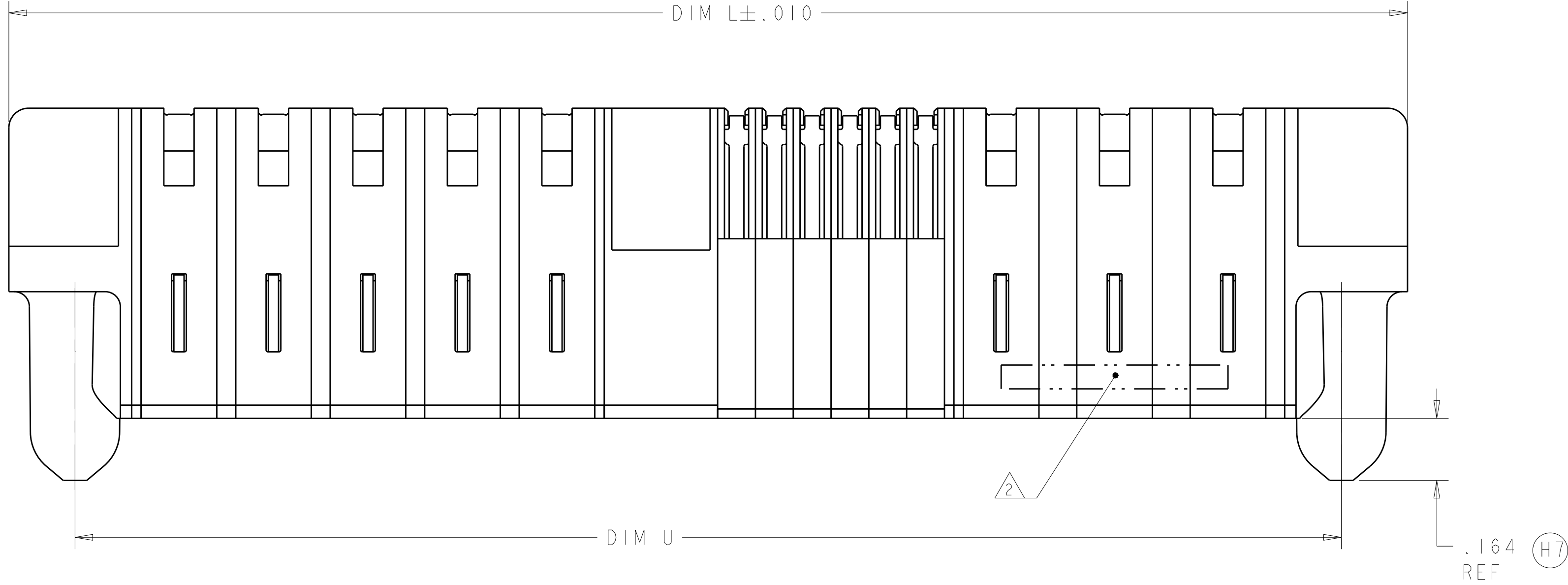
