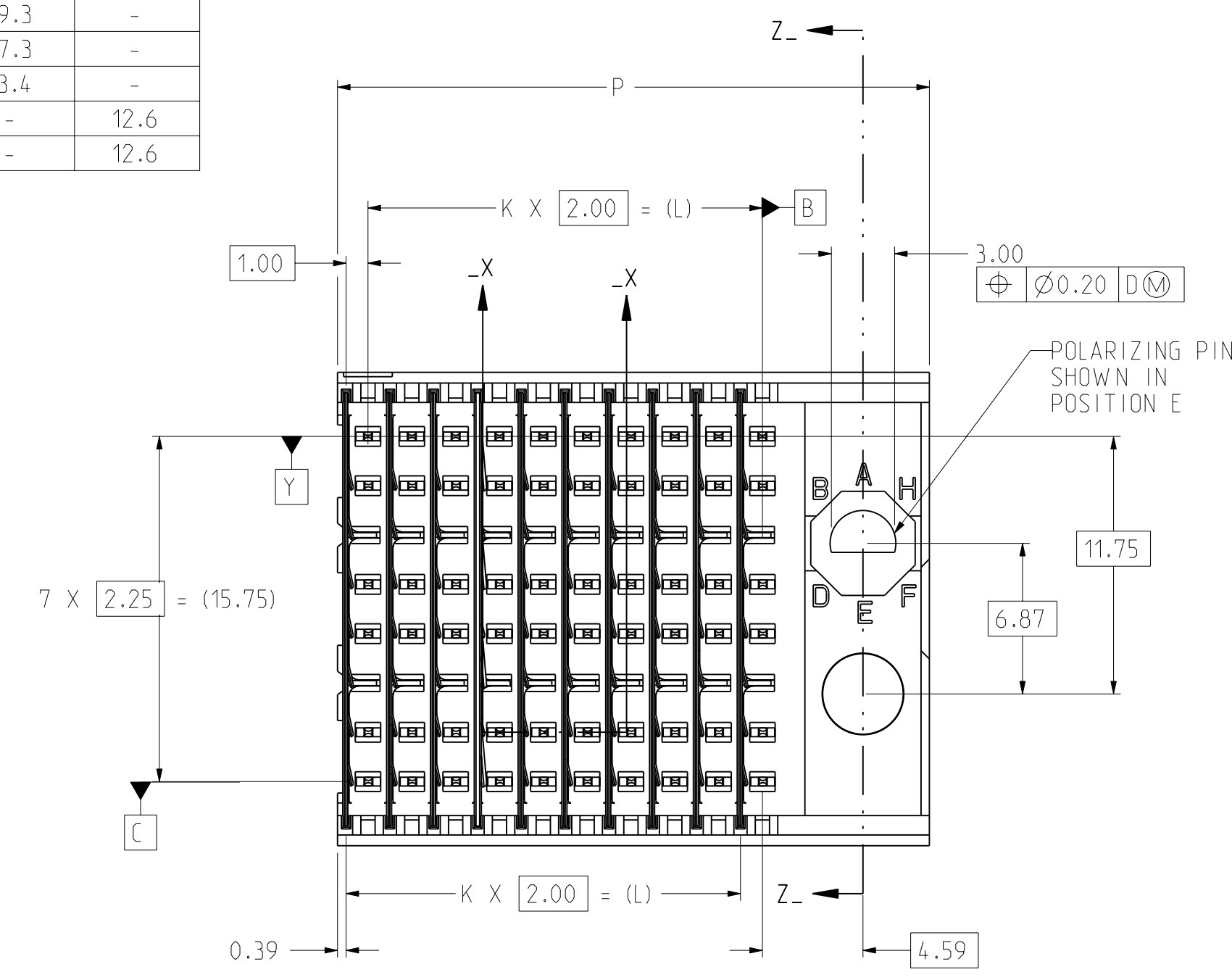
ASSEMBLY PART NUMBER	SHIELD CONTACT	CONTACT LENGTH
499-50XX-XXX	279-0022-(7)	5.3
499-60XX-XXX	279-0002-(7)	5.3
499-80XX-XXX	279-0024-(7)	5.5
499-90XX-XXX	279-0004-(7)	5.5

