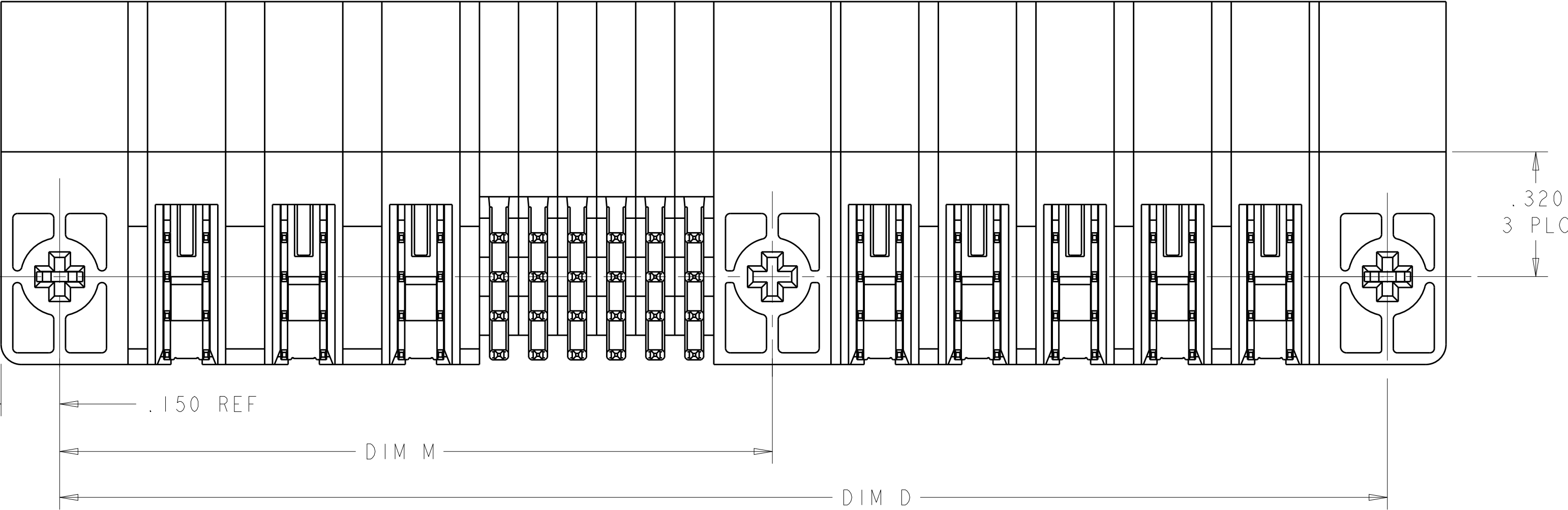
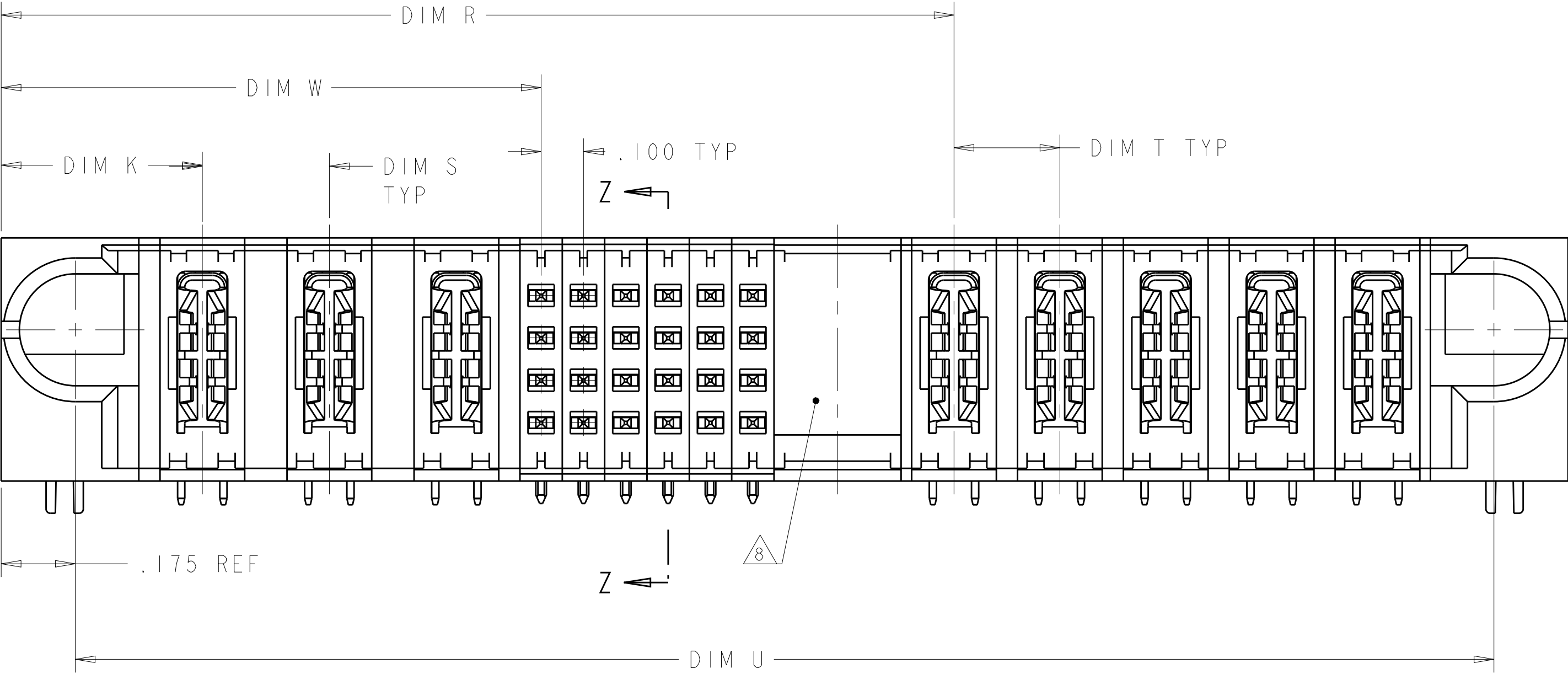
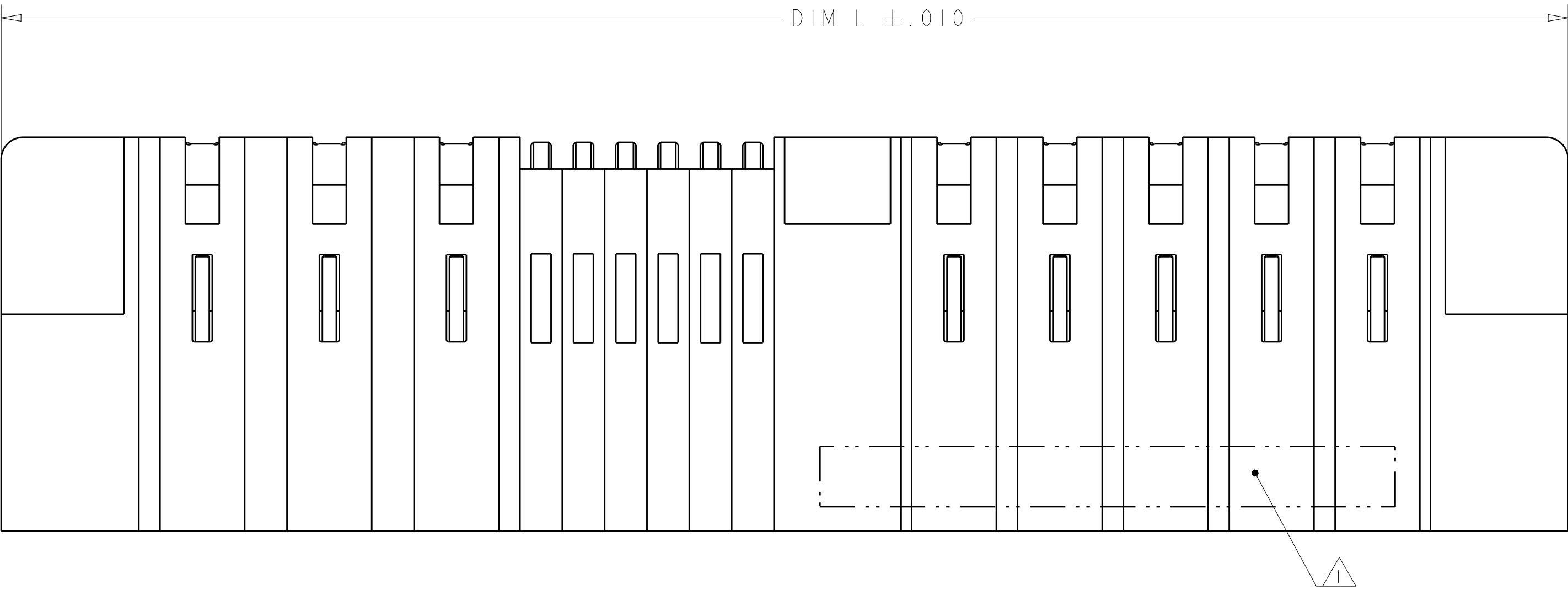
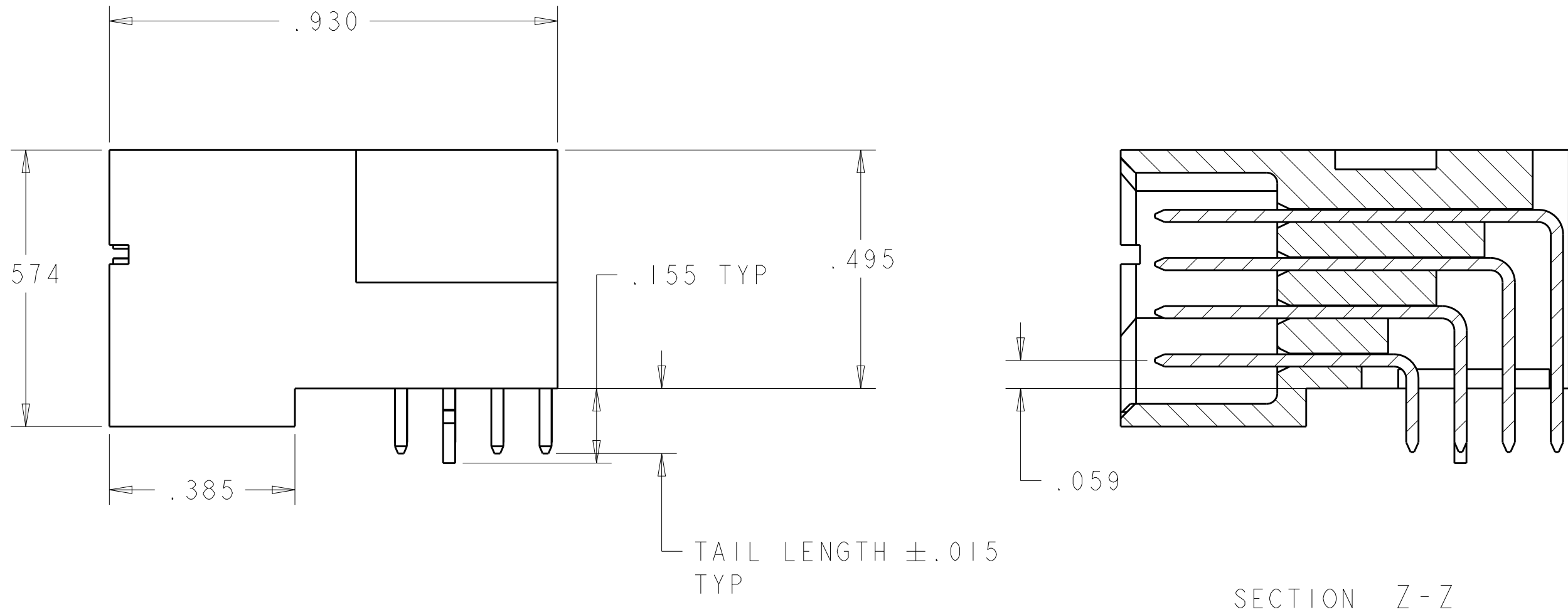


LOC	DIST	REVISIONS						
		P	LTR	DESCRIPTION	DATE	DWN	APVD	
ES	00		M1	ADD NEW DASH NUMBER 7-0	08FEB2014	AL	SZ	
			M2	ADD NEW DASH NUMBER	21MAR2014	AL	SZ	

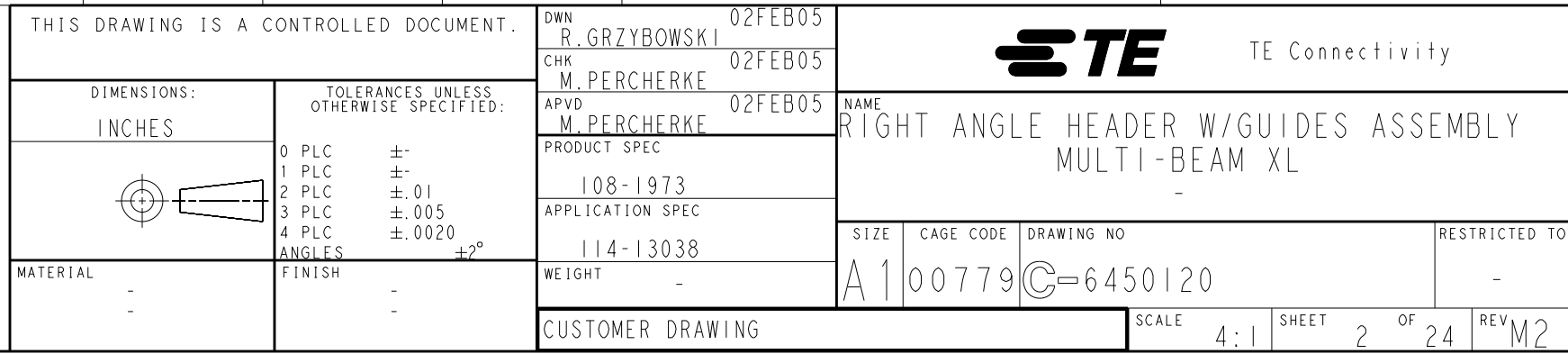


- 1 "AMP" PART NUMBER AND DATE CODE TO BE MARKED IN AREA SHOWN. PARTS UNDER 2.500 LONG MAY BE MARKED ON BOTH SIDES.
- 2 MATERIAL: HOUSING - GLASS FILLED HIGH TEMP THERMO PLASTIC, UL 94 V-0
SIGNAL CONTACT - COPPER ALLOY
POWER CONTACT - HIGH CONDUCTIVITY COPPER ALLOY.
- 3 CONTACT FINISHE:
NOBLE METAL PLATED ON THE CONTACT FUNCTIONAL AREA OF POWER AND SIGNAL CONTACTS.
- 4 MECHANICAL CONNECTOR KEEP OUT ZONE. WHEN PLACING CONNECTORS END-TO-END, ALLOW ADDITIONAL 0.1 CLEARANCE BETWEEN CONNECTORS FOR LATCH ACTIVATION.
- 5 DATUM AND BASIC DIMENSIONS ESTABLISHED BY CUSTOMER.
- 6 PCB - ALL HOLE DIAMETERS ARE FINISHED HOLE SIZES.
- 7 PCB - .0453±.0010 DRILLED HOLES PLATED WITH .0003 MIN Sn OVER .001 TO .003 Cu PLATING TO ACHIEVE A .040 DIA HOLE.
- 8 OPTIONAL CENTER MODULE WITH Ø.150 THRU HOLE OR HOLD DOWN FEATURE.

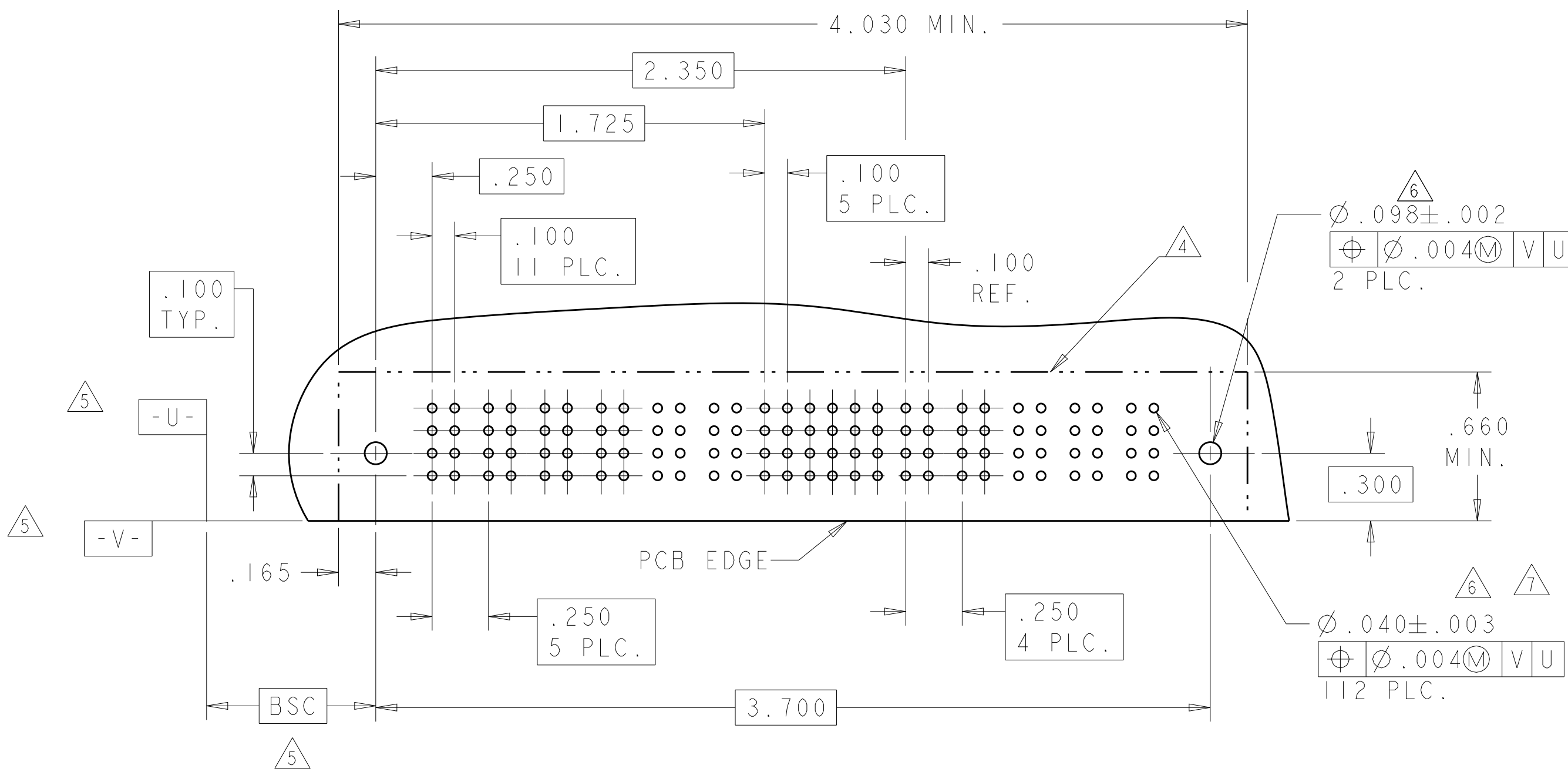


THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN R.GRZYBOWSKI	02FEB05	TE Connectivity	
		CHK M.PERCHERKE	02FEB05		
DIMENSIONS: INCHES		APVD M.PERCHERKE	02FEB05	NAME RIGHT ANGLE HEADER W/GUIDES ASSEMBLY MULTI-BEAM XL	
		TOLERANCES UNLESS OTHERWISE SPECIFIED:		PRODUCT SPEC	
		0 PLC ±"		108-1973	
		1 PLC ±.01		APPLICATION SPEC	
		2 PLC ±.01		114-13038	
		3 PLC ±.005		WEIGHT	
		4 PLC ±.0020		A100779C=6450120	
		ANGLES ±2°		CUSTOMER DRAWING	
		FINISH		SCALE 4:1 SHEET 1 OF 24 REV M2	