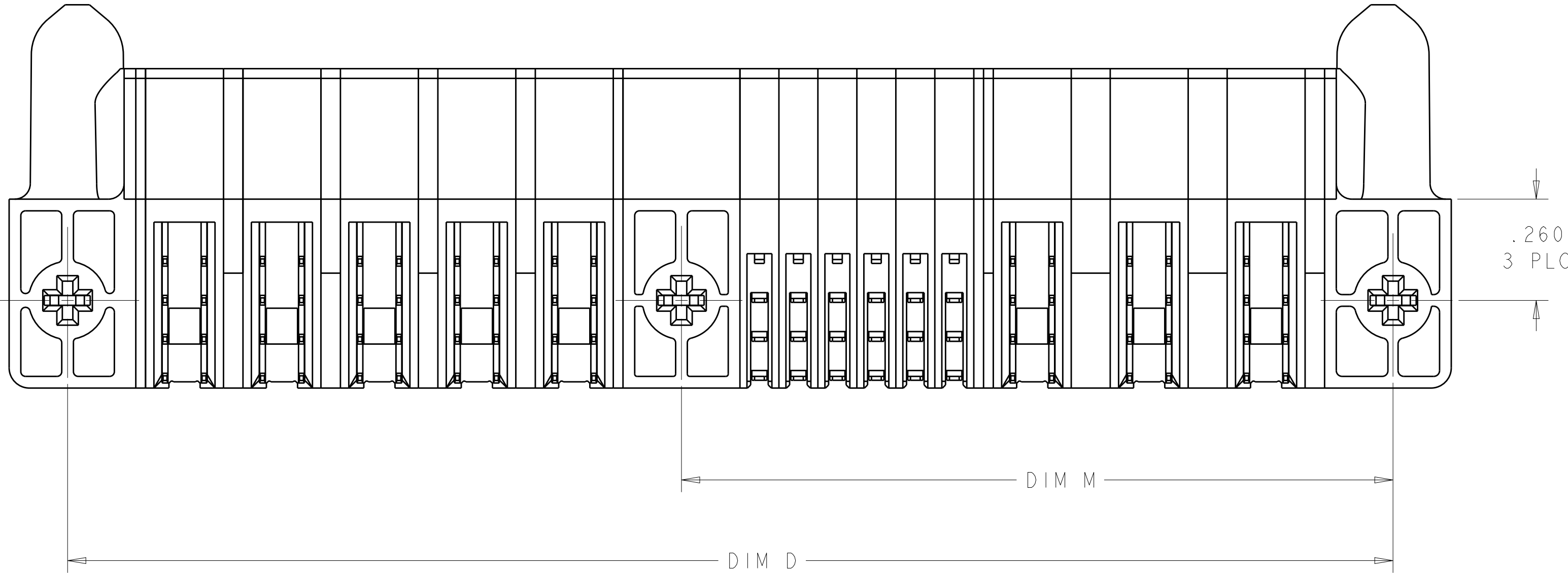
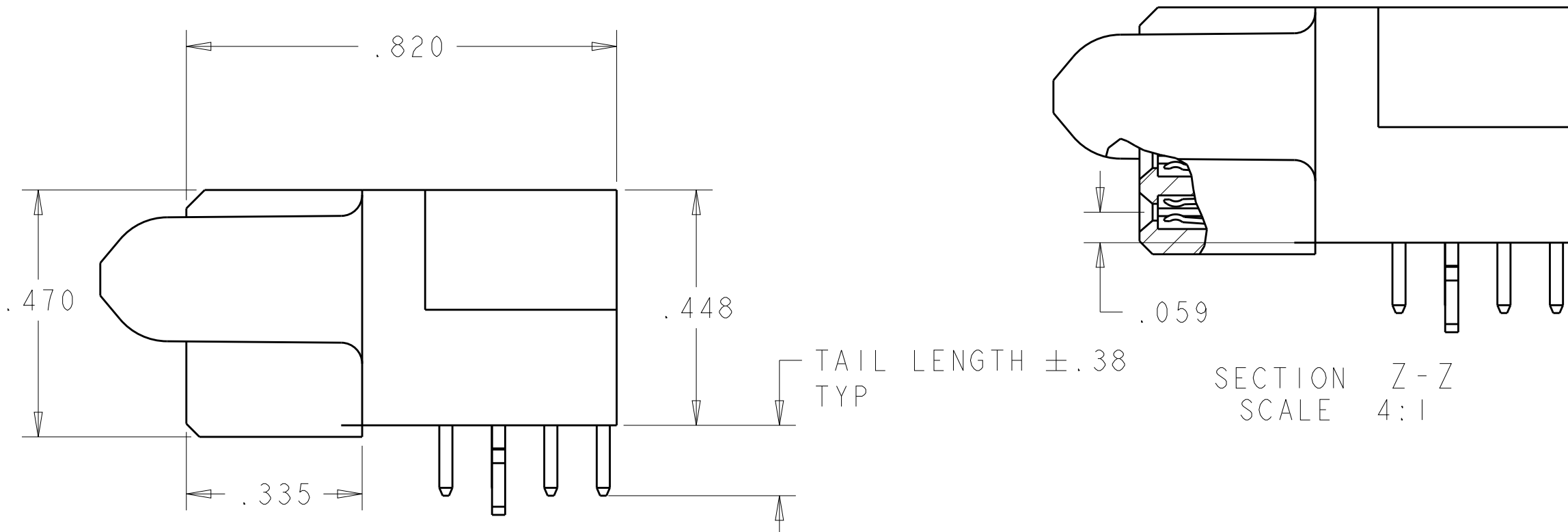