TABLE 4

PART NUMBER 499-(5.6.8.9)0XX-(XXX)	-0XX	-AXX	-BXX	-CXX	-DXX	-EXX	-FXX	-GXX	-HXX
POLARIZING PIN ORIENTATION									

- (16) STANDARD GUIDE PIN (564-0385-553) AND STANDARD POLARIZING PIN (564-0387-540) ARE IN STANDARD 5000 SERIES MODEL ASSEMBLIES. ANY GUIDE PIN OR POLARIZING PIN OTHER THAN THESE STANDARD NUMBERS WILL RESULT IN CUSTOM 7000 SERIES MODULE ASSEMBLIES BEING ASSIGNED.
- (17) USING GUIDE PINS THAT ARE SHORTER THAN THE STANDARD HEIGHT OF 19.3mm AND POLARIZING PINS THAT ARE SHORTER THAN THE STANDARD HEIGHT OF 12.6mm MAY NOT PROVIDE THE SUFFICIENT X AND Y AXIS ALIGNMENT AND POLARIZING PROTECTION PRIOR TO COMMENCEMENT OF ALL COMPONENT MATING SEQUENCES. CONSULT AMPHENOL-TCS APPLICATIONS ENGINEERING PRIOR TO SYSTEMS DESIGN AND COMPONENT SELECTION.
- (16) ALL PART NUMBERS ARE AT REVISION N UNLESS OTHERWISE SPECIFIED.
- 15. DATUM -G- IS DEFINED AS THE CENTERLINE OF THE CONNECTOR MEASURED FROM THE TWO OUTERMOST ROWS OF SIGNAL CONTACTS TAIL SIDE.
- 14. DATUM -F- IS DEFINED AS THE BOTTOM SURFACE OF THE PLASTIC INSULATOR.
- 13. DATUM -E- IS DEFINED AS THE CENTERLINE OF THE CONNECTOR MEASURED FROM THE TWO OUTERMOST COLUMNS OF SIGNAL CONTACTS TAIL SIDE.
- 12. DATUM -C- IS DEFINED AS THE CENTERLINE OF THE CONNECTOR MEASURED FROM THE TWO OUTERMOST ROWS OF SIGNAL CONTACT HOLES.
- 11. DATUM -B- IS DEFINED AS THE CENTERLINE OF THE TOP OF THE OUTERMOST WAFER SLOTS IN THE INSULATOR WALLS.
- 10. DATUM -A- IS DEFINED AS THE WAFER MATING SURFACE OF THE PLASTIC INSULATOR.
- 9. ROUTE DIFFERENTIAL PAIRS THROUGH ROWS A-B, D-E, AND G-H.
- (8) FOR HASL FINISH ONLY, PTH TO BE $\phi 0.61 - \phi 0.495\text{mm}$.
- (7) LAST 3 DIGITS OF SIGNAL CONTACT AND SHIELD CONTACT IS DETERMINED BY THE PLATING CODE, PER EGS 205.
- (6) IF MODULE PART NUMBER IS 499-7XXX-XXX OR 499-2XX-XXX, PART REVISION, MODULE ORIENTATION, NUMBER OF COLUMNS, PLATING CODE, AND SIGNAL CONTACT LOAD ARE NOT APPLICABLE.
- (5) PART MARKING AS FOLLOWS:
LINE 1: ATCSYYWWDHH (LOGO, YEAR, WEEK, DAY, HOUR)
LINE 2: MODULE PART NUMBER(499#####)
LINE 3: WORK ORDER NUMBER(VH#####), WHERE "*" DENOTES MANUFACTURING LOCATION.
- (4) OPEN, NOTCH END DESIGNATES COLUMN 1.
- (3) SHIELDS SHALL BE STRAIGHT WITH MAXIMUM ALLOWABLE BOW OF 0.15 MILLIMETERS ON EITHER SIDE OF SHIELD. SEE DETAIL "X".
- (2) WHEN ASSEMBLED TO BACKPLANE INSULATOR, CONTACTS MUST SEAT FLUSH WITH INSULATOR TOP SURFACE TO A MAXIMUM ALLOWABLE GAP OF 0.25.

- NOTES: (1) POLARIZING PIN MUST ALIGN AS INDICATED BY PART NUMBER CODE. (SEE TABLE 4) TO INSURE PROPER ALIGNMENT, THE OCTAGONAL BASE PORTION OF THE PIN MUST BE POSITIONED INTO THE CORRESPONDING MOLDED CAVITY.



TOLERANCES	DESIGN	11/9/99	J. GIROUX
0.0	±0.15	DRAWN	2/10/99
0.00	±0.05	CHK	4/2/99
0.000	±	APVD	4/2/99
ANGLES	± 1°	C. MURPHY	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MM/DECIMAL MAKER IS PERIOD

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Amphenol TCS
A Division of Amphenol Corporation
200 Innovative Way, Nashua, NH 03082 603.879.3000