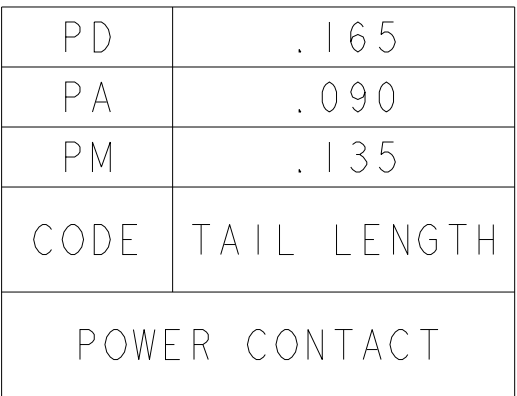
1.700	.250	.250	1.300	.875	1.750	-	2.050	.450	2P+16S+2P	7-6450120-1
2.700	.200	-	2.600	1.425	2.750	-	3.050	.450	5P + 44S + 1P	7-6450120-0
1.100	-	-	1.000	.625	1.150	-	1.450	.450	1P+12S+1P	6-6450120-9
1.000	-	-	.900	.625	1.050	-	1.350	.450	1P + 8S + 1P	6-6450120-8
2.850	.300	.200	2.125	1.825	2.900	-	3.200	.450	7HDP + 8S + 3ACP	6-6450120-7
2.650	.250	.200	1.550	.875	2.700	-	3.000	.450	2P + 24S + 6P	6-6450120-6
2.300	.300	.250	1.950	1.275	2.350	-	2.650	.475	3ACP + 24S + 2P	6-6450120-5
3.100	.250	.250	2.250	1.875	3.150	-	3.450	.450	6P + 12S + 4P	6-6450120-4
2.400	.250	.250	1.800	1.125	2.450	-	2.750	.475	3P + 24S + 3P	6-6450120-1
3.000	.300	.250	1.650	1.325	3.050	-	3.350	.475	3ACP + 8S + 6P	6-6450120-0
1.900	.300	.250	1.550	1.275	1.950	-	2.250	.475	3ACP + 8S + 2P	5-6450120-9
2.800	-	-	-	0.375	2.850	-	3.150	-	100S	5-6450120-8
2.700	.250	.250	2.100	1.125	2.750	-	3.050	.450	3P + 36S + 3P	5-6450120-7
1.100	-	-	1.000	.625	1.150	-	1.450	.450	1P + 12S + 1P	5-6450120-6
3.250	.300	.250	2.525	2.175	3.300	-	3.600	.450	7P + 8S + 3ACP	5-6450120-5
2.400	.250	.250	1.550	.875	2.450	-	2.750	.450	2P + 24S + 4P	5-6450120-3
5.400	.300	.300	2.875	2.175	5.450	-	5.750	.475	6P + 24S + 9P	5-6450120-2
3.800	.250	.300	1.875	1.375	3.850	-	4.150	.450	4P + 16S + 7ACP	5-6450120-0
1.600	.250	.250	1.250	.875	1.650	-	1.950	.450	2P + 12S + 2P	4-6450120-9
2.900	.250	.250	2.050	1.375	2.950	-	3.250	.450	4P + 24S + 4P	4-6450120-8
1.900	.250	.250	1.550	0.875	1.950	-	2.250	.450	2P + 24S + 2P	4-6450120-7
2.000	.250	.250	1.400	1.125	2.050	-	2.350	.450	3P + 8S + 3P	4-6450120-6
2.900	.250	.250	3.550	2.875	5.950	-	6.250	.450	10P + 24S + 10P	4-6450120-5
3.700	.200	.300	2.700	2.025	3.750	-	4.050	.450	8P + 24S + 4ACP	4-6450120-4
2.900	.300	.250	2.050	1.575	2.950	-	3.250	.475	4ACP+16S+4P	4-6450120-3
4.375	.250	.300	3.375	2.375	4.425	3.100	4.725	.450	8P + 24S + 1M + 4ACP	4-6450120-2
4.100	.300	.250	2.250	1.575	4.150	-	4.450	.475	4ACP + 24S + 8P	4-6450120-0
3.800	.250	.250	3.450	.875	3.850	-	4.150	.450	2P + 100S + 2P	3-6450120-6
4.600	.250	.250	3.250	1.875	4.650	-	4.950	.450	6P + 52S + 6P	3-6450120-5
5.100	.250	.250	3.500	2.175	5.150	-	5.450	.450	7P + 48S + 7P	3-6450120-4
3.500	.250	.300	2.775	2.375	3.550	-	3.850	.450	8P + 12S + 3ACP	3-6450120-3
4.000	.200	.200	2.700	1.825	4.050	-	4.350	.450	7HDP + 32S + 7HDP	3-6450120-0
3.900	.250	.250	2.550	1.875	3.950	-	4.250	.450	6P + 24S + 6P	2-6450120-7
5.200	.300	.250	2.350	1.625	5.250	-	5.550	.475	4ACP + 24S + 12P	2-6450120-6
2.500	.250	.250	2.150	1.425	2.550	-	2.850	.450	4P + 24S + 2P	2-6450120-5
3.600	.250	.250	2.500	1.625	3.650	-	3.950	.450	5P + 32S + 5P	2-6450120-4
2.500	.250	.250	2.150	.875	2.550	-	2.850	.450	2P + 48S + 2P	2-6450120-3
4.500	.300	.250	1.650	.975	4.550	-	4.850	.475	2ACP + 24S + 12P	2-6450120-2
2.850	.250	.250	2.000	1.125	2.900	-	3.200	.450	3P + 32S + 4P	2-6450120-1
3.950	.200	.250	2.125	1.025	4.000	-	4.300	.425	3P + 40S + 8P	2-6450120-0
1.400	-	-	1.300	.625	1.450	-	1.750	.450	1P + 24S + 1P	1-6450120-6
2.000	.300	.300	1.575	.975	2.050	-	2.350	.475	2P + 20S + 2P	1-6450120-4
1.200	-	-	1.100	.625	1.250	-	1.550	.450	1P + 16S + 1P	1-6450120-3
2.400	.250	.250	1.800	1.125	2.450	-	2.750	.450	3P + 24S + 3P	1-6450120-2
2.675	.200	.200	2.375	1.650	2.725	-	3.025	.450	5P + 24S + 2P	1-6450120-1
4.350	.250	.250	3.500	2.625	4.400	-	4.700	.450	9P + 32S + 4P	1-6450120-0
4.150	.250	.250	2.800	2.125	4.200	-	4.500	.450	7P + 24S + 6P	6450120-9
2.800	.250	.300	2.075	1.375	2.850	-	3.150	.450	4P + 24S + 3ACP	6450120-8
3.050	.300	.250	1.950	1.275	3.100	-	3.400	.475	3ACP + 24S + 5P	6450120-7
7.400	.250	.250	5.050	2.875	7.450	-	7.750	.450	10P + 84S + 10P	6450120-6
4.350	.250	.250	3.000	2.125	4.400	-	4.700	.450	7P + 32S + 6P	6450120-5
3.650	.250	.250	2.550	1.875	3.700	-	4.000	.450	6P + 24S + 5P	6450120-4
2.900	.250	.250	1.800	1.125	2.950	-	3.250	.450	3P + 24S + 5P	6450120-3
1.900	.250	.250	1.550	0.875	1.950	-	2.250	.450	2P + 24S + 2P	6450120-2
5.100	.250	.250	3.250	2.375	5.150	-	5.450	.450	8P + 32S + 8P	6450120-1
U	S	T	R	W	D	M	L	K	DESCRIPTION	PART NUMBER

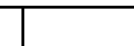
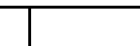


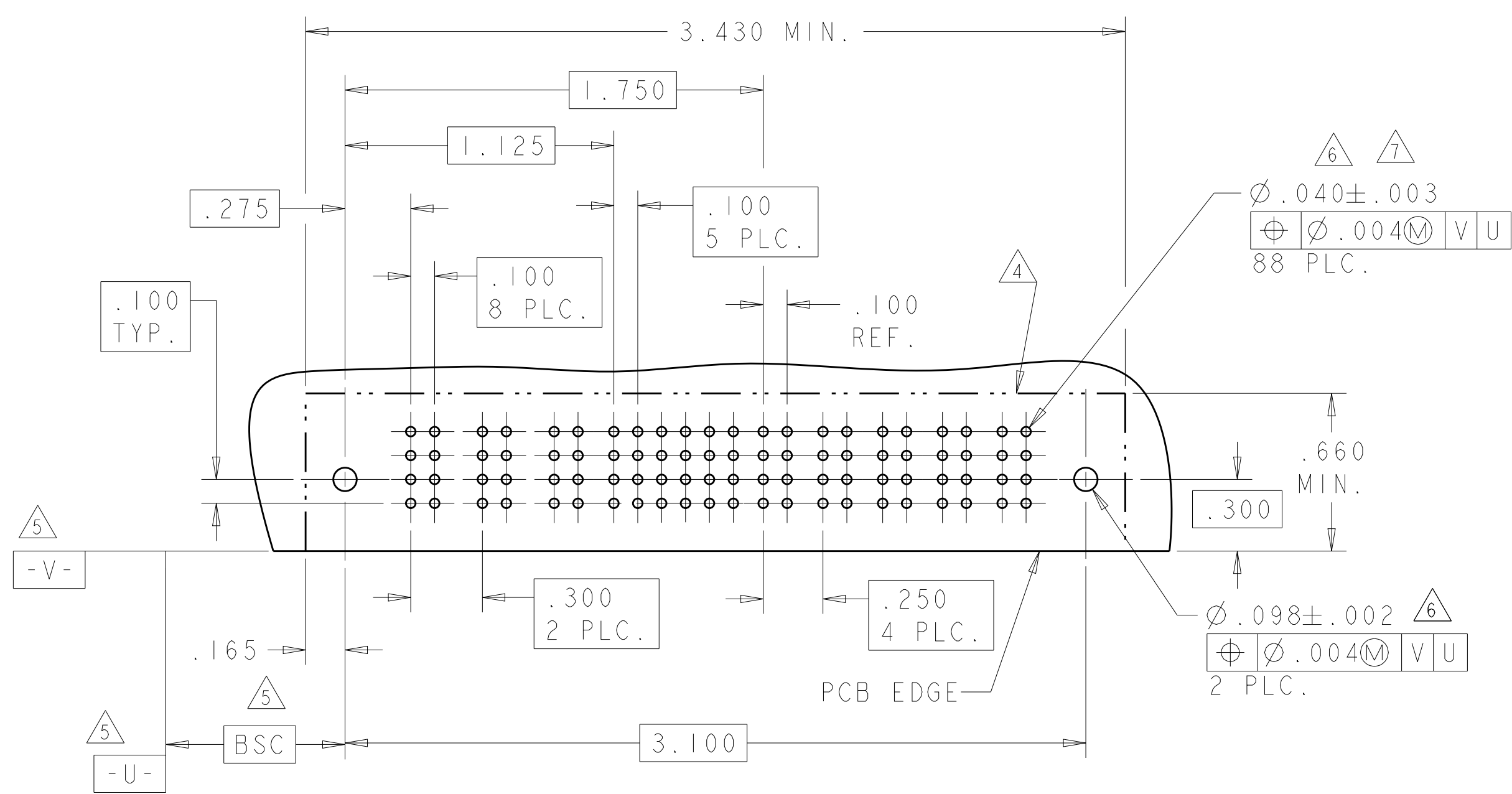
PART NUMBER	ROWS		POWER						SIGNAL						POWER						
			P1	P2	P3	P4	P5	P6	1	2	3	4	5	6	P7	P8	P9	P10	P11		
6450120-4	D C B A		PM	PM	PM	PM	PM	PM	J	J	J	J	J	J	PM	PM	PM	PM	PM		
									K	K	K	K	K	K							
									N	N	N	N	N	N							
									S	S	S	S	S	S							
6P + 24S + 5P																					



H	MLBF	.135	A
G	MLBF	.135	B
F	MLBF	.135	C
E	MLBF	.135	D
L4	STD	.165	D
L3	STD	.165	B
L2	STD	.165	C
L1	STD	.165	A
Z	STD	.090	D
Y	STD	.090	C
R	STD	.090	B
O	STD	.090	A
F	MLBF	.135	C
G	MLBF	.135	B
J	STD	.135	D
K	STD	.135	C
N	STD	.135	B
S	STD	.135	A
CODE	MATING SEQUENCE	TAIL LENGTH	ROW

4805 (3/11)

PART NUMBER	ROWS		POWER			SIGNAL						POWER					
			P1	P2	P3	1	2	3	4	5	6	P4	P5	P6	P7	P8	
6450120-7	D		PM	PM	PM	J	J	J	J	J	J	PM	PM	PM	PM	PM	
	K					K	K	K	K	K							
	N					N	N	N	N	N							
	S					S	S	S	S	S							
		(HD)															(HD)
3ACP + 24S + 5P																	



7.780 MIN.

4.850

2.725

.250

.100
20 PLC.

.100
20 PLC.

.100 REF.

Ø .040 ± .003
⊕ Ø .004 (M) V U
244 PLC. ⚠ ⚠

.660 MIN.

.300

PCB EDGE

.250
9 PLC.

Ø .098 ± .002
⊕ Ø .004 (M) V U
2 PLC. ⚠

.165

.100 TYP.

-U- ⚠

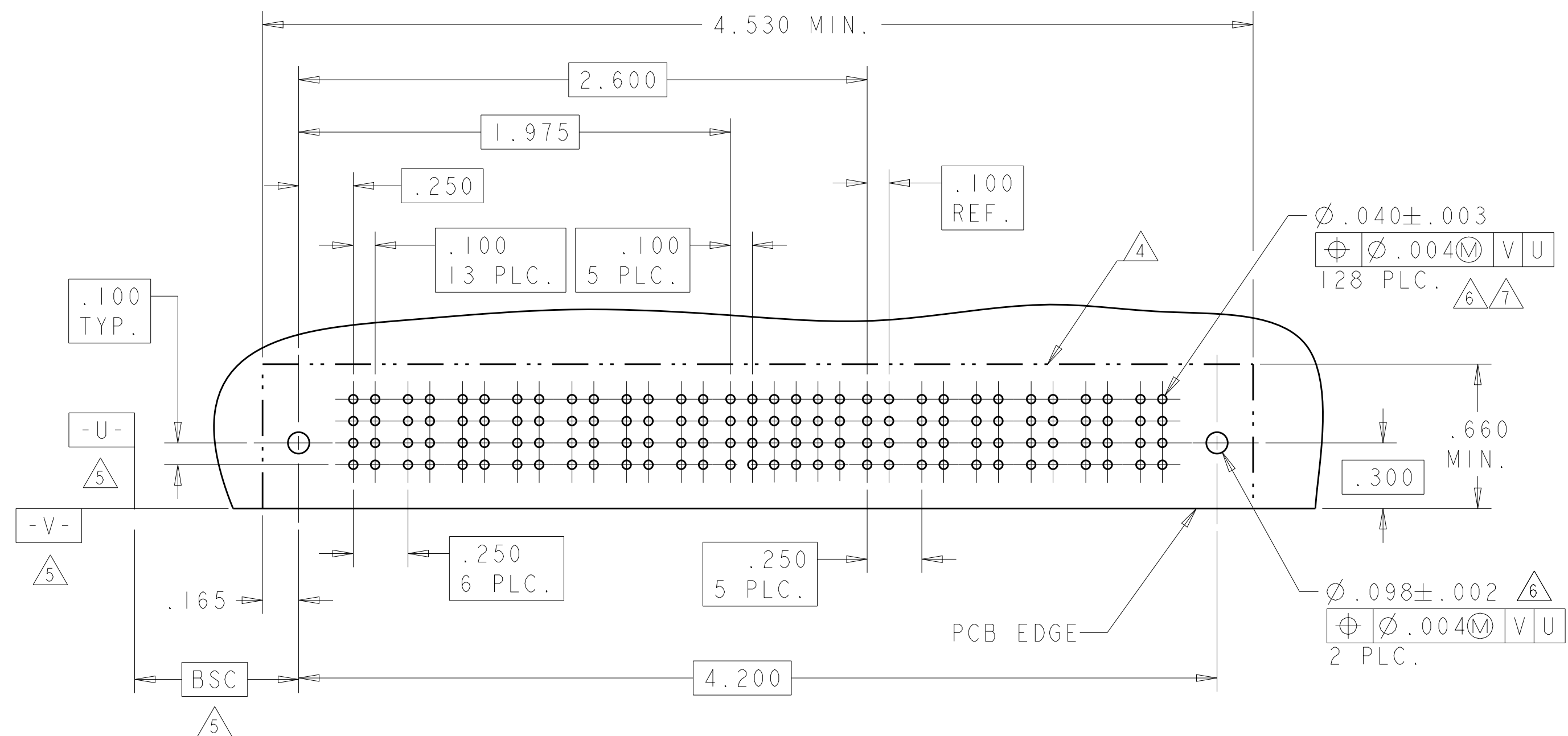
-V- ⚠

BSC

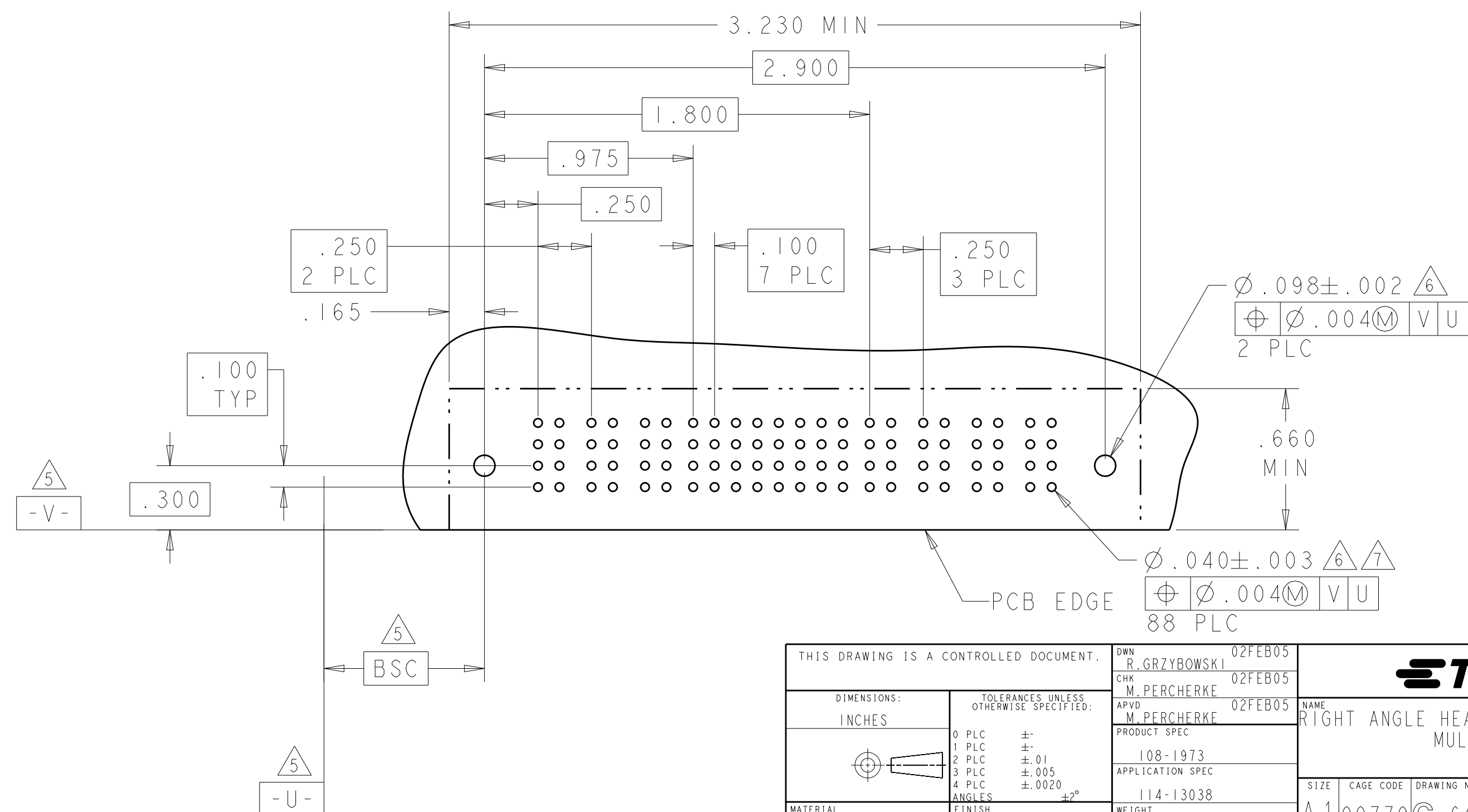
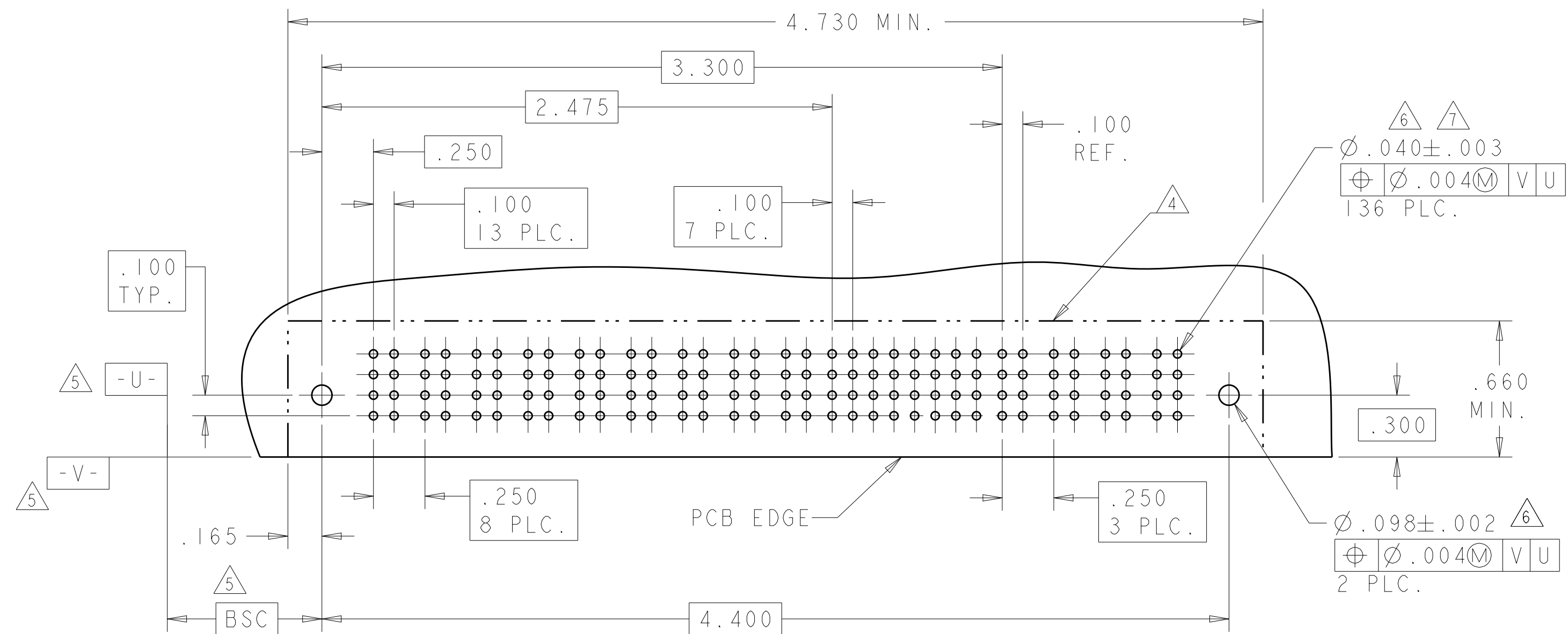
7.450