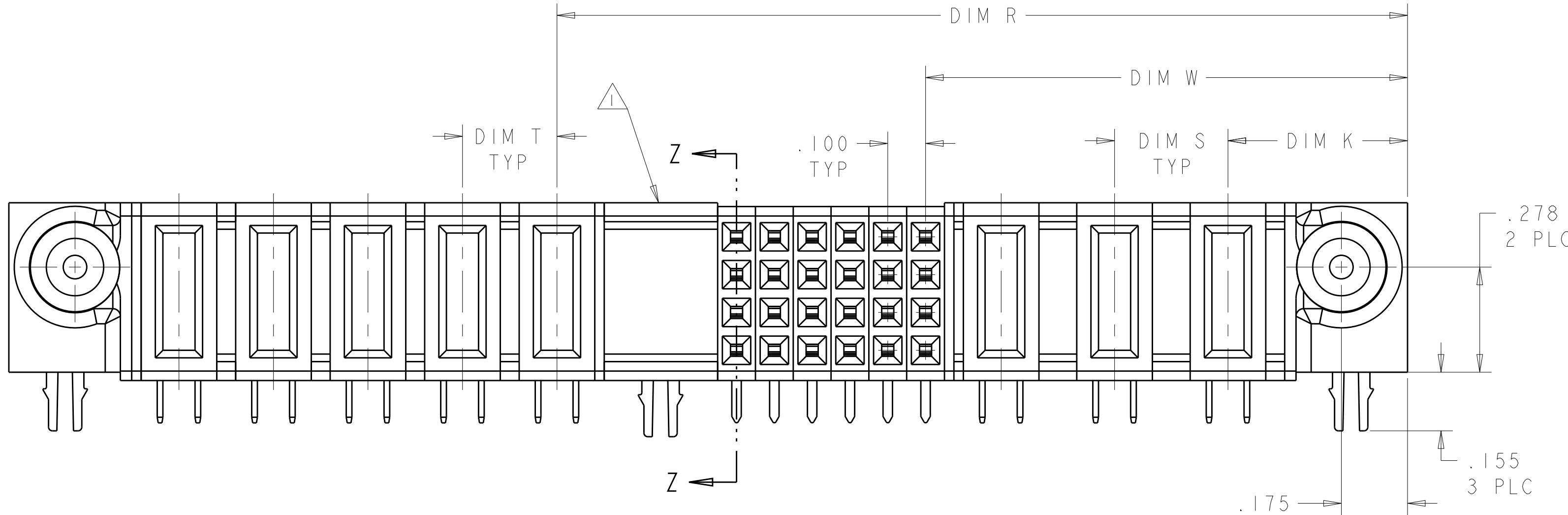