TITLE: BACKPLANE MODULE OPEN ENDED 8 ROW DIFFERENTIAL VDM-HSD

PART NO. SEE TABLE 6

REV J

DRAWING NO. C-499-5000-500

PROE ASSEM P1006-BP-DIFF-SHRUD-GENERIC 2.46

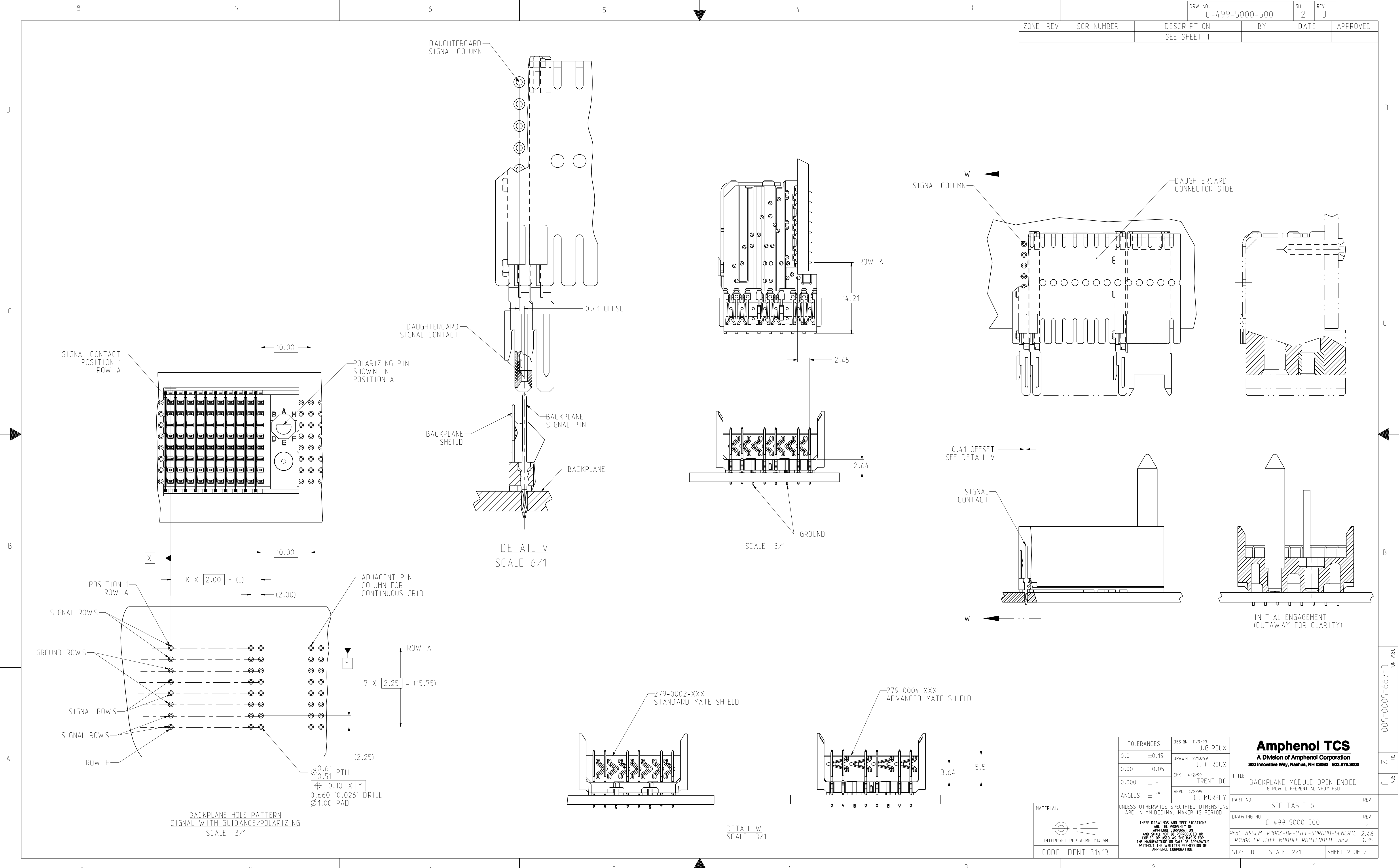
P1006-BP-DIFF-MODULE-RGTENDED .drtw 1.35

SIZE D SCALE 2/1 SHEET 1 OF 2

C-499-5000-500

SH 1 REV J

DRW NO.	C-499-5000-500	SH	2	REV	J	
ZONE	REV	SCR NUMBER	DESCRIPTION	BY	DATE	APPROVED
			SEE SHEET 1			



DETAIL V
SCALE 6/1

SCALE 3/1

DETAIL W
SCALE 3/1

INITIAL ENGAGEMENT
(CUTAWAY FOR CLARITY)

TOLERANCES	DESIGN	11/9/99
0.0	±0.15	J. GIROUX
0.00	±0.05	J. GIROUX
0.000	± -	TRENT DO
ANGLES	± 1°	C. MURPHY

MATERIAL:	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MM. DECIMAL MAKER IS PERIOD
	INTERPRET PER ASME Y14.5M
CODE IDENT	31413

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TITLE	BACKPLANE MODULE OPEN ENDED 8 ROW DIFFERENTIAL VHDM-HSD
PART NO.	SEE TABLE 6
DRAWING NO.	C-499-5000-500
PROJ ASSEM	P1006-BP-DIFF-SHROUD-GENERIC 2.46
P1006-BP-DIFF-MODULE-RGHTENDED	.drw 1.35
SIZE D	SCALE 2/1
SHEET 2 OF 2	

C-499-5000-500
 SH 2
 REV J