⚠

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN. GRZYBOWSKI 02FEB05 CHG. M. PERCHERKE 02FEB05 APPR. M. PERCHERKE 02FEB05		 TE Connectivity	
DIMENSIONS: INCHES		TOLERANCES UNLESS OTHERWISE SPECIFIED:		NAME: RIGHT ANGLE HEADER W/GUIDES ASSEMBLY MULTI-BEAM XL	
		0 PLC ±. 1 PLC ±. 2 PLC ±.01 3 PLC ±.005 4 PLC ±.0020 ANGLES ±0°		PRODUCT SPEC 108-1973 APPLICATION SPEC 114-13038	
MATERIAL -		FINISH -		SIZE CAGE CODE DRAWING NO RESTRICTED TO A100779C6450120 -	
WEIGHT -		CUSTOMER DRAWING		SCALE 4:1 SHEET 4 of 24 REV M	

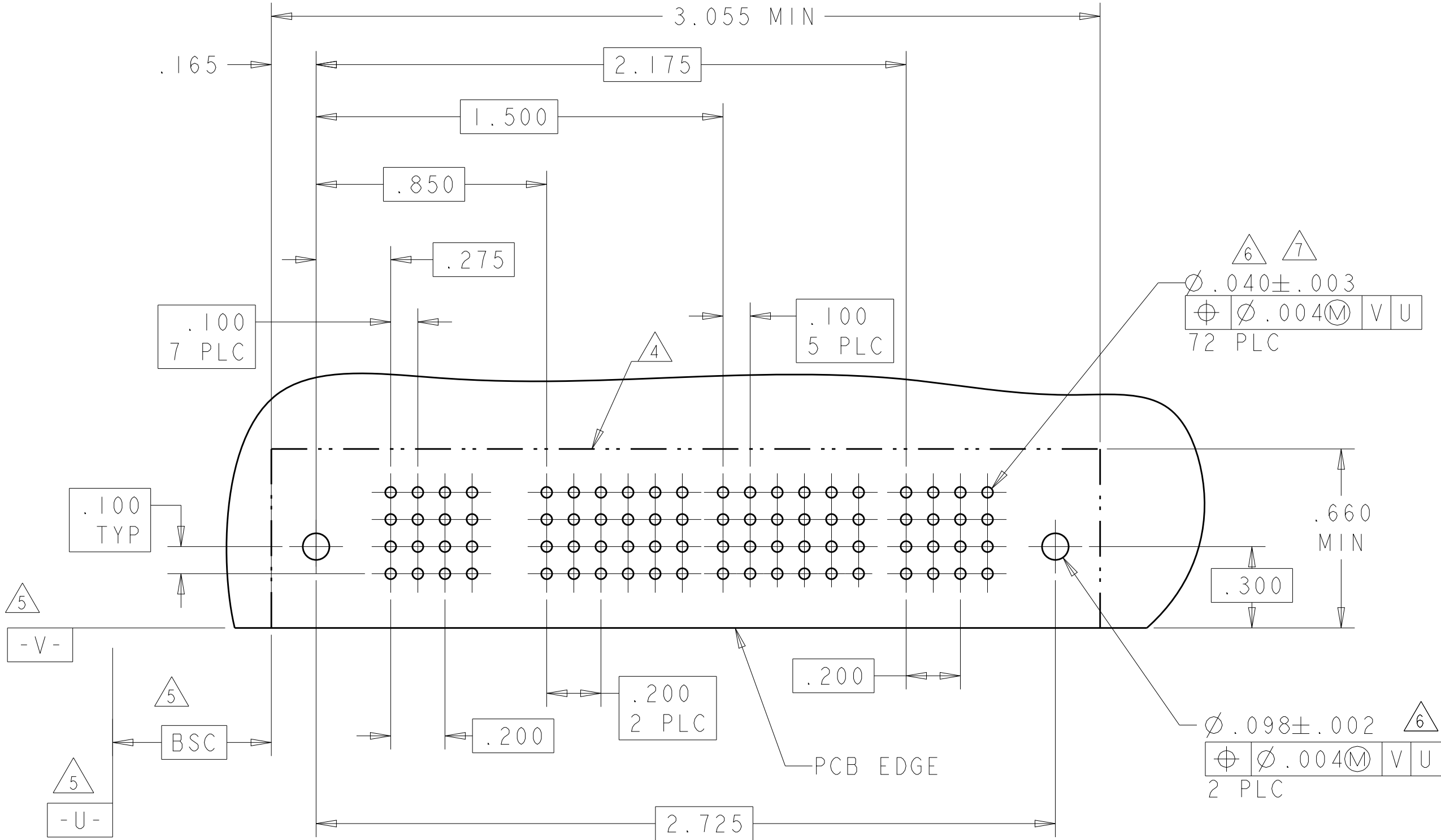


LOC	DIST	REVISIONS					
ES	00	REV	LYR	DESCRIPTION	DATE	DWN	APVD
		-		SEE SHEET 1	-	-	-

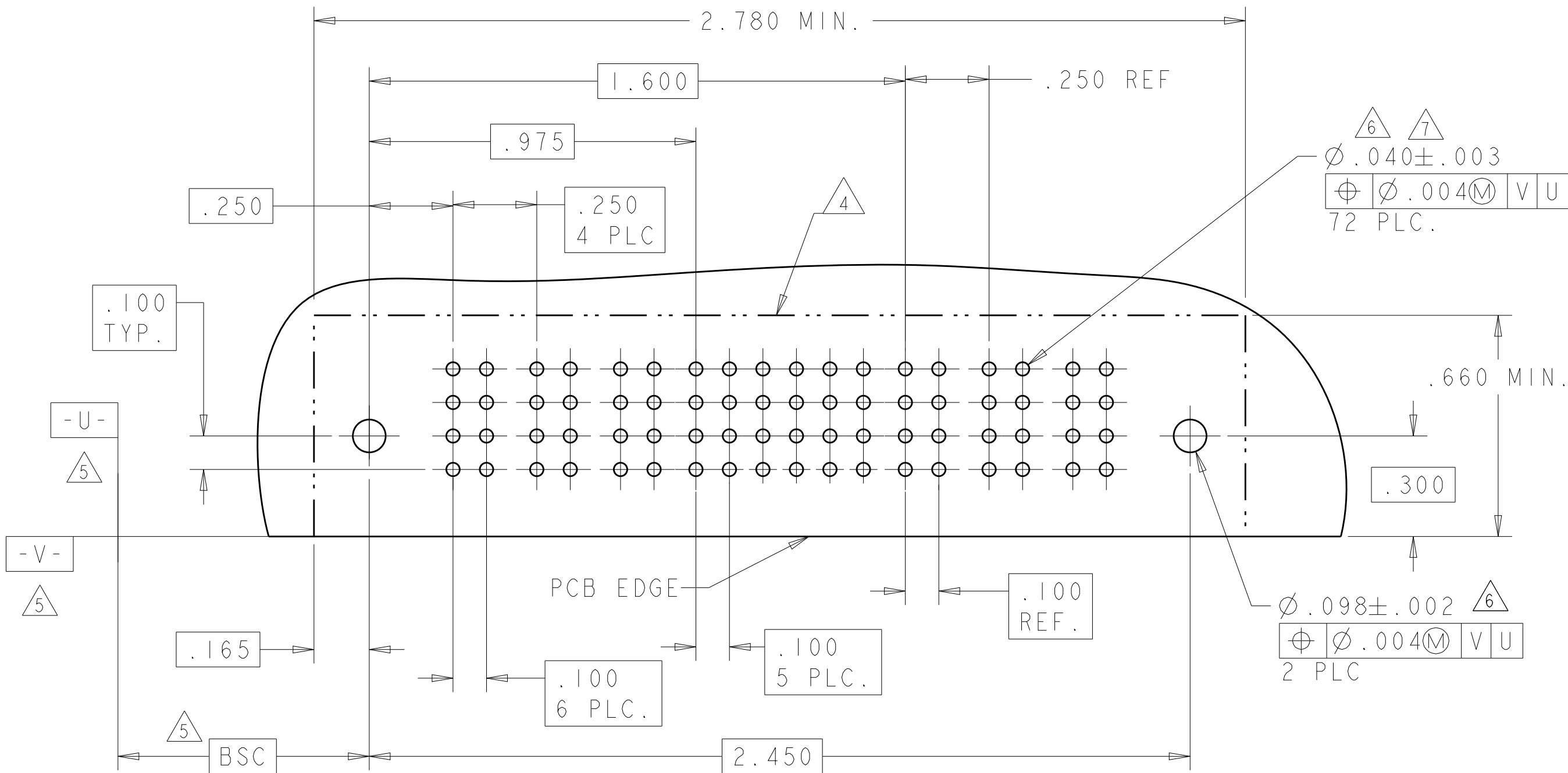


THIS DRAWING IS A CONTROLLED DOCUMENT.		PWN 02FEB05 CHK M PERCHERKE 02FEB05 M PERCHERKE 02FEB05		 TE Connectivity	
DIMENSIONS: INCHES		TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ±. 1 PLC ±.01 2 PLC ±.005 3 PLC ±.0020 ANGLES ±.3°		NAME RIGHT ANGLE HEADER W/GUIDES ASSEMBLY MULTI-BEAM XL	
		PRODUCT SPEC 108-1973 APPLICATION SPEC 114-13038		SIZE A1	
MATERIAL -		FINISH -		CASE CODE C-6450120	
WEIGHT -		CUSTOMER DRAWING -		RESTRICTED TO -	
				SCALE 4:1 SHEET 5 OF 24 REV M2	

PART NUMBER	ROWS		POWER					SIGNAL						POWER																		
			P1	P2	P3	P4	P5	1	2	3	4	5	6	P6	P7																	
I-6450120-1	D			PM	PM		PM	PM		J	J	J	J	J	J		PM	PM														
	C																			K	K	K	K	K	K							
	B																			N	N	N	N	N	N							
	A																										S	S	S	S	S	S
5P + 24S + 2P																																

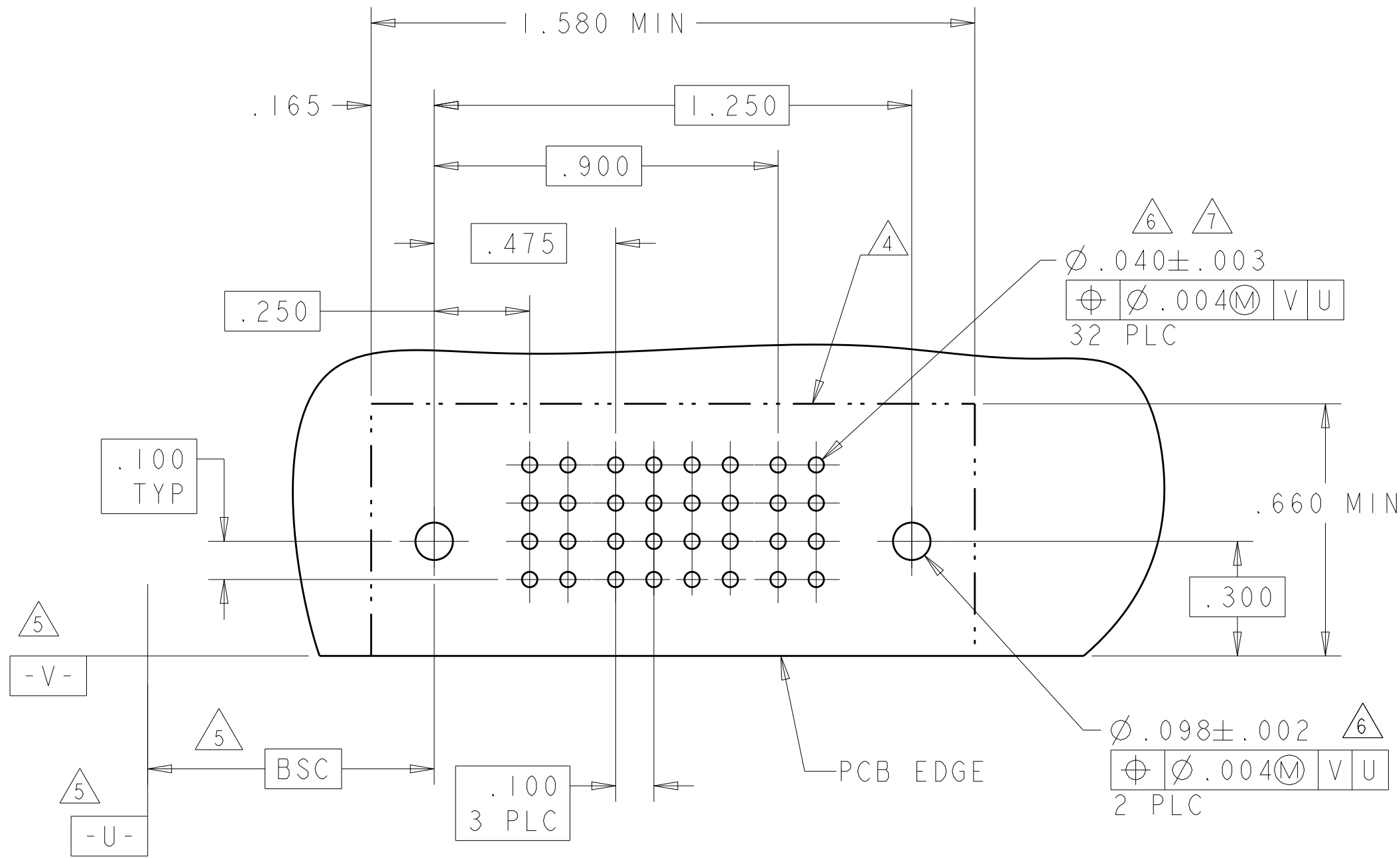


PART NUMBER	ROWS		POWER			SIGNAL						POWER									
			P1	P2	P3	1	2	3	4	5	6	P4	P5	P6							
I-6450120-2	D			PM	PM	PM	J	J	J	J	J	J	PM	PM	PM						
	C						K	K	K	K	K	K									
	B						N	N	N	N	N	N									
	A											S					S	S	S	S	S
3P + 24S + 3P																					

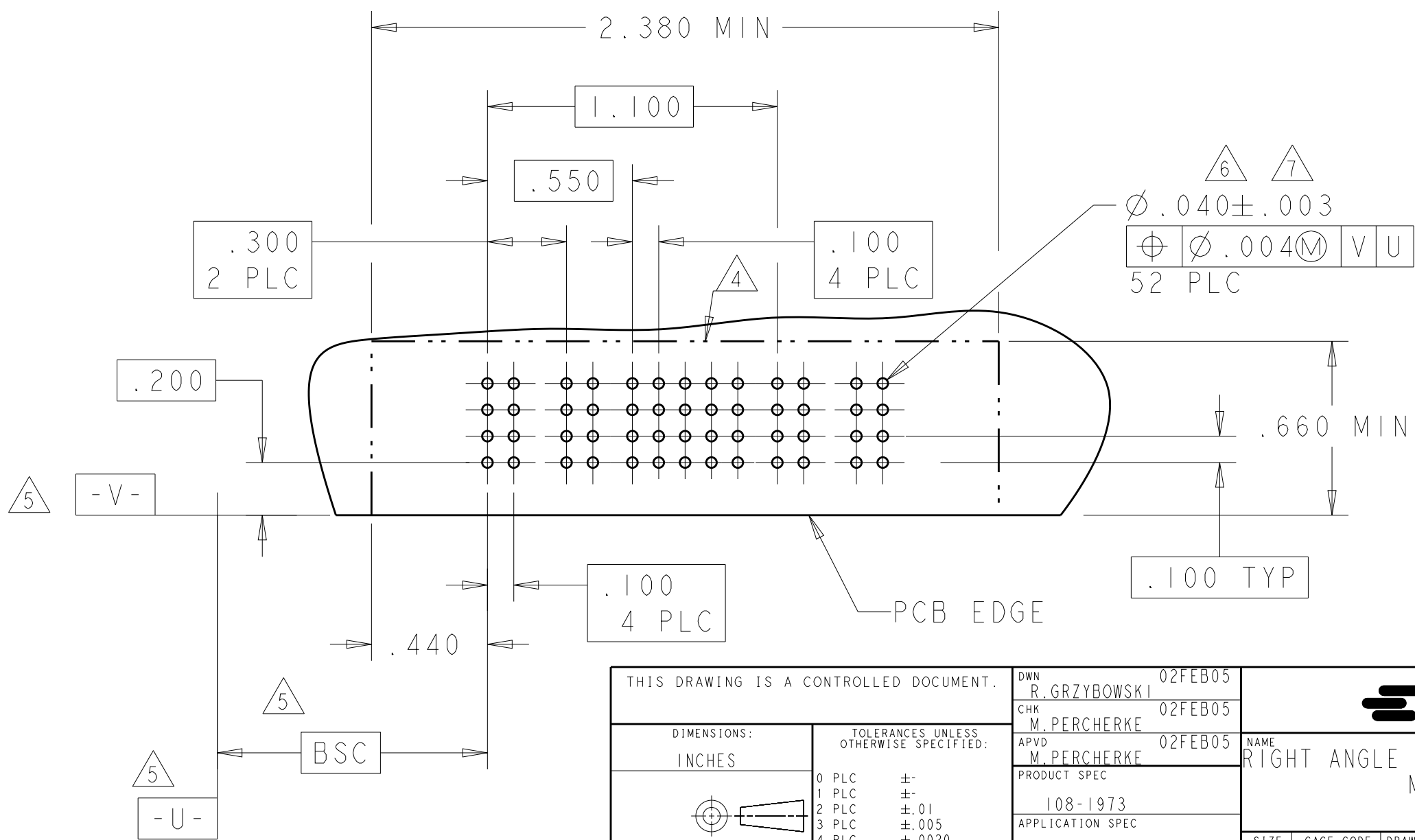


LOC	DIST	REVISIONS			
		P	LTR	DESCRIPTION	DATE
ES	00	-	-	SEE SHEET 1	-

PART NUMBER	ROWS	POWER		SIGNAL				POWER					
		P1		1	2	3	4	P2					
I-6450120-3	D		PM	J	J	J	J	PM					
	C			K	K	K	K						
	B			N	N	N	N						
	A									S	S	S	S
IP + 16S + IP													



PART NUMBER	ROWS		POWER		SIGNAL					POWER							
			P1	P2	1	2	3	4	5	P3	P4						
I-6450120-4	D		PM	PM	J	J	J	J	J	PM	PM						
	C				K	K	K	K	K								
	B				N	N	N	N	N								
	A												S	S	S	S	S
2P + 20S + 2P																	



THIS DRAWING IS A CONTROLLED DOCUMENT.