LOC	DIST	REVISIONS				
		P	LTR	DESCRIPTION	DATE	DWN
ES	00		J1	REV PER ECR-12-016975	25SEP2012	CZ
			J3	ADDED NEW DASH NUMBER 4-0	01FEB2013	SZ
			J5	ADDED NEW DASH NUMBER 4-1	25FEB2014	SZ



- 1 OPTIONAL CENTER MODULE, WITH .150 THRU HOLE OR HOLD DOWN FEATURE.
- 2 "AMP", PART NUMBER AND DATE CODE TO BE MARKED
- 3 MATERIAL: HOUSING - GLASS FILLED HIGH TEMP THERMO PLASTIC, UL94 V-0.
SIGNAL CONTACT - HIGH CONDUCTIVITY COPPER ALLOY
POWER CONTACT - HIGH CONDUCTIVITY COPPER ALLOY
- 4 CONTACT PLATING: NOBLE METAL PLATING ON CONTACT FUNCTIONAL AREA OF POWER AND SIGNAL CONTACTS
- 5 MECHANICAL CONNECTOR KEEP OUT ZONE.
- 6 DATUM AND BASIC DIMENSIONS ESTABLISHED BY CUSTOMER.
- 7 PCB - ALL HOLE DIAMETERS ARE FINISHED HOLE SIZES
- 8 PCB - .0453±.0010 DRILLED HOLES PLATED WITH .0003 MIN Sn OVER .001 TO .003 Cu PLATING TO ACHIEVE A .040 DIAMETER HOLE



THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN R.GRZYBOWSKI 21FEB05	TE Connectivity	
		CHK M.PERCHEKKE 21FEB05		
DIMENSIONS:		APVD M.PERCHEKKE	NAME	
INCHES		PRODUCT SPEC		
		108-1973	SIZE	
		APPLICATION SPEC		
		114-13038	CAGE CODE	
		FINISH		
		WEIGHT	DRAWING NO	
			RESTRICTED TO	
			SCALE	
			SHEET	
			OF	
			REV	
			J5	

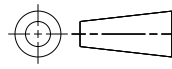
LOC	DIST	REVISIONS					
		P	LTR	DESCRIPTION	DATE	DWN	APVD
ES	00	-	-	SEE SHEET 1	-	-	-

J4

2.650	.200	.250	1.550	.875	2.700	-	3.000	.450	2P + 24S + 6P	4-6450170-1
3.100	.250	.250	2.250	1.875	3.150	-	3.450	.450	6P + 12S + 4P	4-6450170-0
1.900	.250	.300	1.550	1.275	1.950	-	2.250	.475	3ACP + 8S + 2P	3-6450170-9
1.800	-	-	1.700	.625	1.850	-	2.150	.450	1P + 40S + 1P	3-6450170-8
1.600	-	-	1.500	.625	1.650	-	1.950	.450	1P + 32S + 1P	3-6450170-7
1.700	.250	.250	1.350	.875	1.750	-	2.050	.450	2P + 16S + 2P	3-6450170-6
1.550	.250	.250	1.200	.900	1.600	-	1.900	.450	2P + 8S + 2P	3-6450170-5
2.350	.250	.250	1.250	.875	2.400	-	2.700	.450	2P + 12S + 5P	3-6450170-4
2.325	.250	.300	1.975	1.600	2.375	-	2.675	.450	4ACP + 12S + 2P	3-6450170-3
1.700	.250	.250	1.350	.875	1.750	-	2.050	.450	2P + 16S + 2P	3-6450170-1
2.300	.250	.300	1.950	1.275	2.350	-	2.650	.450	3ACP + 24S + 2P	3-6450170-0
2.400	.250	.250	1.800	1.125	2.450	-	2.750	.450	3P + 24S + 3P	2-6450170-9
2.300	.250	.300	1.950	1.275	2.350	-	2.650	.450	3ACP + 24S + 2P	2-6450170-8
2.400	.250	.250	1.800	1.125	2.450	-	2.750	.450	3P + 24S + 3P	2-6450170-7
1.950	.250	.250	1.600	1.125	2.000	-	2.300	.450	3P + 16S + 2P	2-6450170-6
1.300	-	-	1.200	.675	1.350	-	1.650	.450	1P + 16S + 1P	2-6450170-0
2.200	.250	.250	1.350	.875	2.250	-	2.550	.450	2P + 16S + 4P	1-6450170-9
2.800	.300	.250	2.075	1.375	2.850	-	3.150	.450	4P + 24S + 3ACP	1-6450170-8
3.000	.250	.250	2.150	1.425	3.050	-	3.350	.450	4P + 24S + 4P	1-6450170-4
2.600	.200	.200	1.925	1.175	2.650	-	2.950	.425	4P + 28S + 4P	1-6450170-1
1.575	-	-	1.425	.700	1.625	-	1.925	.475	1P + 24S + 1P	1-6450170-0
2.500	.250	.250	2.150	.875	2.550	-	2.850	.450	2P + 48S + 2P	6450170-9
3.300	.250	.300	1.950	1.275	3.350	-	3.650	.475	3ACP +24S + 6P	6450170-8
1.400	.250	.250	1.300	.625	1.450	-	1.750	.450	1P + 24S + 1P	6450170-6
2.400	.250	.250	1.800	1.125	2.450	-	2.750	.450	3P + 24S + 3P	6450170-5
4.350	.250	.250	3.500	2.625	4.400	-	4.700	.450	9P + 32S + 4P	6450170-4
3.650	.250	.300	2.550	1.275	3.700	-	4.000	.475	3ACP + 48S + 5P	6450170-3
3.050	.250	.300	1.950	1.275	3.100	-	3.400	.475	3ACP +24S + 5P	6450170-2
2.550	.250	.300	2.200	1.525	2.600	-	2.900	.475	3ACP+1P+24S+2P	6450170-1
DIM U	DIM T	DIM S	DIM R	DIM W	DIM D	DIM M	DIM L	DIM K	DESCRIPTION	PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS:
INCHES