OWN: R. GRZYBOWSKI 02FEB05
CHK: M. PERCHERKE 02FEB05
APVD: M. PERCHERKE 02FEB05

DIMENSIONS: INCHES
TOLERANCES UNLESS OTHERWISE SPECIFIED:
0 PLC ±.01
1 PLC ±.01
2 PLC ±.01
3 PLC ±.01
4 PLC ±.01
ANGLES ±.020

MATERIAL: -
FINISH: -

NAME: RIGHT ANGLE HEADER W/GUIDES ASSEMBLY MULTI-BEAM XL

PRODUCT SPEC: 108-1973
APPLICATION SPEC: 114-13038
WEIGHT: -

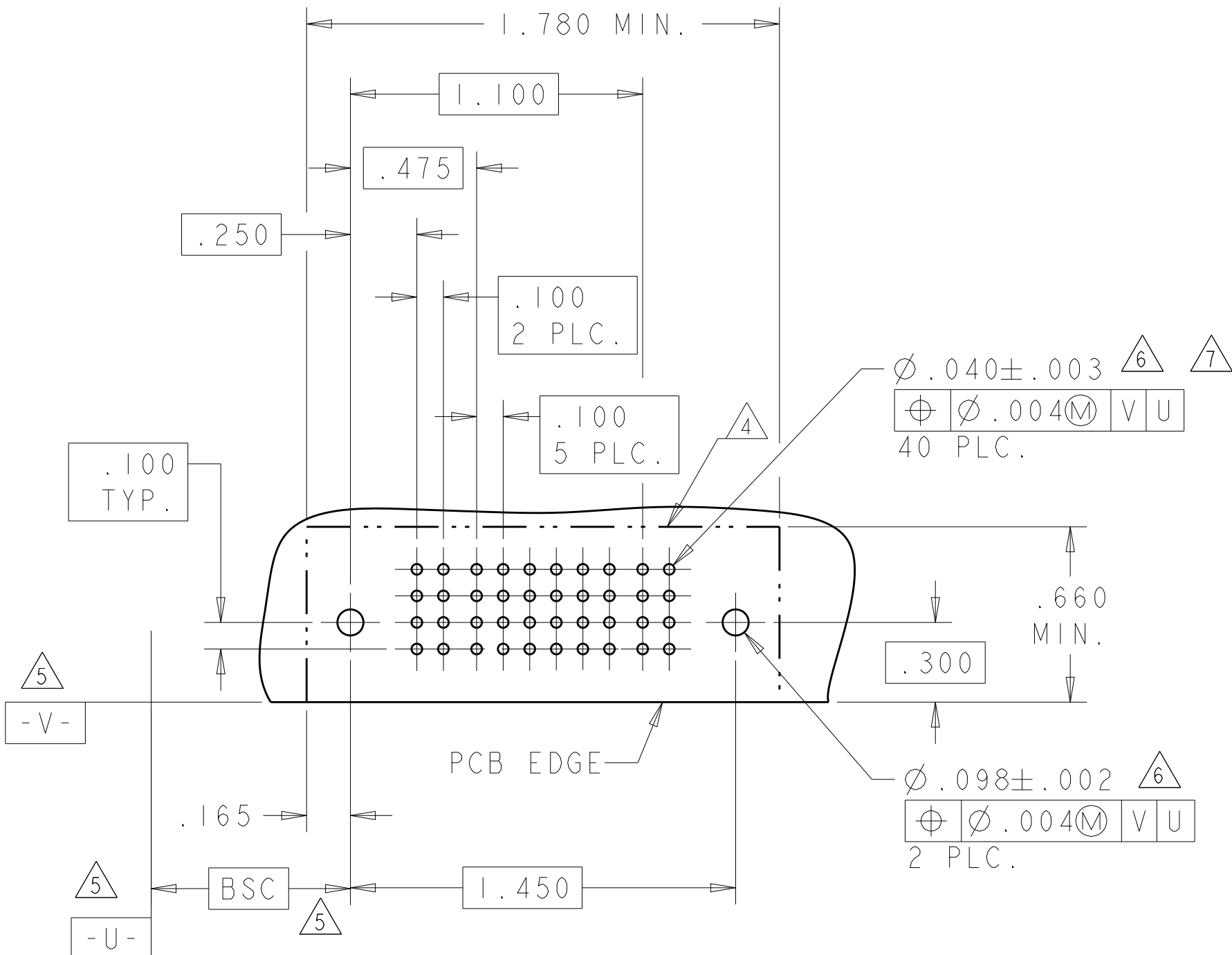
SIZE: A1
CAGE CODE: 100779
DRAWING NO: 6450120

RESTRICTED TO: -
SCALE: 4:1
SHEET: 6 OF 24
REV: M2

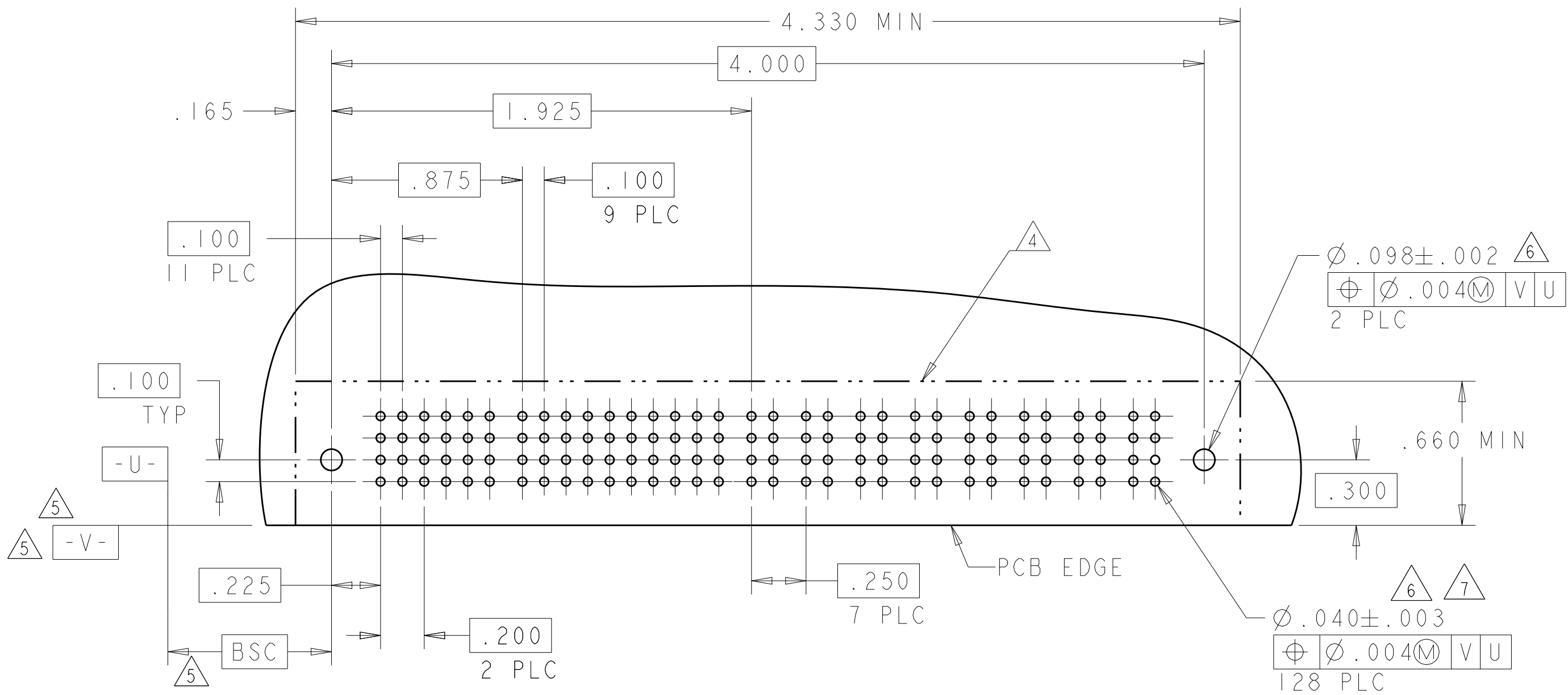
TE Connectivity

CUSTOMER DRAWING

PART NUMBER	ROWS	POWER		SIGNAL						POWER	
		PI	P2	1	2	3	4	5	6	P2	P1
1-6450120-6	D	PA	PA	Z	Z	Z	Z	Z	Z	PA	PA
	C			Y	Y	Y	Y	Y	Y		
	B			R	R	R	R	R	R		
	A			O	O	O	O	O	O		
IP + 24S + IP											

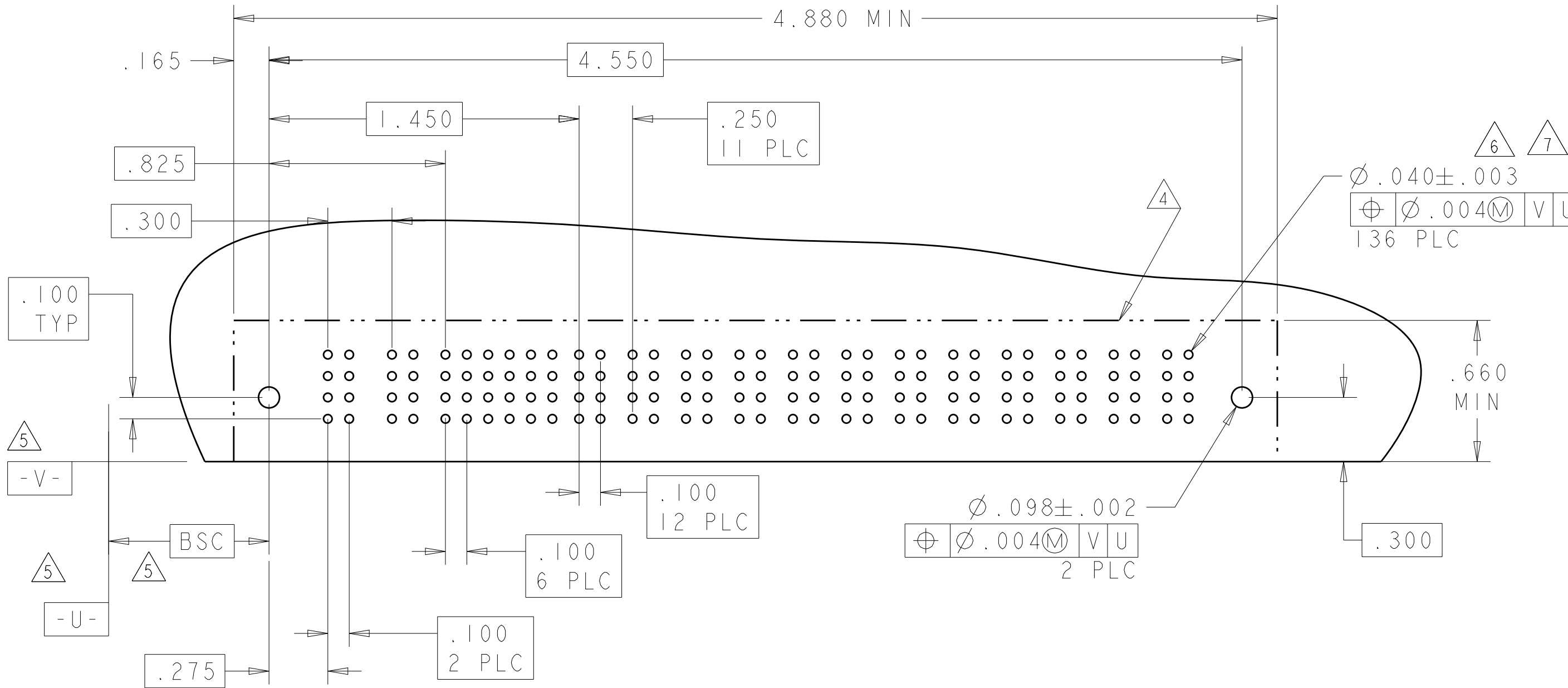


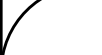
PART NUMBER	ROWS		POWER			SIGNAL										POWER								
			P1	P2	P3	1	2	3	4	5	6	7	8	9	10	P4	P5	P6	P7	P8	P9	P10	P11	
2-6450120-0	D		PM	PM	PM	J	J	J	J	J	J	J	J	J	J	PM	PM	PM	PM	PM	PM	PM	PM	
	K					K	K	K	K	K	K	K	K	K	K									
	N					N	N	N	N	N	N	N	N	N	N									N
	S					S	S	S	S	S	S	S	S	S	S									S
3P + 40S + 8P			HD																					HD

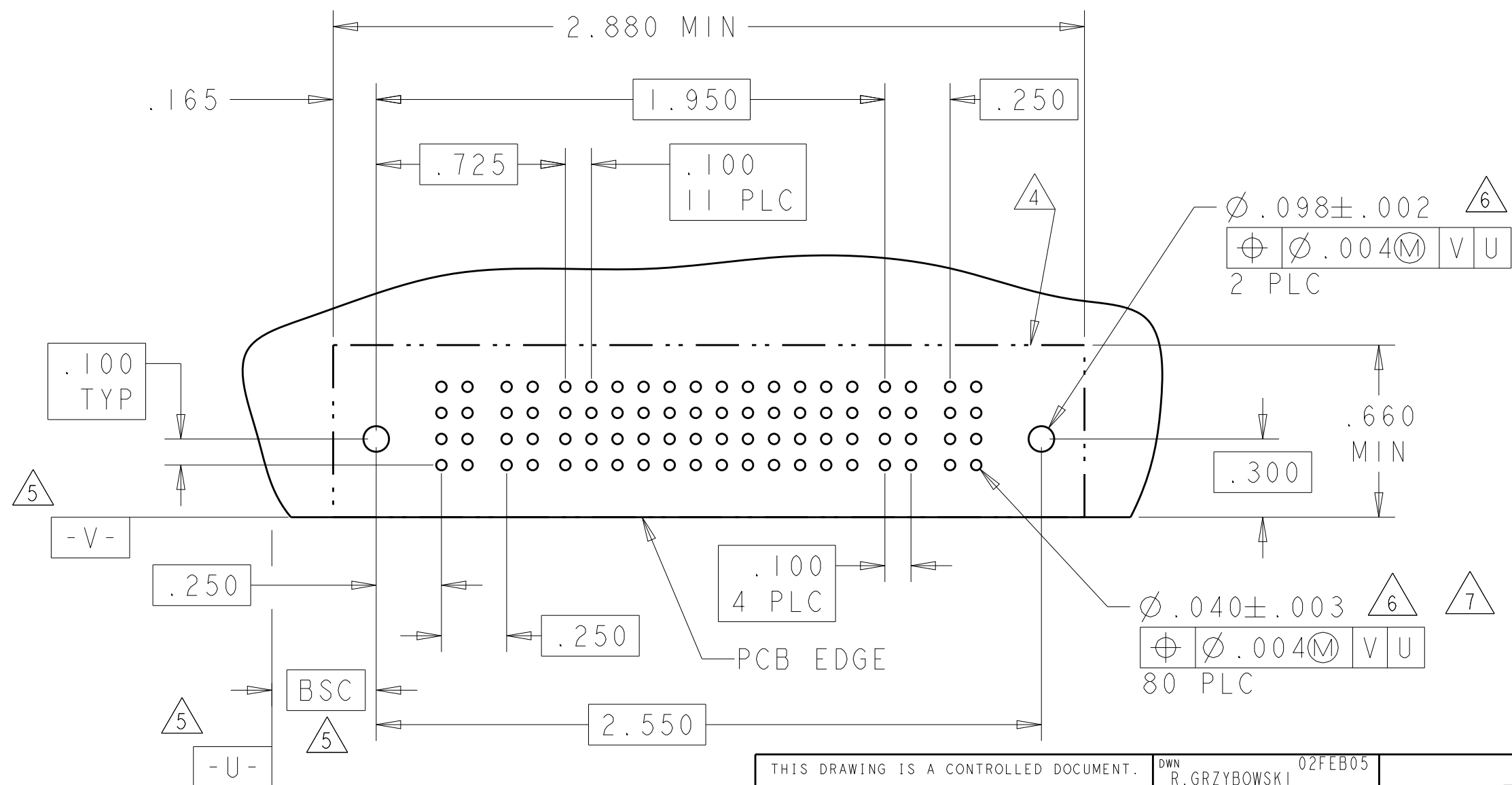


LOC		DIST		REVISIONS			
P	LYR	DESCRIPTION		DATE	DWN	APVD	
ES	00	-	SEE SHEET 1	-	-	-	

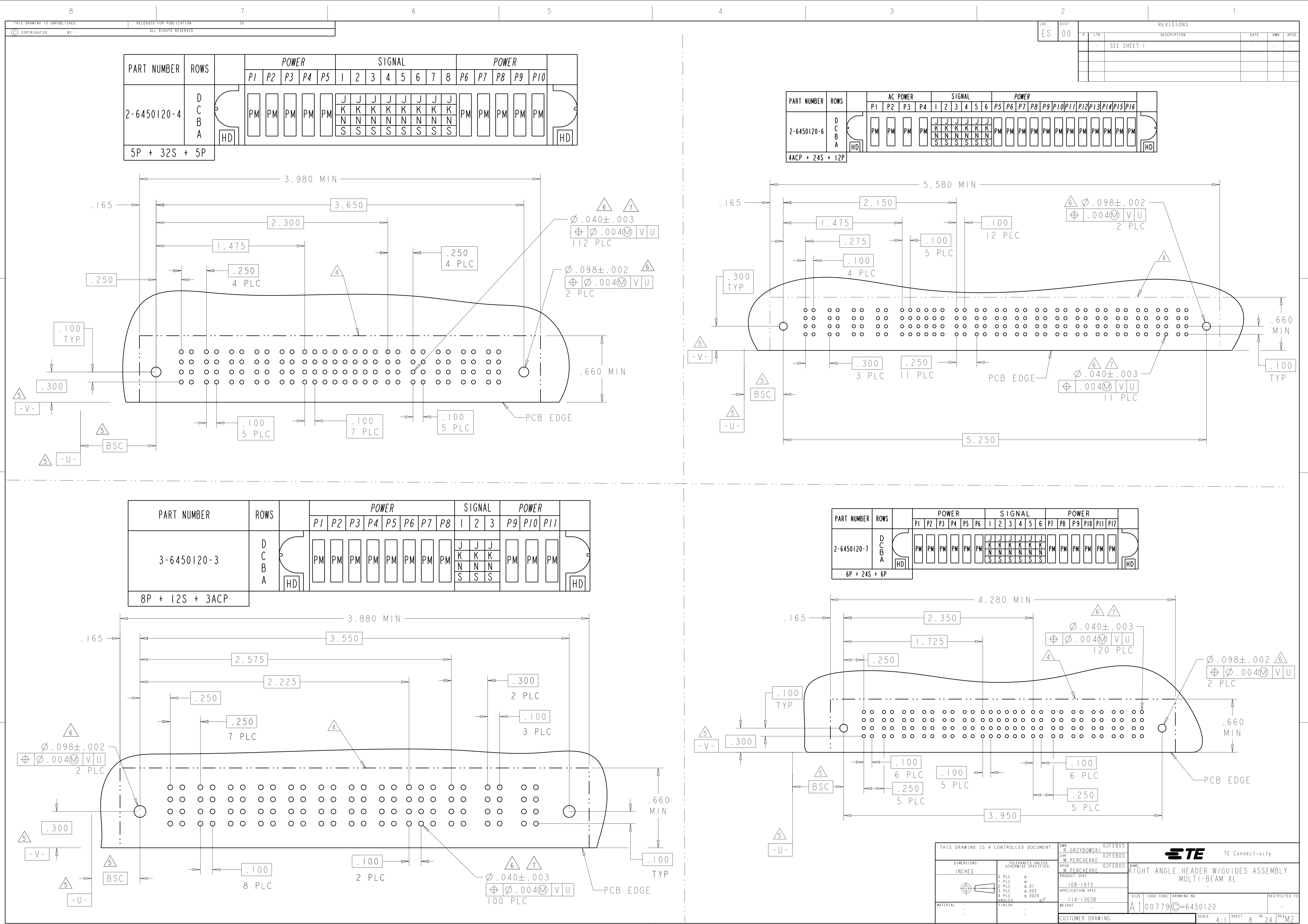
PART NUMBER	ROWS		POWER		SIGNAL						POWER														
			P1	P2	1	2	3	4	5	6	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14			
2-6450120-2	D		PM	PM	J	J	J	J	J	J	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM			
	K				K	K	K	K	K	K															
	N				N	N	N	N	N	N															
	S				S	S	S	S	S	S															
A	A																								
2ACP + 24S + 12P																									



PART NUMBER	ROWS		POWER		SIGNAL												POWER		
			P1	P2	1	2	3	4	5	6	7	8	9	10	11	12	P3	P4	
2-6450120-3	D		PM	PM	J	J	J	J	J	J	J	J	J	J	J	PM	PM		
	K				K	K	K	K	K	K	K	K	K	K	K				
	N				N	N	N	N	N	N	N	N	N	N	N				N
	S				S	S	S	S	S	S	S	S	S	S	S				S
2P + 48S + 2P																			



THIS DRAWING IS A CONTROLLED DOCUMENT.				DWN	R. GRZYBOWSKI	02FEB05	 TE Connectivity							
DIMENSIONS: INCHES				CHK	M. PERCHERKE	02FEB05								
				TOLERANCES UNLESS OTHERWISE SPECIFIED:				APVD	M. PERCHERKE	02FEB05	NAME			
				PRODUCT SPEC			RIGHT ANGLE HEADER W/GUIDES ASSEMBLY							
				108-1973			MULTI-BEAM XL							
				APPLICATION SPEC			-							
				114-13038			SIZE							
				WEIGHT			CAGE CODE							
MATERIAL				CUSTOMER DRAWING			DRAWING NO			RESTRICTED TO				
-				-			A100779			C6450120				
FINISH				SCALE			4:1		SHEET		7 of 24		REV M2	



[illegible]

Technical drawing of a PCB layout for a 132 PLC. The drawing shows a rectangular board with a central array of 132 circular components arranged in 11 rows and 12 columns. Dimensions are provided in inches, including a total length of 4.180 MIN and a width of .660 MIN. Various callouts specify component types like "24 PLC", "2 PLC", and "132 PLC", as well as tolerances and material specifications like "PCB EDGE" and "BCS". A coordinate system is indicated with "5" and "6" markers.

4805 (3/11)

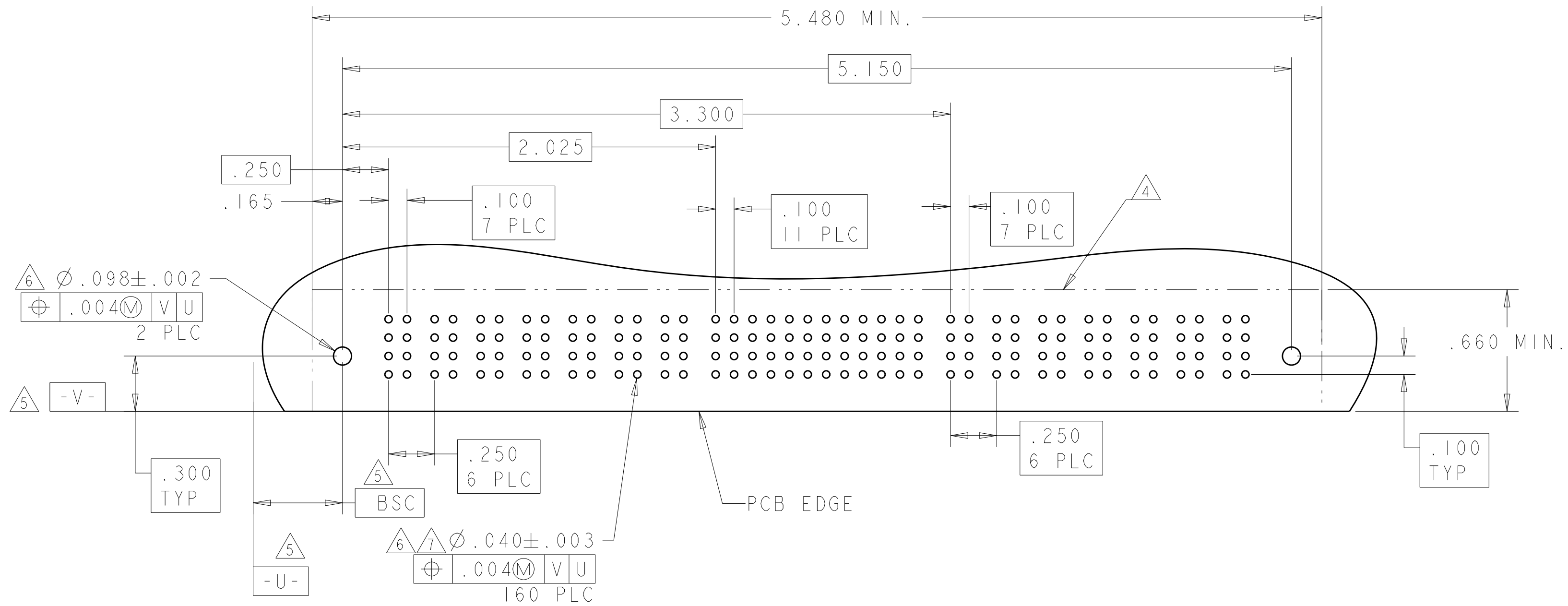
Top view drawing of a PCB assembly. The drawing includes the following dimensions and tolerances:

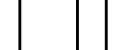
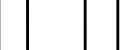
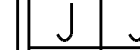
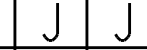
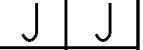
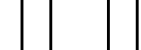
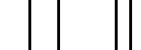
- Overall width: 4.480 MIN
- Overall height: .660 MIN
- Left side dimensions: .165, 2.050, 1.425, .275, .300 (3 PLC)
- Right side dimensions: .250 (7 PLC), .100 (TYP)
- Bottom dimensions: .300 (5), .100 (4 PLC), .100 (8 PLC), .100 (TYP)
- Internal dimensions: .100 (TYP), .250 (7 PLC)
- Feature 1 (Left): $\phi .040 \pm .003$ (6, 7), $\phi .004$ (M), V, U, 120 PLC
- Feature 2 (Right): $\phi .098 \pm .002$ (6), $\phi .004$ (M), V, U, 2 PLC
- Feature 3 (Bottom Left): -V- (5)
- Feature 4 (Bottom Right): -U- (5)
- Feature 5 (Bottom Center): BSC (5)
- Feature 6 (Bottom Right): .100 (TYP)
- Feature 7 (Bottom Right): .100 (8 PLC)
- Feature 8 (Bottom Right): .100 (4 PLC)
- Feature 9 (Bottom Right): .300 (5)
- Feature 10 (Bottom Right): .660 MIN
- Feature 11 (Bottom Right): .100 (TYP)
- Feature 12 (Bottom Right): .100 (8 PLC)
- Feature 13 (Bottom Right): .100 (4 PLC)
- Feature 14 (Bottom Right): .300 (5)
- Feature 15 (Bottom Right): -V- (5)
- Feature 16 (Bottom Right): -U- (5)
- Feature 17 (Bottom Right): BSC (5)
- Feature 18 (Bottom Right): .100 (TYP)
- Feature 19 (Bottom Right): .100 (8 PLC)
- Feature 20 (Bottom Right): .100 (4 PLC)
- Feature 21 (Bottom Right): .300 (5)
- Feature 22 (Bottom Right): .660 MIN
- Feature 23 (Bottom Right): .100 (TYP)
- Feature 24 (Bottom Right): .100 (8 PLC)
- Feature 25 (Bottom Right): .100 (4 PLC)
- Feature 26 (Bottom Right): .300 (5)
- Feature 27 (Bottom Right): -V- (5)
- Feature 28 (Bottom Right): -U- (5)
- Feature 29 (Bottom Right): BSC (5)
- Feature 30 (Bottom Right): .100 (TYP)
- Feature 31 (Bottom Right): .100 (8 PLC)
- Feature 32 (Bottom Right): .100 (4 PLC)
- Feature 33 (Bottom Right): .300 (5)
- Feature 34 (Bottom Right): .660 MIN
- Feature 35 (Bottom Right): .100 (TYP)
- Feature 36 (Bottom Right): .100 (8 PLC)
- Feature 37 (Bottom Right): .100 (4 PLC)
- Feature 38 (Bottom Right): .300 (5)
- Feature 39 (Bottom Right): -V- (5)
- Feature 40 (Bottom Right): -U- (5)
- Feature 41 (Bottom Right): BSC (5)
- Feature 42 (Bottom Right): .100 (TYP)
- Feature 43 (Bottom Right): .100 (8 PLC)
- Feature 44 (Bottom Right): .100 (4 PLC)
- Feature 45 (Bottom Right): .300 (5)
- Feature 46 (Bottom Right): .660 MIN
- Feature 47 (Bottom Right): .100 (TYP)
- Feature 48 (Bottom Right): .100 (8 PLC)
- Feature 49 (Bottom Right): .100 (4 PLC)
- Feature 50 (Bottom Right): .300 (5)
- Feature 51 (Bottom Right): -V- (5)
- Feature 52 (Bottom Right): -U- (5)
- Feature 53 (Bottom Right): BSC (5)
- Feature 54 (Bottom Right): .100 (TYP)
- Feature 55 (Bottom Right): .100 (8 PLC)
- Feature 56 (Bottom Right): .100 (4 PLC)
- Feature 57 (Bottom Right): .300 (5)
- Feature 58 (Bottom Right): .660 MIN
- Feature 59 (Bottom Right): .100 (TYP)
- Feature 60 (Bottom Right): .100 (8 PLC)
- Feature 61 (Bottom Right): .100 (4 PLC)
- Feature 62 (Bottom Right): .300 (5)
- Feature 63 (Bottom Right): -V- (5)
- Feature 64 (Bottom Right): -U- (5)
- Feature 65 (Bottom Right): BSC (5)
- Feature 66 (Bottom Right): .100 (TYP)
- Feature 67 (Bottom Right): .100 (8 PLC)
- Feature 68 (Bottom Right): .100 (4 PLC)
- Feature 69 (Bottom Right): .300 (5)
- Feature 70 (Bottom Right): .660 MIN
- Feature 71 (Bottom Right): .100 (TYP)
- Feature 72 (Bottom Right): .100 (8 PLC)
- Feature 73 (Bottom Right): .100 (4 PLC)
- Feature 74 (Bottom Right): .300 (5)
- Feature 75 (Bottom Right): -V- (5)
- Feature 76 (Bottom Right): -U- (5)
- Feature 77 (Bottom Right): BSC (5)
- Feature 78 (Bottom Right): .100 (TYP)
- Feature 79 (Bottom Right): .100 (8 PLC)
- Feature 80 (Bottom Right): .100 (4 PLC)
- Feature 81 (Bottom Right): .300 (5)
- Feature 82 (Bottom Right): .660 MIN
- Feature 83 (Bottom Right): .100 (TYP)
- Feature 84 (Bottom Right): .100 (8 PLC)
- Feature 85 (Bottom Right): .100 (4 PLC)
- Feature 86 (Bottom Right): .300 (5)
- Feature 87 (Bottom Right): -V- (5)
- Feature 88 (Bottom Right): -U- (5)
- Feature 89 (Bottom Right): BSC (5)
- Feature 90 (Bottom Right): .100 (TYP)
- Feature 91 (Bottom Right): .100 (8 PLC)
- Feature 92 (Bottom Right): .100 (4 PLC)
- Feature 93 (Bottom Right): .300 (5)
- Feature 94 (Bottom Right): .660 MIN
- Feature 95 (Bottom Right): .100 (TYP)
- Feature 96 (Bottom Right): .100 (8 PLC)
- Feature 97 (Bottom Right): .100 (4 PLC)
- Feature 98 (Bottom Right): .300 (5)
- Feature 99 (Bottom Right): -V- (5)
- Feature 100 (Bottom Right): -U- (5)
- Feature 101 (Bottom Right): BSC (5)
- Feature 102 (Bottom Right): .100 (TYP)
- Feature 103 (Bottom Right): .100 (8 PLC)
- Feature 104 (Bottom Right): .100 (4 PLC)
- Feature 105 (Bottom Right): .300 (5)
- Feature 106 (Bottom Right): .660 MIN
- Feature 107 (Bottom Right): .100 (TYP)
- Feature 108 (Bottom Right): .100 (8 PLC)
- Feature 109 (Bottom Right): .100 (4 PLC)
- Feature 110 (Bottom Right): .300 (5)
- Feature 111 (Bottom Right): -V- (5)
- Feature 112 (Bottom Right): -U- (5)
- Feature 113 (Bottom Right): BSC (5)
- Feature 114 (Bottom Right): .100 (TYP)
- Feature 115 (Bottom Right): .100 (8 PLC)
- Feature 116 (Bottom Right): .100 (4 PLC)
- Feature 117 (Bottom Right): .300 (5)
- Feature 118 (Bottom Right): .660 MIN
- Feature 119 (Bottom Right): .100 (TYP)
- Feature 120 (Bottom Right): .100 (8 PLC)
- Feature 121 (Bottom Right): .100 (4 PLC)
- Feature 122 (Bottom Right): .300 (5)
- Feature 123 (Bottom Right): -V- (5)
- Feature 124 (Bottom Right): -U- (5)
- Feature 125 (Bottom Right): BSC (5)
- Feature 126 (Bottom Right): .100 (TYP)
- Feature 127 (Bottom Right): .100 (8 PLC)
- Feature 128 (Bottom Right): .100 (4 PLC)
- Feature 129 (Bottom Right): .300 (5)
- Feature 130 (Bottom Right): .660 MIN
- Feature 131 (Bottom Right): .100 (TYP)
- Feature 132 (Bottom Right): .100 (8 PLC)
- Feature 133 (Bottom Right): .100 (4 PLC)
- Feature 134 (Bottom Right): .300 (5)
- Feature 135 (Bottom Right): -V- (5)
- Feature 136 (Bottom Right): -U- (5)
- Feature 137 (Bottom Right): BSC (5)
- Feature 138 (Bottom Right): .100 (TYP)
- Feature 139 (Bottom Right): .100 (8 PLC)
- Feature 140 (Bottom Right): .100 (4 PLC)
- Feature 141 (Bottom Right): .300 (5)
- Feature 142 (Bottom Right): .660 MIN
- Feature 143 (Bottom Right): .100 (TYP)
- Feature 144 (Bottom Right): .100 (8 PLC)
- Feature 145 (Bottom Right): .100 (4 PLC)
- Feature 146 (Bottom Right): .300 (5)
- Feature 147 (Bottom Right): -V- (5)
- Feature 148 (Bottom Right): -U- (5)
- Feature 149 (Bottom Right): BSC (5)
- Feature 150 (Bottom Right): .100 (TYP)
- Feature 151 (Bottom Right): .100 (8 PLC)
- Feature 152 (Bottom Right): .100 (4 PLC)
- Feature 153 (Bottom Right): .300 (5)
- Feature 154 (Bottom Right): .660 MIN
- Feature 155 (Bottom Right): .100 (TYP)
- Feature 156 (Bottom Right): .100 (8 PLC)
- Feature 157 (Bottom Right): .100 (4 PLC)
- Feature 158 (Bottom Right): .300 (5)
- Feature 159 (Bottom Right): -V- (5)
- Feature 160 (Bottom Right): -U- (5)
- Feature 161 (Bottom Right): BSC (5)
- Feature 162 (Bottom Right): .100 (TYP)
- Feature 163 (Bottom Right): .100 (8 PLC)
- Feature 164 (Bottom Right): .100 (4 PLC)
- Feature 165 (Bottom Right): .300 (5)
- Feature 166 (Bottom Right): .660 MIN
- Feature 167 (Bottom Right): .100 (TYP)
- Feature 168 (Bottom Right): .100 (8 PLC)
- Feature 169 (Bottom Right): .100 (4 PLC)
- Feature 170 (Bottom Right): .300 (5)
- Feature 171 (Bottom Right): -V- (5)
- Feature 172 (Bottom Right): -U- (5)
- Feature 173 (Bottom Right): BSC (5)
- Feature 174 (Bottom Right): .100 (TYP)
- Feature 175 (Bottom Right): .100 (8 PLC)
- Feature 176 (Bottom Right): .100 (4 PLC)
- Feature 177 (Bottom Right): .300 (5)
- Feature 178 (Bottom Right): .660 MIN
- Feature 179 (Bottom Right): .100 (TYP)
- Feature 180 (Bottom Right): .100 (8 PLC)
- Feature 181 (Bottom Right): .100 (4 PLC)
- Feature 182 (Bottom Right): .300 (5)
- Feature 183 (Bottom Right): -V- (5)
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- Feature 185 (Bottom Right): BSC (5)
- Feature 186 (Bottom Right): .100 (TYP)
- Feature 187 (Bottom Right

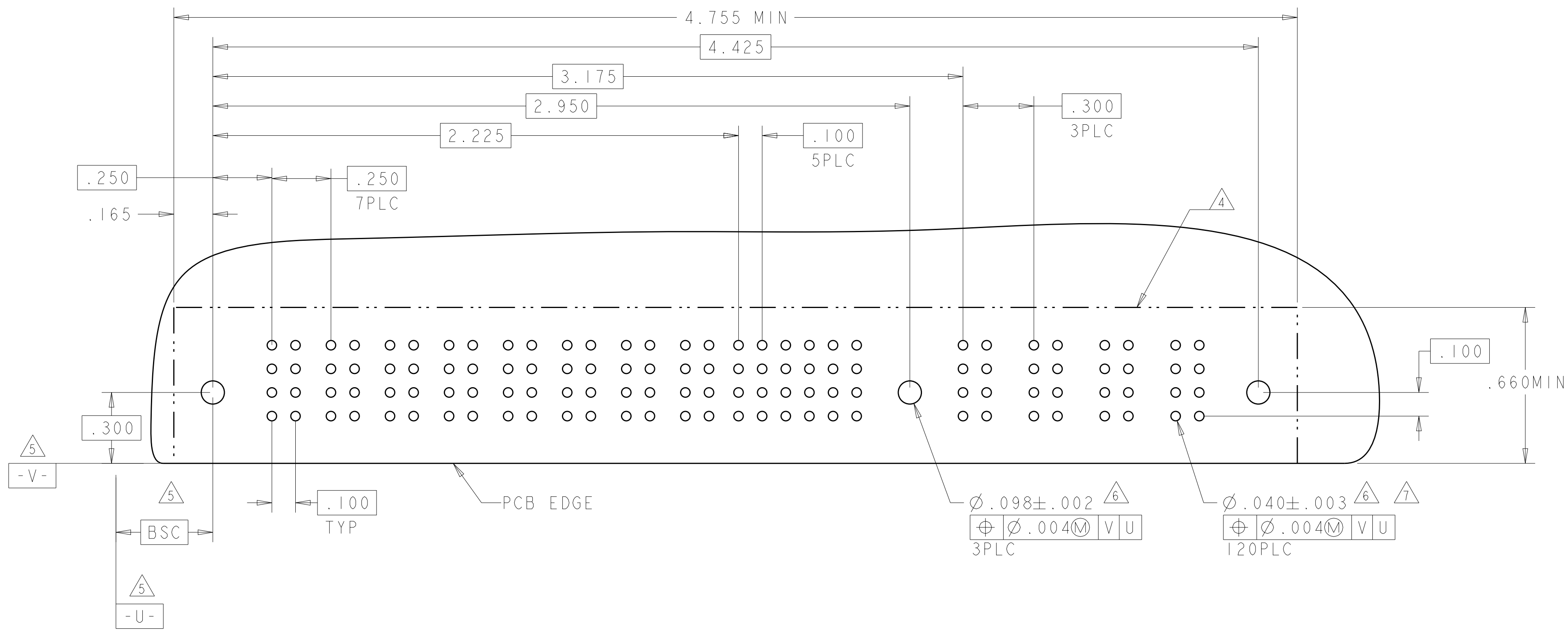
Top view drawing of a PCB showing dimensions and features. The drawing includes a grid of 148 holes (12x12) and various dimensions. Key dimensions include: overall width 4.980 MIN, overall length 4.650, and a central section width of 3.050. Hole diameters are specified as $\phi .0098 \pm .002$ (2 PLC) and $\phi .004 \pm .003$ (148 PLC). The drawing also shows a BSC (Basic Size) dimension of .300 and a .660 MIN dimension. The PCB EDGE is indicated.

4805 (3/11)

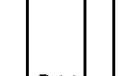
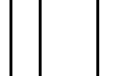
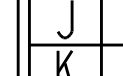
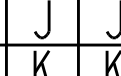
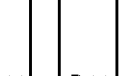
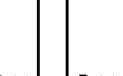
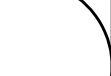
PART NUMBER	ROWS		POWER							SIGNAL												POWER																				
			P1	P2	P3	P4	P5	P6	P7	1	2	3	4	5	6	7	8	9	10	11	12	P8	P9	P10	P11	P12	P13	P14														
3-6450120-4	D C B A																																									
																												J	J	J	J	J	J	J	J	J	J	J	J	J	J	
																												K	K	K	K	K	K	K	K	K	K	K	K	K	K	K
																												N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
7P + 48S + 7P																																										

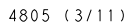
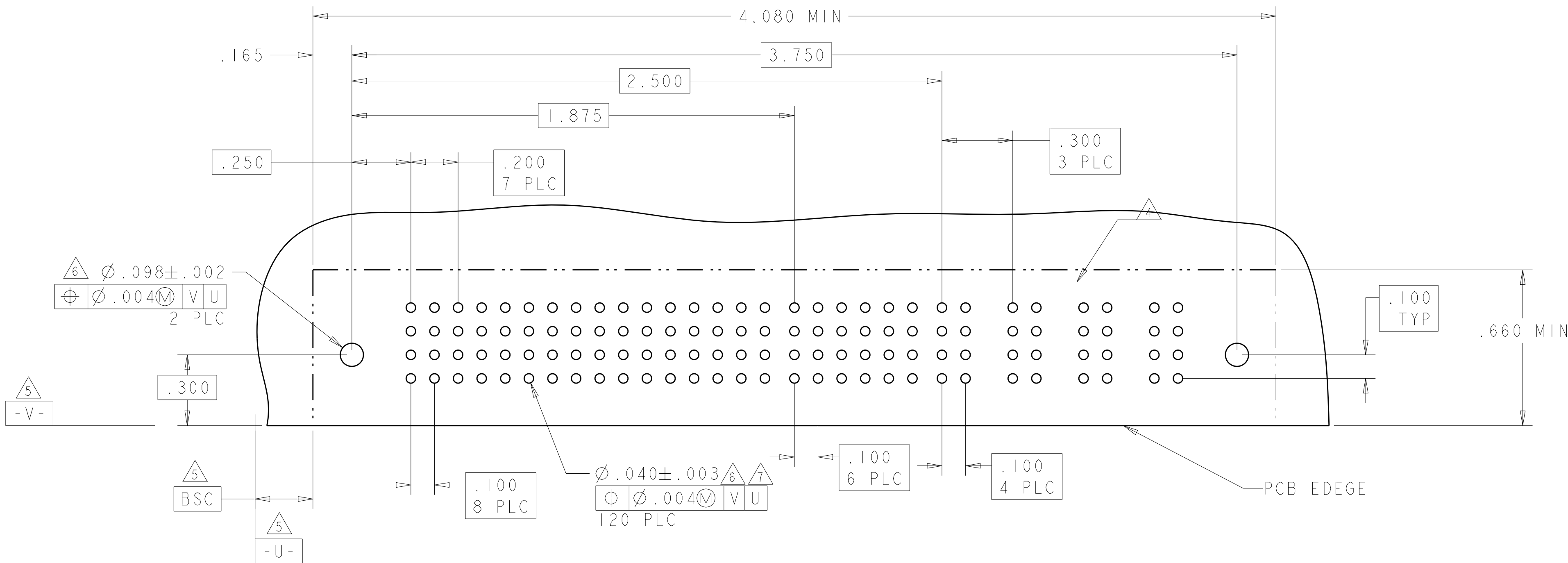


PART NUMBER	ROWS		POWER								SIGNAL							POWER																																																																																																																									
			P1	P2	P3	P4	P5	P6	P7	P8	1	2	3	4	5	6		P9	P10	P11	P12																																																																																																																						
4-6450120-2	D C B A																																																																																																																																										



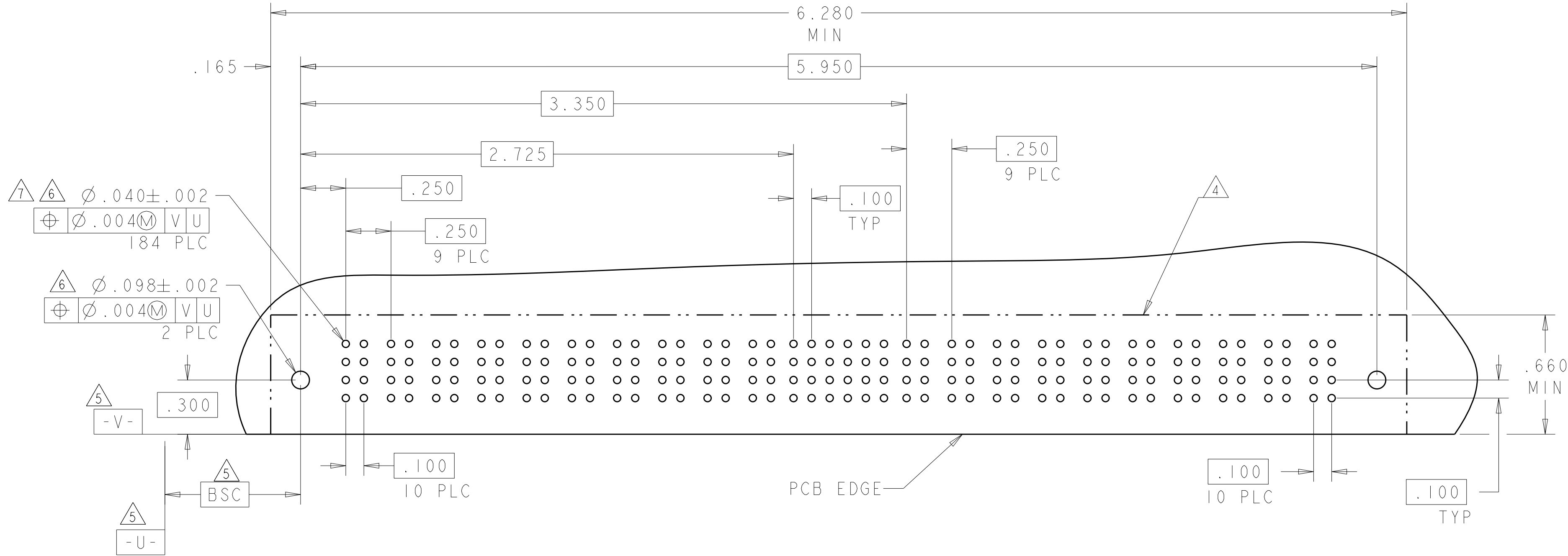
THIS DRAWING IS A CONTROLLED DOCUMENT.		DWA R. GRZYBOWSKI		02FEB05	 TE Connectivity	
		CHP M. PERCHERKE		02FEB05		
DIMENSIONS: INCHES		TOLERANCES, UNLESS OTHERWISE SPECIFIED:		APVD M. PERCHERKE	02FEB05	NAME RIGHT ANGLE HEADER W/GUIDES ASSEMBLY MULTI-BEAM XL -
		0 PLC ± 2 PLC ± 0.1 3 PLC ± 0.05 4 PLC ± 0.020		PRODUCT SPEC 108-1973 APPLICATION SPEC 114-13038		
		ANGLES FINISH		SIZE CASE CODE DRAWING NO 114-13038 - A100779		
		MATERIAL -		RESTRICTED TO - SCALE 4:1 SHEET 11 OF 24 REV M2		
		CUSTOMER DRAWING				

PART NUMBER	ROWS		POWER								SIGNAL						POWER				
			P1	P2	P3	P4	P5	P6	P7	P8	1	2	3	4	5	6	P9	P10	P11	P12	
4-6450120-4	D C B A									J	J	J	J	J	J						
										K	K	K	K	K	K						
										N	N	N	N	N	N						
										S	S	S	S	S	S						
8P + 24S + 4ACP																					

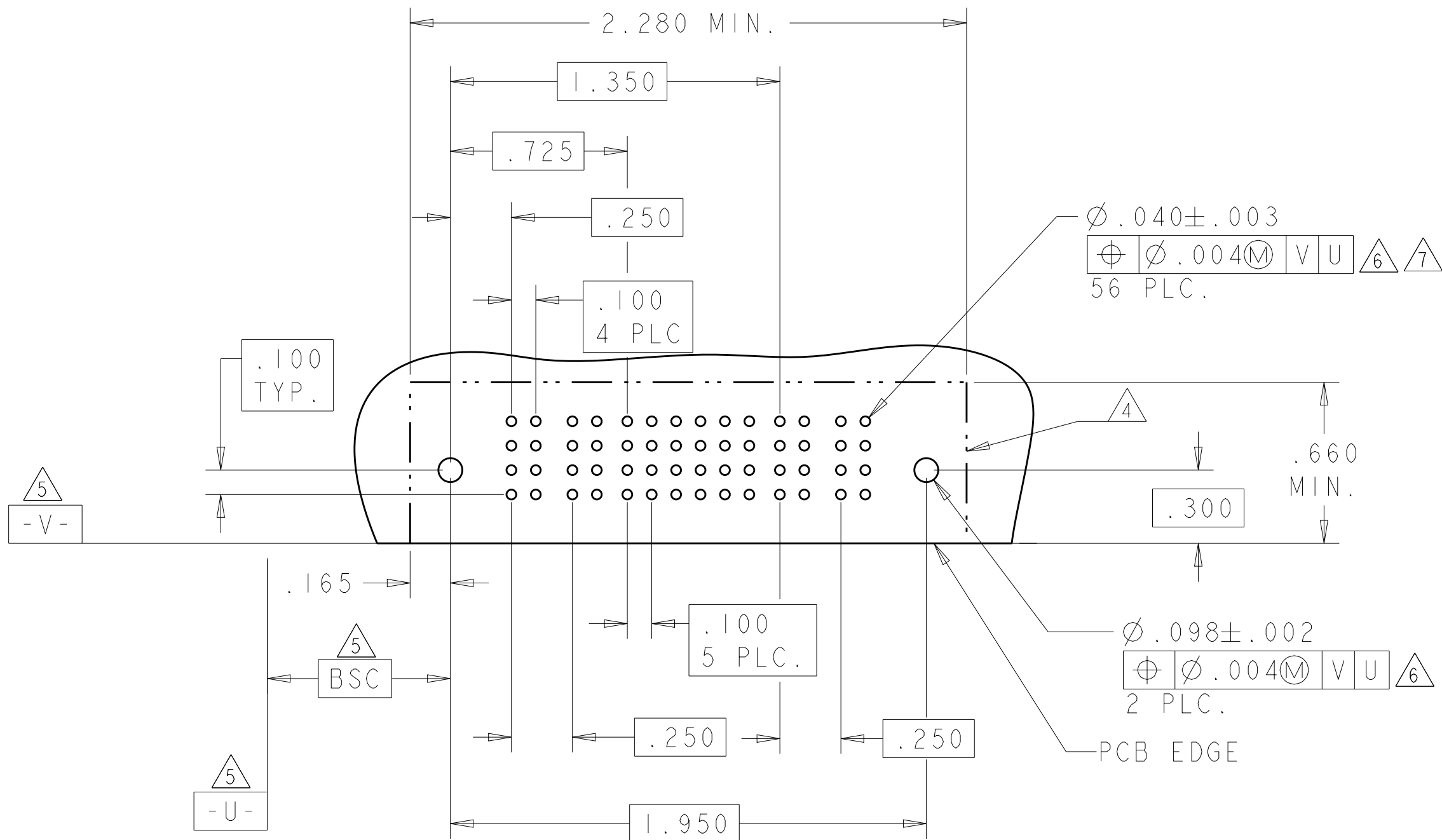


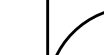
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P	LTR	DESCRIPTION		DATE	DWN	APVD	
-	-	SEE SHEET 1		-	-	-	

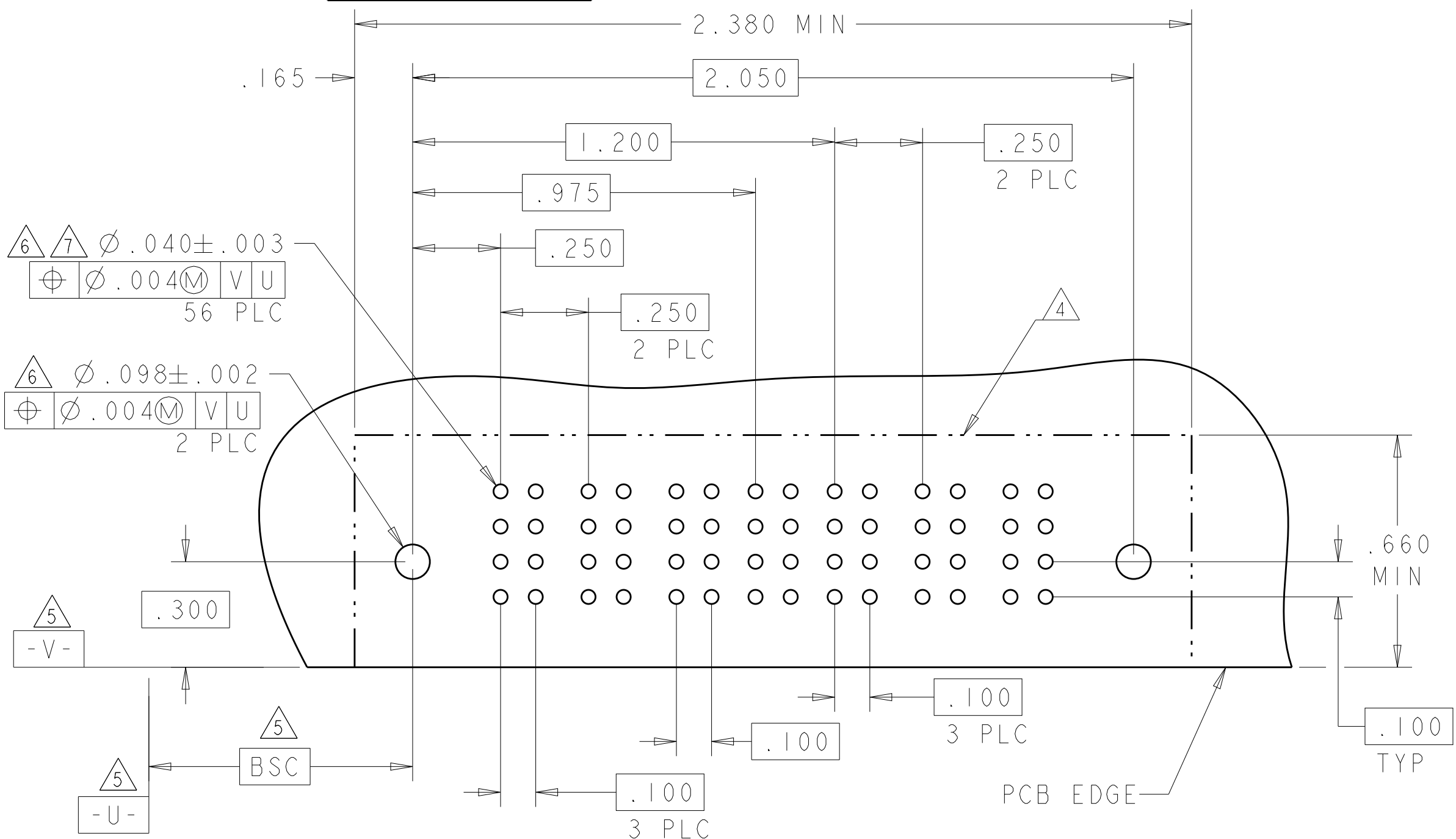
PART NUMBER	ROWS		POWER										SIGNAL						POWER														
			P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	1	2	3	4	5	6	P11	P12	P13	P14	P15	P16	P17	P18	P19	P20					
4-6450120-5	D C B A		PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	J	J	J	J	J	J	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM				
													K	K	K	K	K	K															
													N	N	N	N	N	N															
													S	S	S	S	S	S															
10P + 24S + 10P																																	



PART NUMBER	ROWS		POWER		SIGNAL						POWER		
			P1	P2	1	2	3	4	5	6	P3	P4	
4-6450120-7	D		PM	PM	J	J	J	J	J	J	PM	PM	
	K				K	F	K	K	K				
	N				N	G	N	N	N				
	S				S	S	S	S	S				
2P + 24S + 2P													



PART NUMBER	ROWS		POWER			SIGNAL		POWER			
			P1	P2	P3	1	2	P4	P5	P6	
4-6450120-6	D C B A				J	J					
					K	K					
					N	N					
					S	S					
3P + 8S + 3P											



THIS DRAWING IS A CONTROLLED DOCUMENT.

DWN: R.GRZYBOWSKI 02FEB05
CHK: M.PERCHEKKE 02FEB05
APVD: M.PERCHEKKE 02FEB05

DIMENSIONS:
INCHES

MATERIAL: -

TOLERANCES UNLESS OTHERWISE SPECIFIED:

0 PLC ±.01
1 PLC ±.01
2 PLC ±.01
3 PLC ±.005
4 PLC ±.002
ANGLES ±.2°

FINISH: -

PRODUCT SPEC: 108-1973

APPLICATION SPEC: 114-13038

WEIGHT: -

CUSTOMER DRAWING

NAME: RIGHT ANGLE HEADER W/GUIDES ASSEMBLY MULTI-BEAM XL

SIZE: A1

CAGE CODE: 100779

DRAWING NO: C=6450120

RESTRICTED TO: -

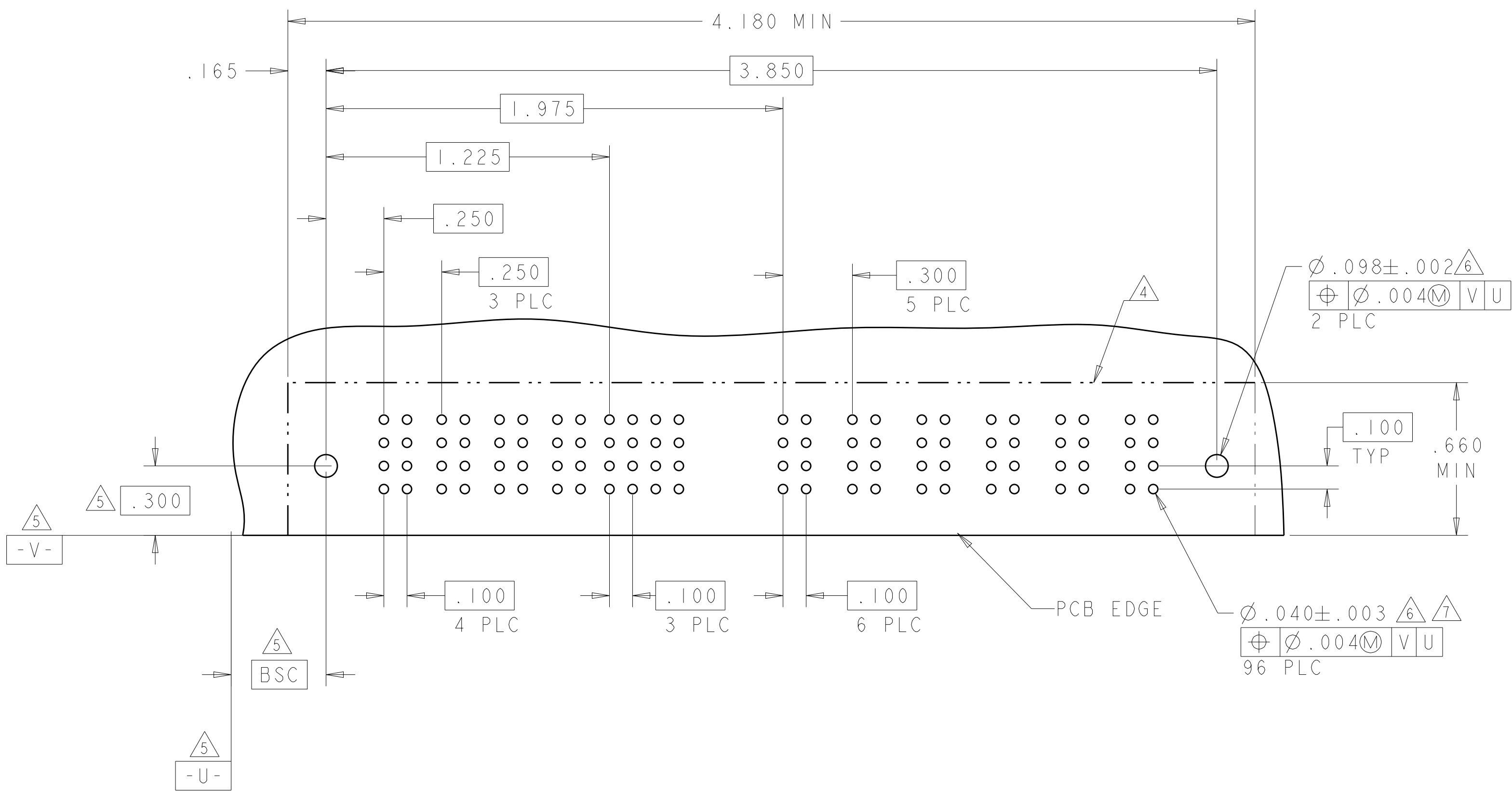
SCALE: 4:1

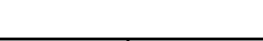
SHEET: 13

OF: 24

REV: M2

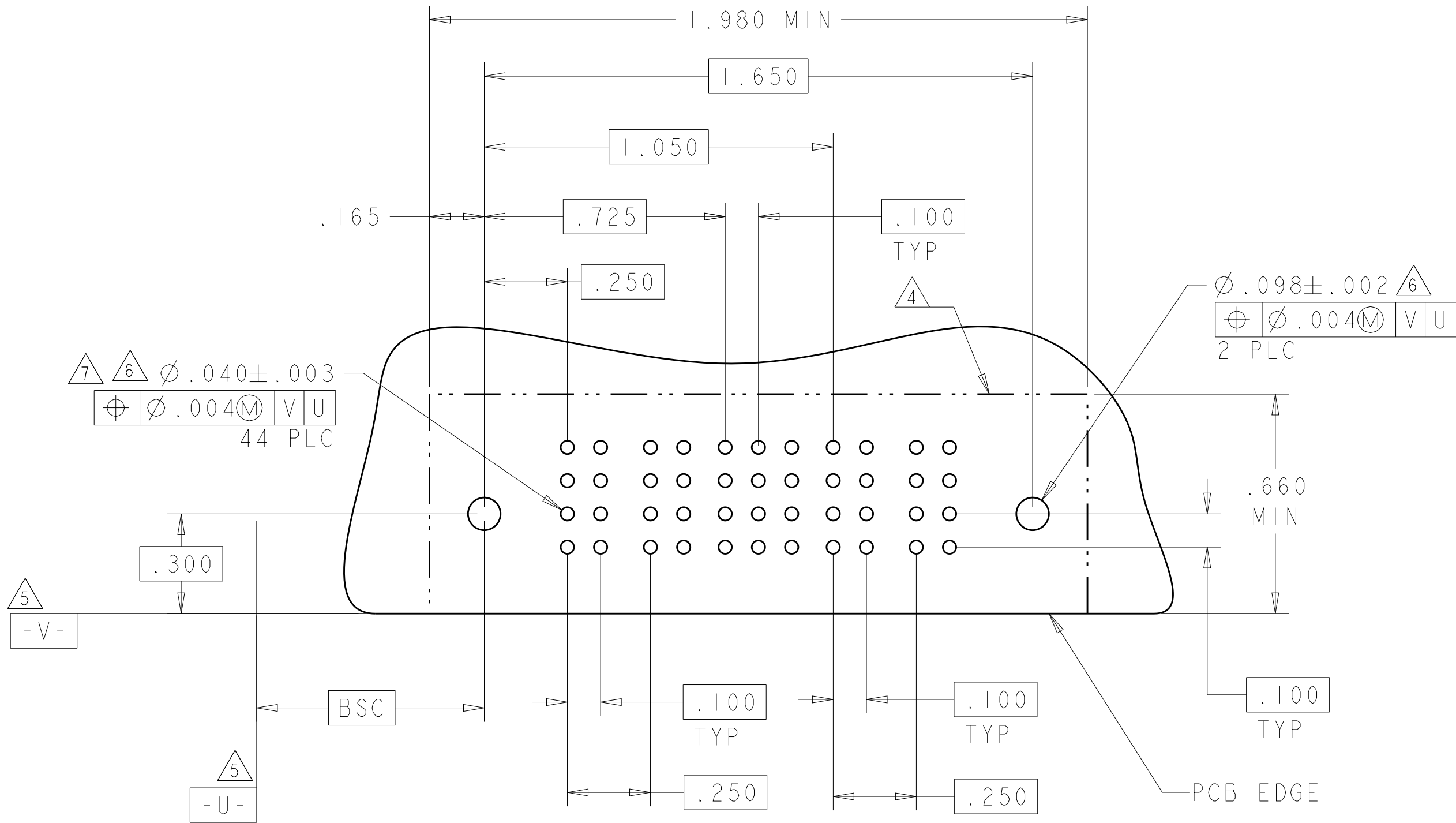
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	K						K	K	K									
	N						N	N	N									
	S						S	S	S									
A	HD																	HD
4P + 16S + 7ACP																		

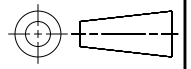


THIS DRAWING IS A CONTROLLED DOCUMENT.						DWN Z GRZYBOWSKI 02FEB05		 TE Connectivity	
DIMENSIONS: INCHES		TOLERANCES UNLESS OTHERWISE SPECIFIED:		CHN M PERCERKE 02FEB05		NAME RIGHT ANGLE HEADER W/GUIDES ASSEMBLY MULTI-BEAM XL			
				BYVW M PERCERKE 02FEB05					
		0 PLC ±.1		PRODUCT SPEC		SIZE CAGE CODE DRAWING NO RESTRICTED TO			
		1 PLC ±.01		108-1973					
		3 PLC ±.005		APPLICATION SPEC					
		4 PLC ±.0020		114-13038					
MATERIAL -		FINISH -		WEIGHT -		A100779C6450120 -			
CUSTOMER DRAWING						SCALE 4:1 SHEET 14 OF 24 REV M2			

LOC	DIST	REVISIONS					
		P	LTR	DESCRIPTION	DATE	DWN	APVD
ES	00	-	-	SEE SHEET 1	-	-	-

PART NUMBER	ROWS	POWER		SIGNAL			POWER			
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4-6450120-9	D		PM	PM	J	J	J	PM	PM	
	C				K	K	K			
	B				N	N	N			
	A				S	S	S			
2P + 12S + 2P										

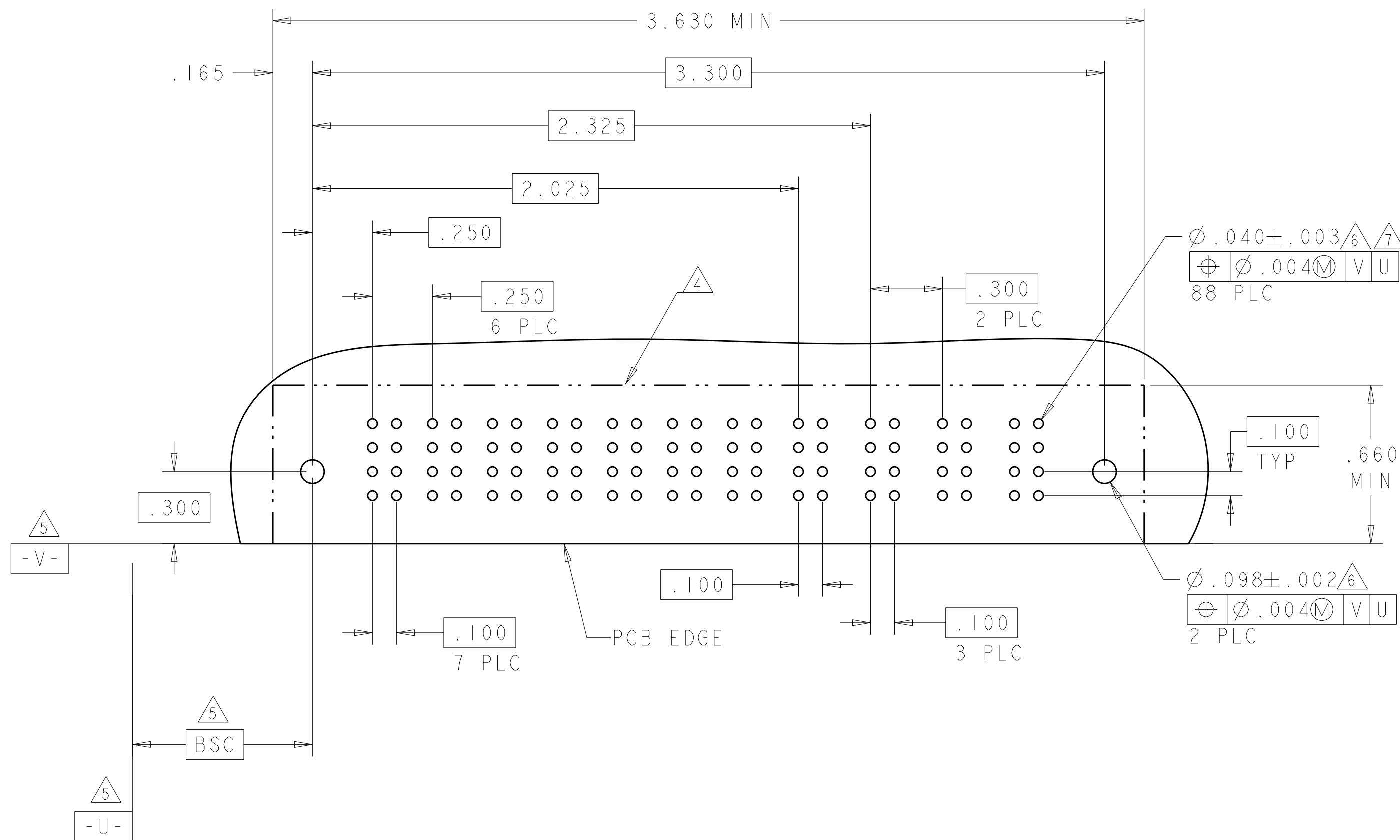


THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN R.GRZYBOWSKI	02FEB05	 TE Connectivity	
		CHK M.PERCHERKE	02FEB05		
DIMENSIONS: INCHES		APVD M.PERCHERKE	02FEB05	NAME RIGHT ANGLE HEADER W/GUIDES ASSEMBLY MULTI-BEAM XL	
		PRODUCT SPEC		SIZE	
		108-1973		CAGE CODE	
		APPLICATION SPEC		DRAWING NO	
		114-13038		REV	
MATERIAL		WEIGHT		CUSTOMER DRAWING	
				SCALE	
				4:1	
				SHEET	
				15	
				OF	
				24	
				REV	
				M2	

Ⓜ

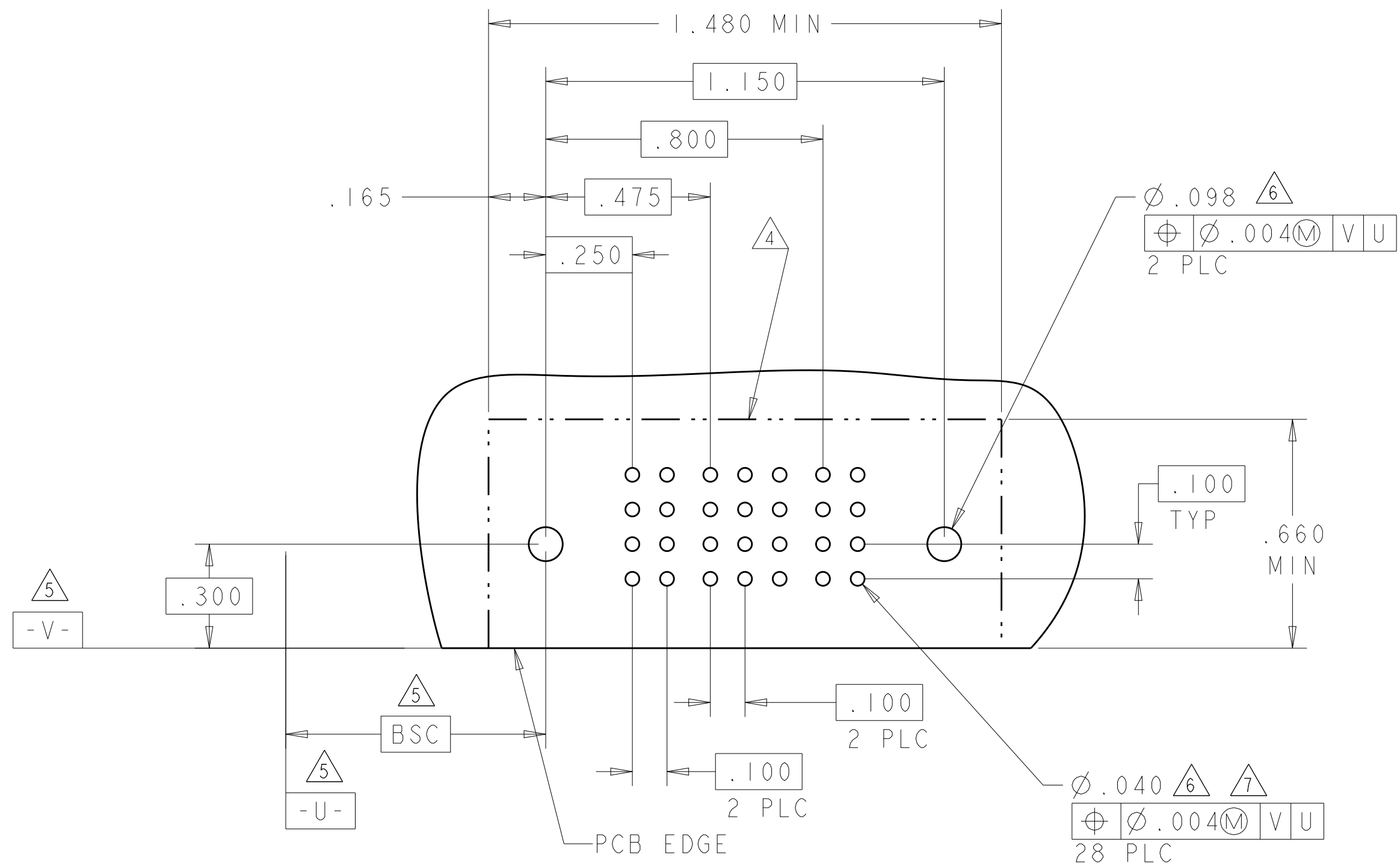
4805 (3/11)

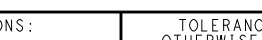
PART NUMBER	ROWS		POWER							SIGNAL		POWER			
			P1	P2	P3	P4	P5	P6	P7	1	2	P8	P9	P10	
5-6450120-5	D		PM	PM	PM	PM	PM	PM	PM	J	J	PM	PM	PM	
	K									K					
	N									N					
	A	HD													
7P + 8S + 3ACP															

4805 (3/11)

PART NUMBER	ROWS		POWER			SIGNAL									POWER					
			P1	P2	P3	1	2	3	4	5	6	7	8	9	P4	P5	P6			
5-6450120-7	D C B A	  HD	 PM	 PM	 PM	J	J	J	J	J	J	J	J	J	 PM	 PM	 PM	 HD		
						K	K	K	K	K	K	K	K	K					K	
						N	N	N	N	N	N	N	N	N					N	N
						S	S	S	S	S	S	S	S	S					S	S
3P + 36S + 3P																				

Technical drawing of a PCB layout for a 16x16 LED array. The drawing shows a rectangular PCB with a central array of 256 LEDs (16 rows by 16 columns). Key dimensions include a total width of 3.080 MIN, a central LED array width of 2.750, and a pitch of 0.100 between LEDs. The drawing also shows mounting holes with diameters of 0.040 and 0.098, and various clearance and spacing dimensions. A dashed line indicates the PCB edge.

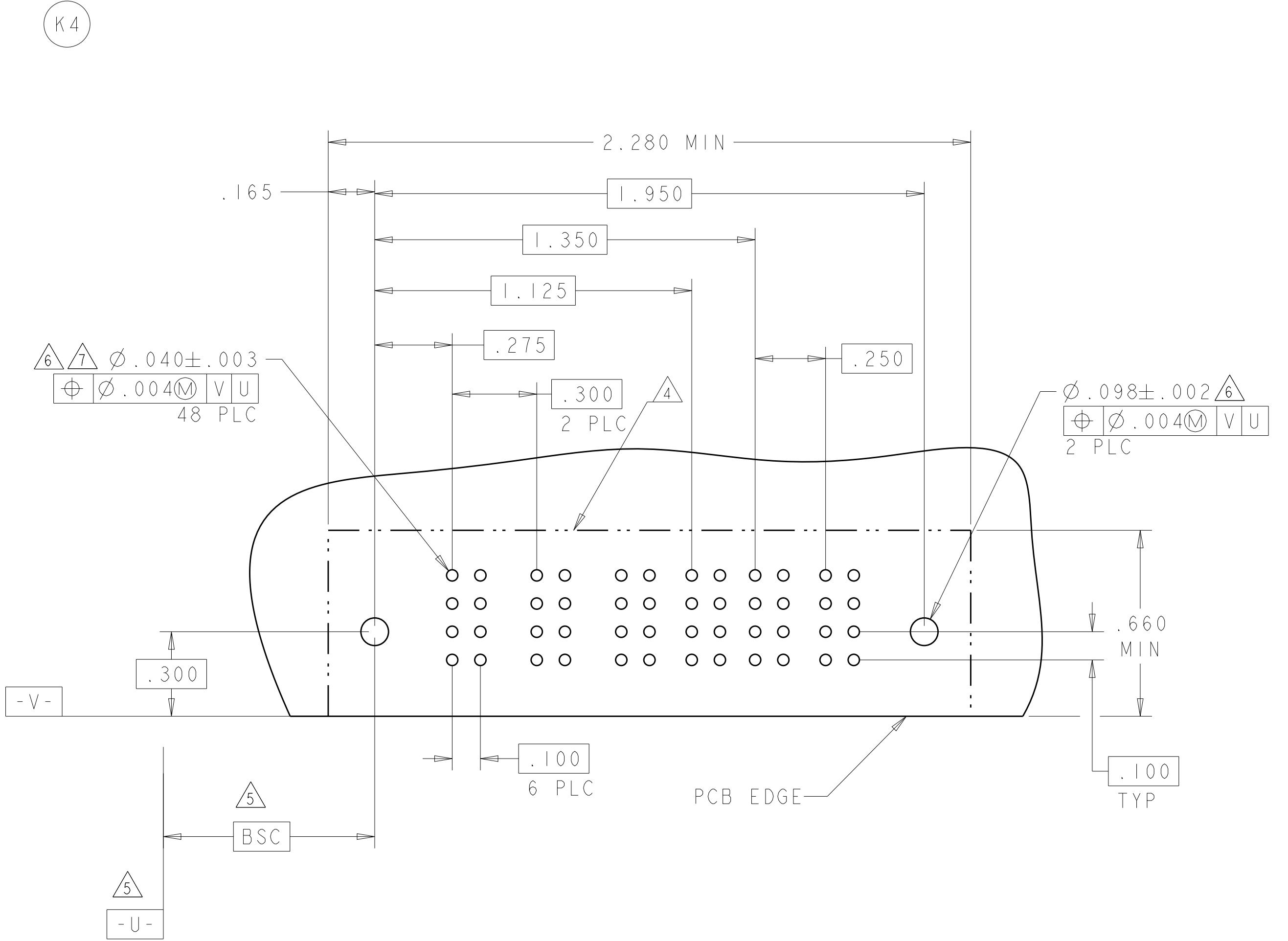
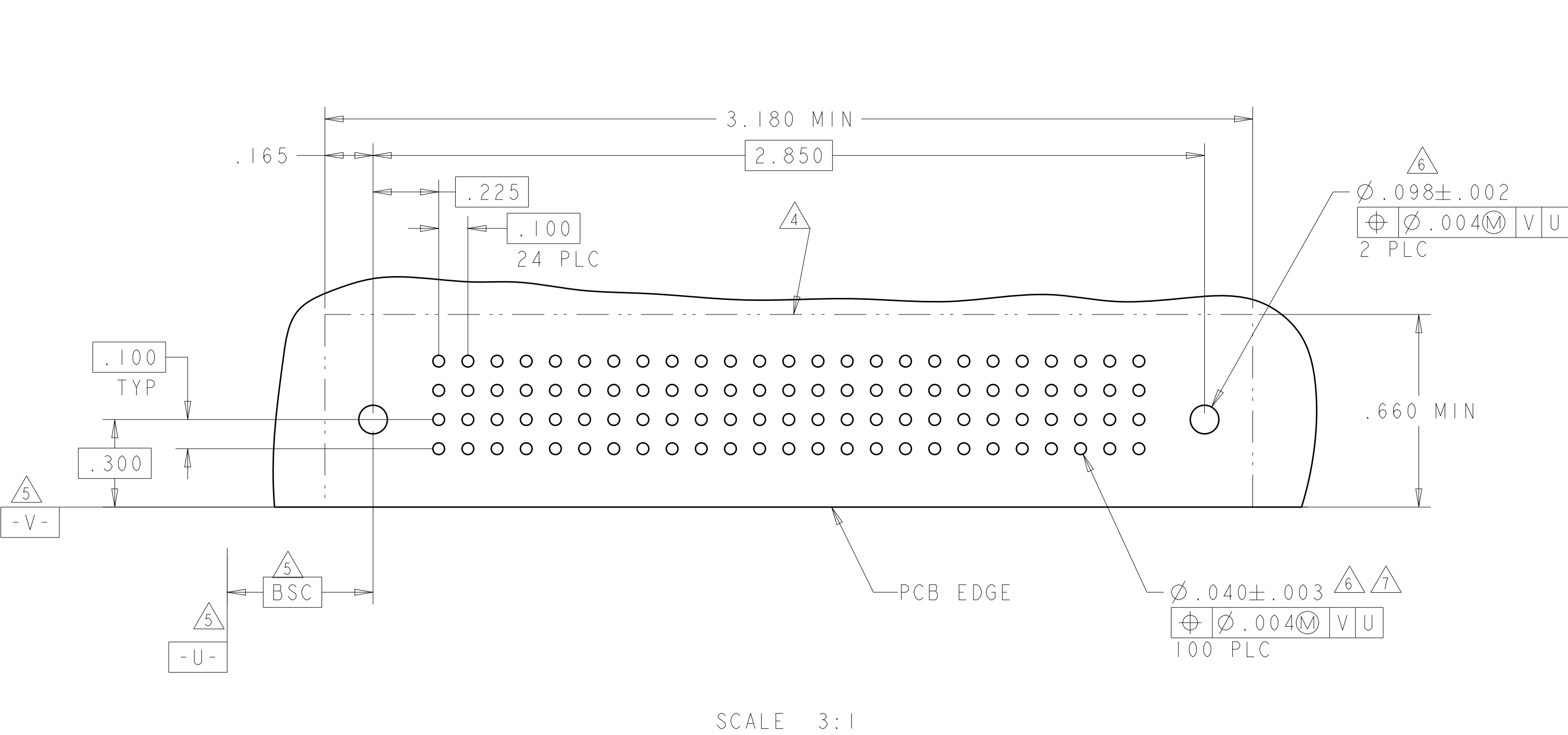


THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN R. GRZYBOWSKI 02FEB05		 TE Connectivity	
DIMENSIONS:		CWN M. PERCHERKE 02FEB05		NAME	
INCHES		APVD M. PERCHERKE 02FEB05		RIGHT ANGLE HEADER W/GUIDES ASSEMBLY MULTI-BEAM XL	
		PRODUCT SPEC 108-1973		-	
TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ±. 1 PLC ±. 2 PLC ±.01 3 PLC ±.005 4 PLC ±.0020 ANGLES ±.7°		APPLICATION SPEC 114-13038		-	
MATERIAL		WEIGHT		SIZE CAGE CODE DRAWING NO	
FINISH		-		A100779C6450120	
				RESTRICTED TO	
				-	
CUSTOMER DRAWING				SCALE 4:1	SHEET 18 of 24 REV M2

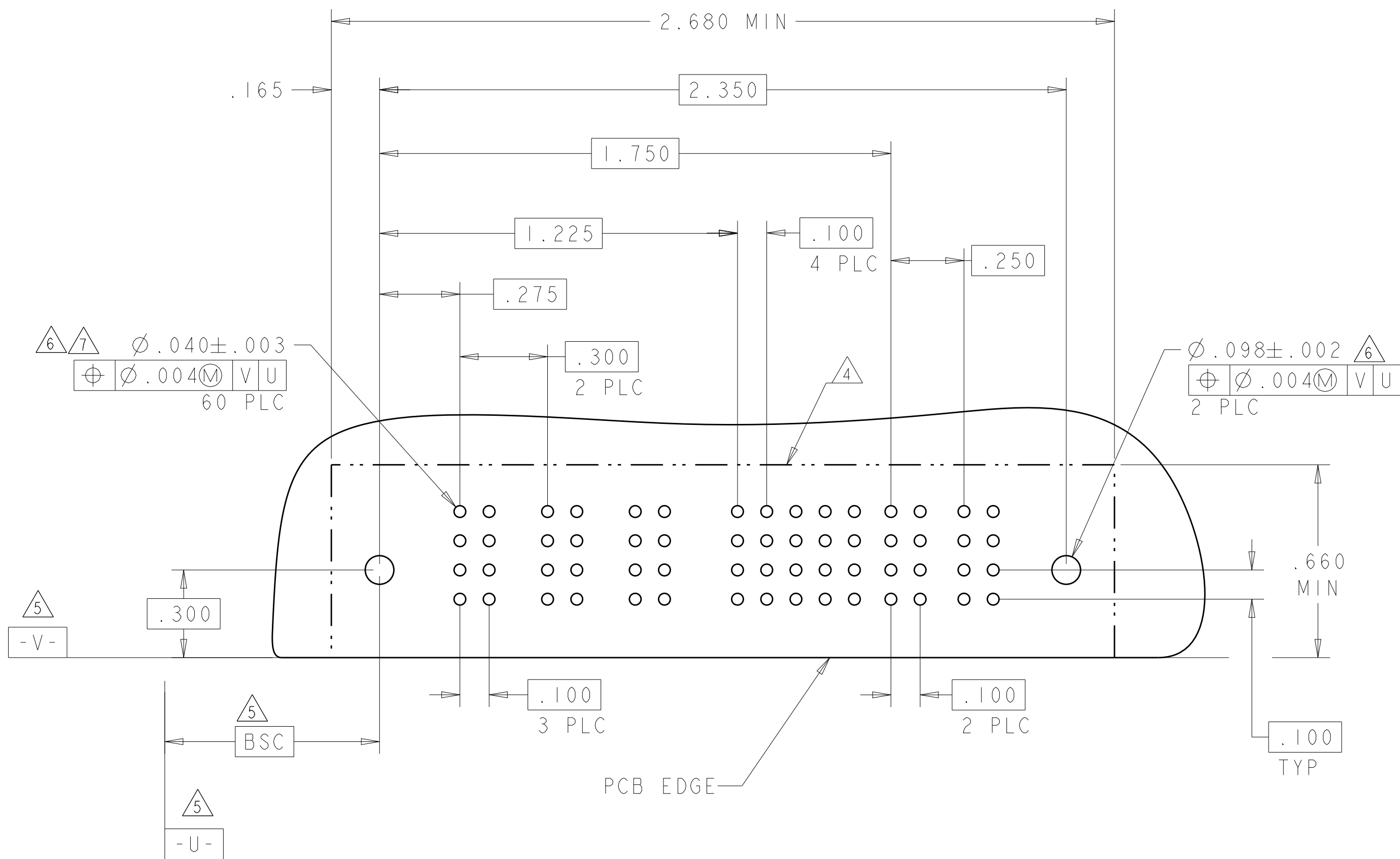
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		P	LTR	DESCRIPTION	DATE	DWN	APVD
ES	00	-	-	SEE SHEET 1	-	-	-

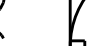
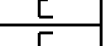
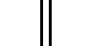
PART NUMBER	ROWS		SIGNAL																									
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
5-6450120-8	D		J	J	J	J	J	J	J	J	J	J	J	J	J	J	J	J	J	J	J	J	J	J	J	J		
	K		K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K			
	N		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		
	S		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S			
100S																												

PART NUMBER	ROWS		POWER			SIGNAL		POWER		
			P1	P2	P3	1	2	P4	P5	
5-6450120-9	D		PM	PM	PM	J	J	PM	PM	
	C					K	K			
	B					N	N			
3ACP + 8S + 2P	A	HD				H	S			HD

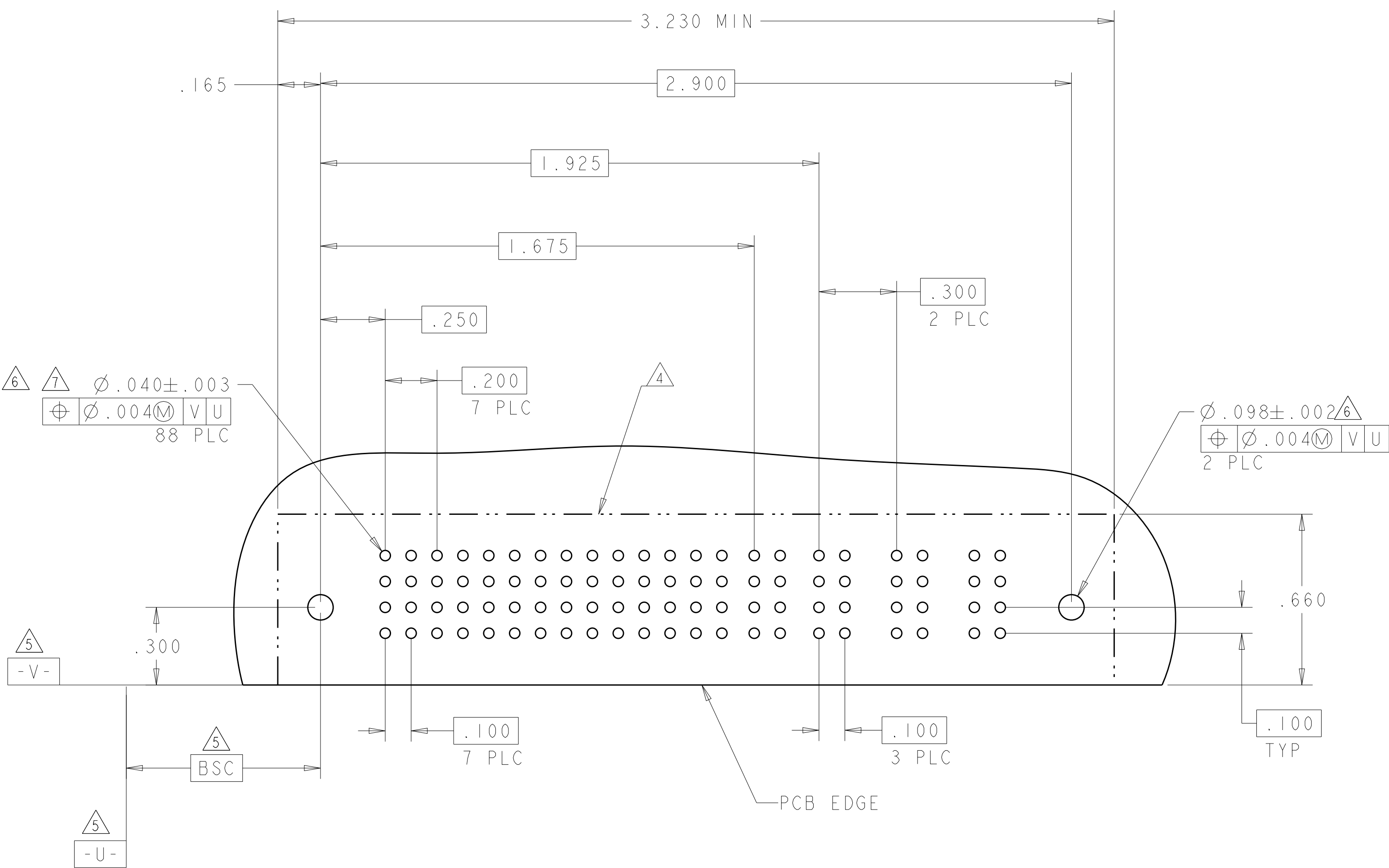


PART NUMBER	ROWS		POWER			SIGNAL						POWER			
			PI	P2	P3	1	2	3	4	5	6	P4	P5		
6-6450120-5	D C B A	 HD1	 PM	 PM	 PM		 J	 J	 J	 J	 J	 PM	 PM	 HD	
3ACP + 24S + 2P			         												

4805 (3/11)

PART NUMBER	ROWS		POWER							SIGNAL		POWER			
			P1	P2	P3	P4	P5	P6	P7	1	2	P8	P9	P10	
6-6450120-7	D C B A														
7HDP + 8S + 3ACP															

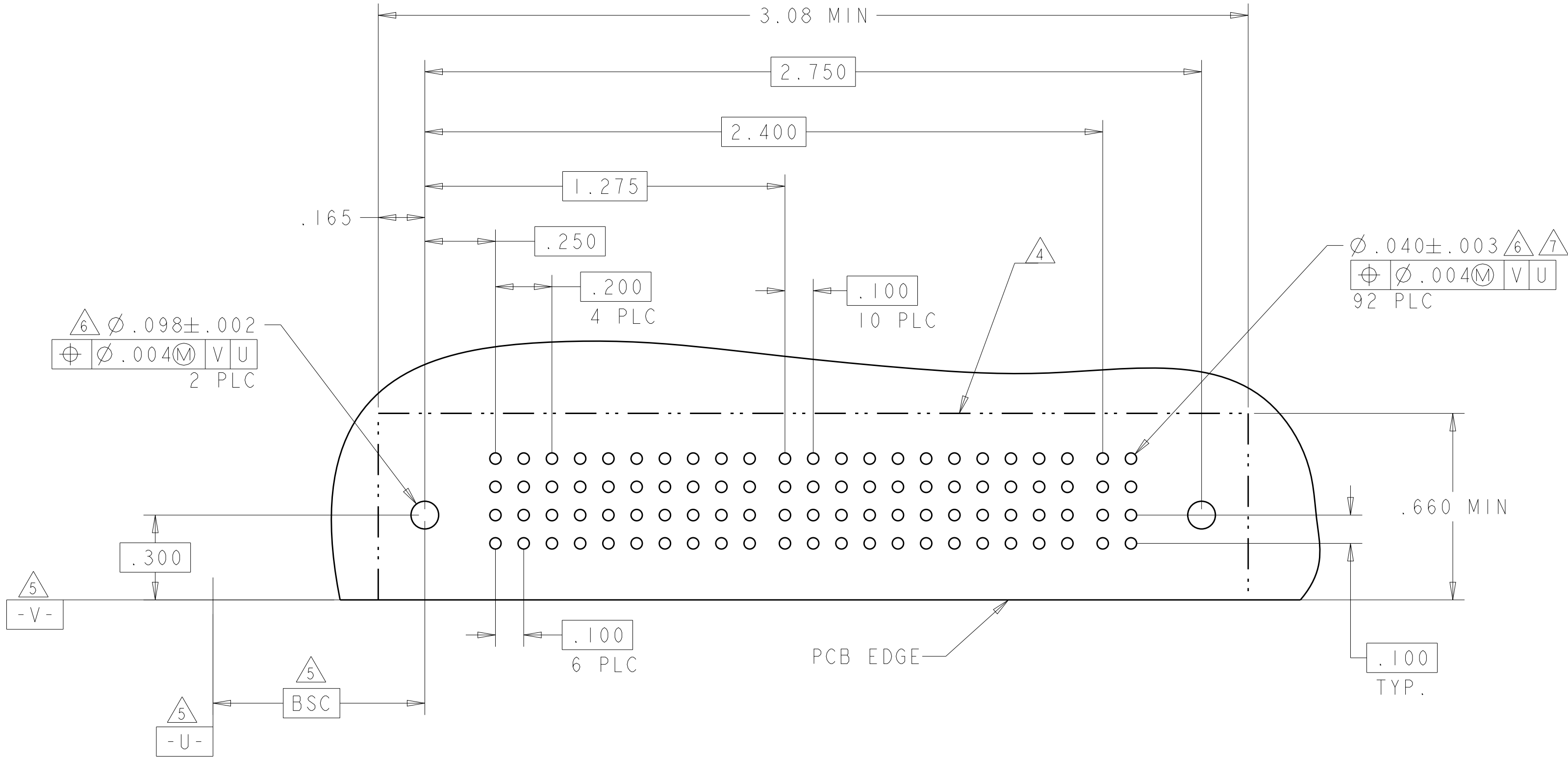
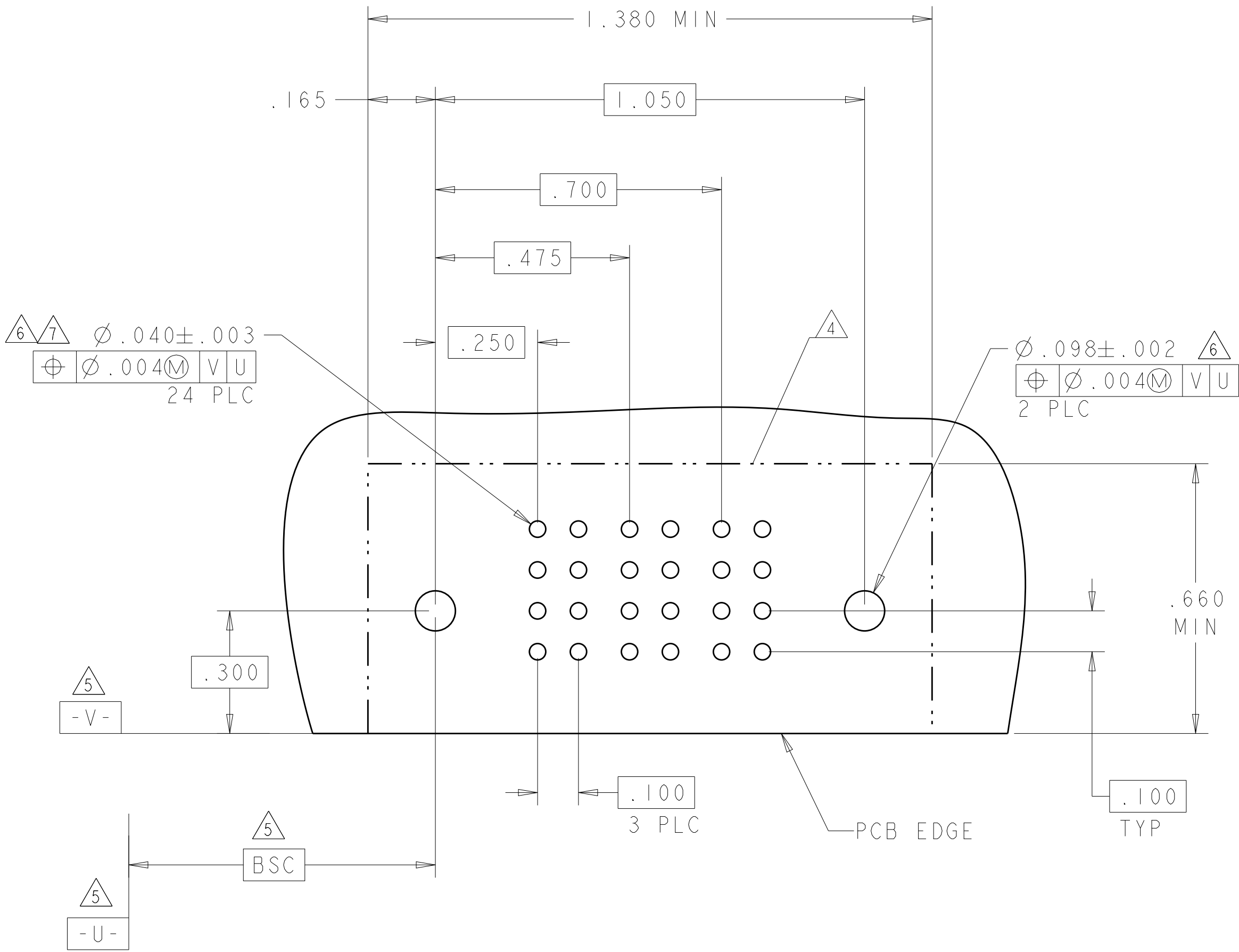
(L5)

4805 (3/11)

LOC	DIST	REVISIONS					
ES	00	P	LTR	DESCRIPTION	DATE	DWN	APVD
			-	SEE SHEET 1	-	-	-

PART NUMBER	ROWS		POWER	SIGNAL		POWER	
			P1	1	2	P2	
6-6450120-8	D C B A		PM	J	J	PM	
				K	K		
				N	N		
				S	S		
IP + 8S + IP		HD					HD

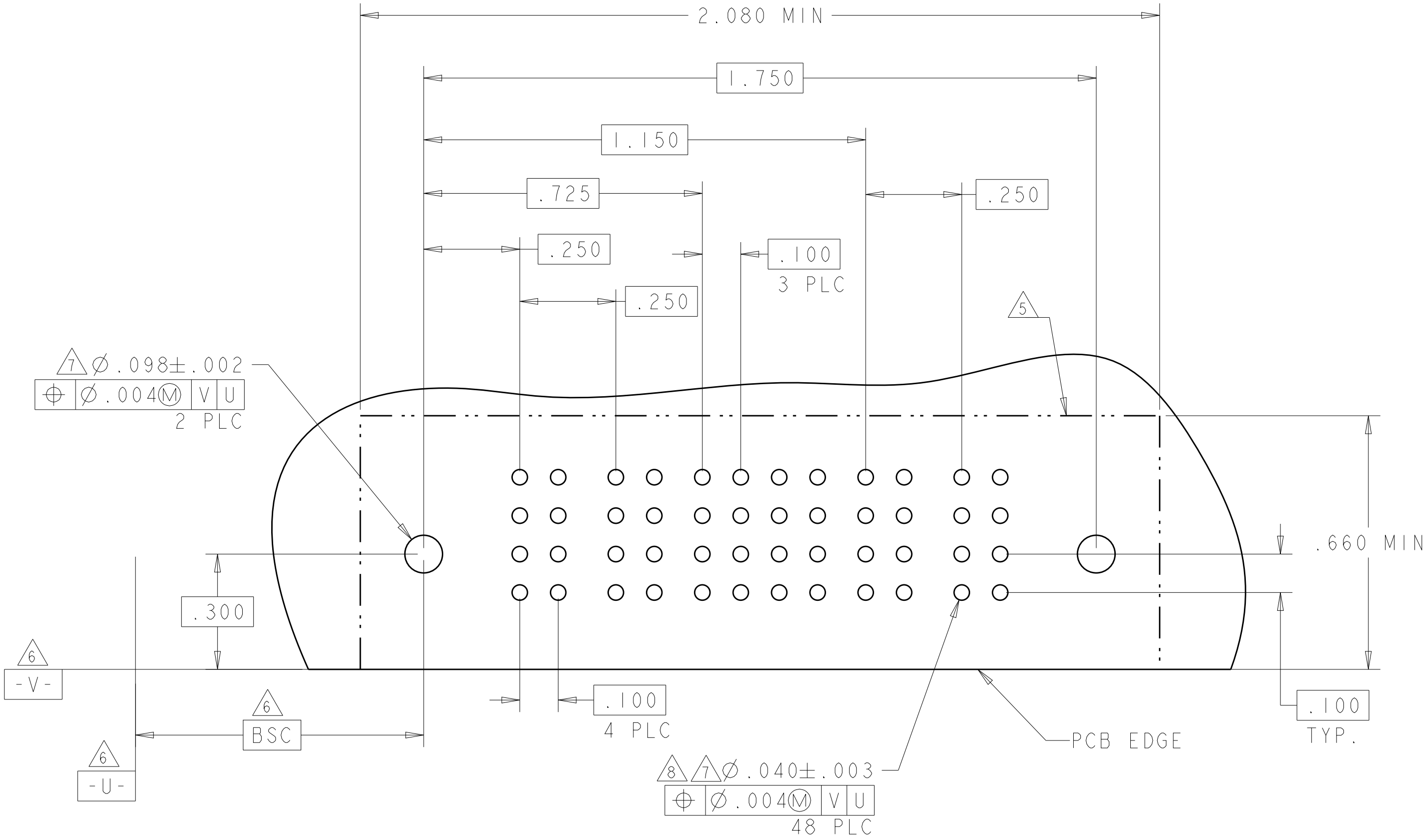
PART NUMBER	ROWS		POWER					SIGNAL											POWER	
			P1	P2	P3	P4	P5	1	2	3	4	5	6	7	8	9	10	11	P6	
7-6450120-0	D C B A		PM	PM	PM		PM	J		J		J		J		E		E	PM	
								G	N		N		N		K	F		F		
								H	H	H	H	H	H	S	S	H		H		
5P + 44S + 1P		HD																		HD



LOC	DIST	REVISIONS				
		P	LTR	DESCRIPTION	DATE	DWN
ES	00	-	-	SEE SHEET 1	-	-

M2

PART NUMBER	ROWS		POWER		SIGNAL				POWER		
			P1	P2	1	2	3	4	P3	P4	
7-6450120-1	D		PM	PM	E	E	E	E	PM	PM	
	C				F	F	F	F			
	B				N	N	N	N			
	A				H	H	H	H			
2P + 16S + 2P											



THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN R.GRZYBOWSKI	02FEB05	TE Connectivity	
		CHK M.PERCHEKKE	02FEB05		
DIMENSIONS: INCHES		TOLERANCES UNLESS OTHERWISE SPECIFIED:		NAME RIGHT ANGLE HEADER W/GUIDES ASSEMBLY	RESTRICTED TO
		0 PLC ±.01 1 PLC ±.01 2 PLC ±.01 3 PLC ±.005 4 PLC ±.0020 ANGLES #2° FINISH -		PRODUCT SPEC 108-1973 APPLICATION SPEC 114-13038 WEIGHT -	
MATERIAL -	-	CUSTOMER DRAWING		SIZE A100779	REV M2
				CAGE CODE C=6450120	SCALE 4:1
				DRAWING NO 6450120	SHEET 24
				OF 24	REV M2

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