MATERIAL
-

TOLERANCES UNLESS OTHERWISE SPECIFIED:

0 PLC
1 PLC
2 PLC
3 PLC
4 PLC
ANGLES
FINISH

±
±.01
±.005
±.0020
#2°
-

DWN
R.GRZYBOWSKI

CHK
M.PERCHEKKE

APVD
M.PERCHEKKE

PRODUCT SPEC
108-1973

APPLICATION SPEC
114-13038

WEIGHT
-

CUSTOMER DRAWING

21FEB05

21FEB05

-

NAME
RIGHT ANGLE RECEPTACLE ASSEMBLY
WITH GUIDES
MULTI-BEAM XL

SIZE
A1

CAGE CODE
100779

DRAWING NO
6450170

RESTRICTED TO
-

SCALE
4:1

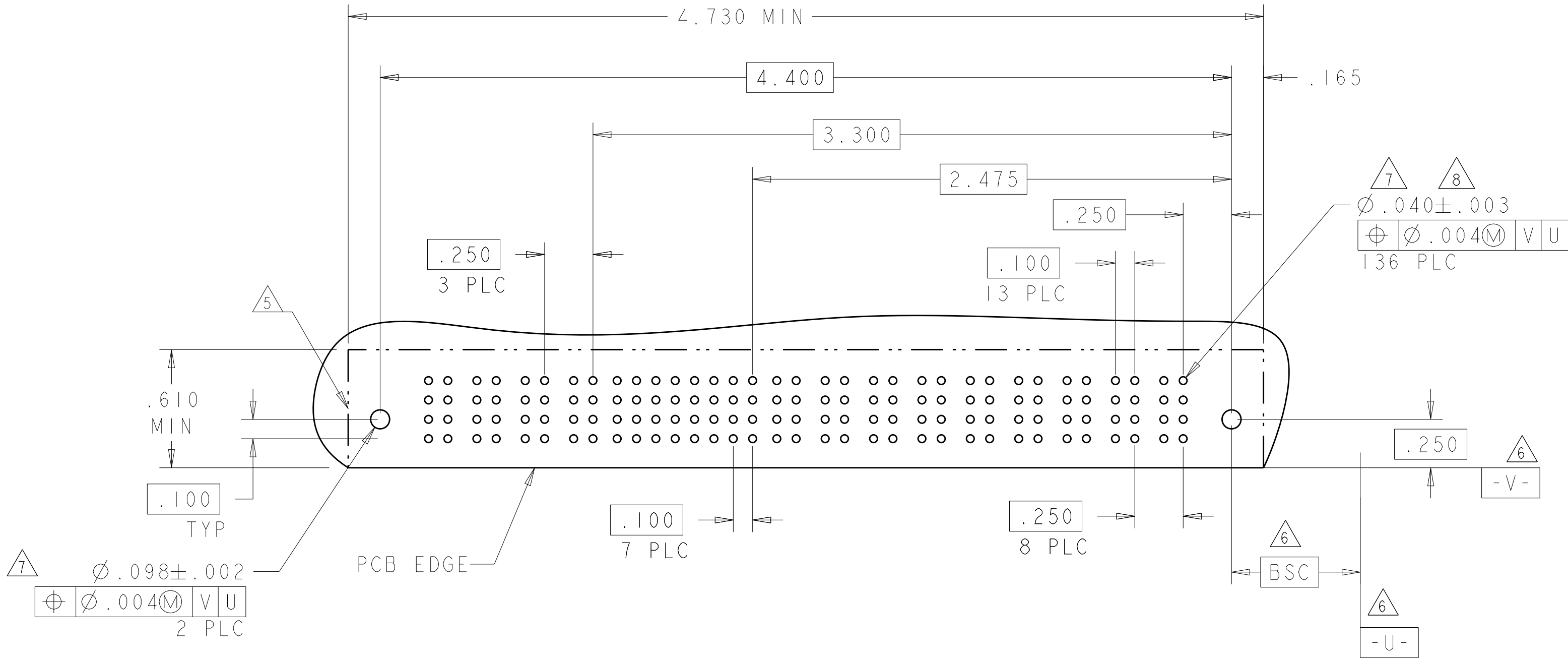
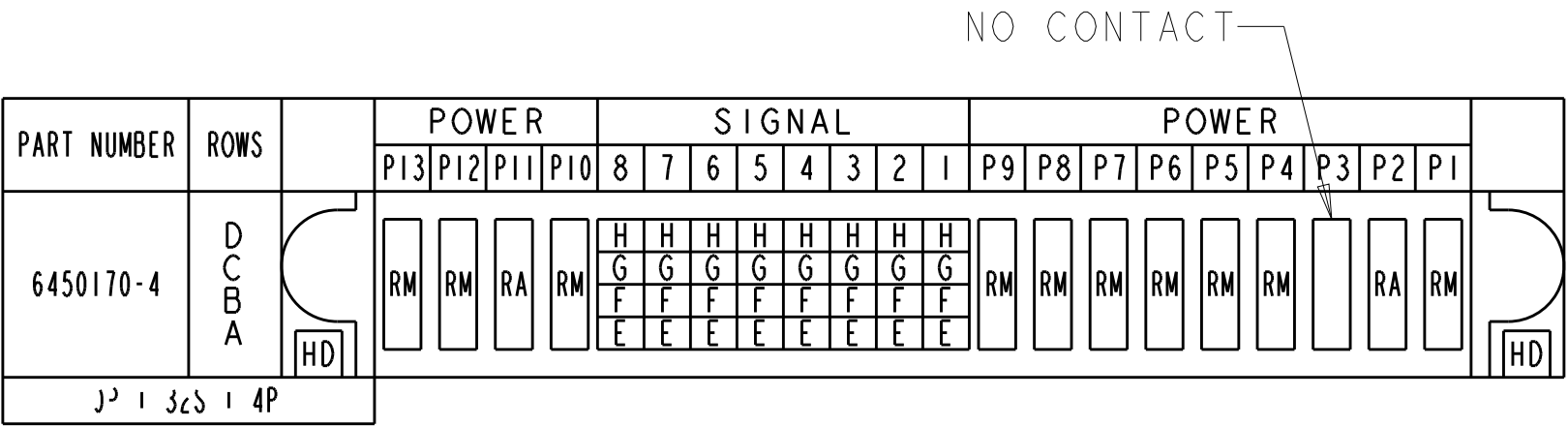
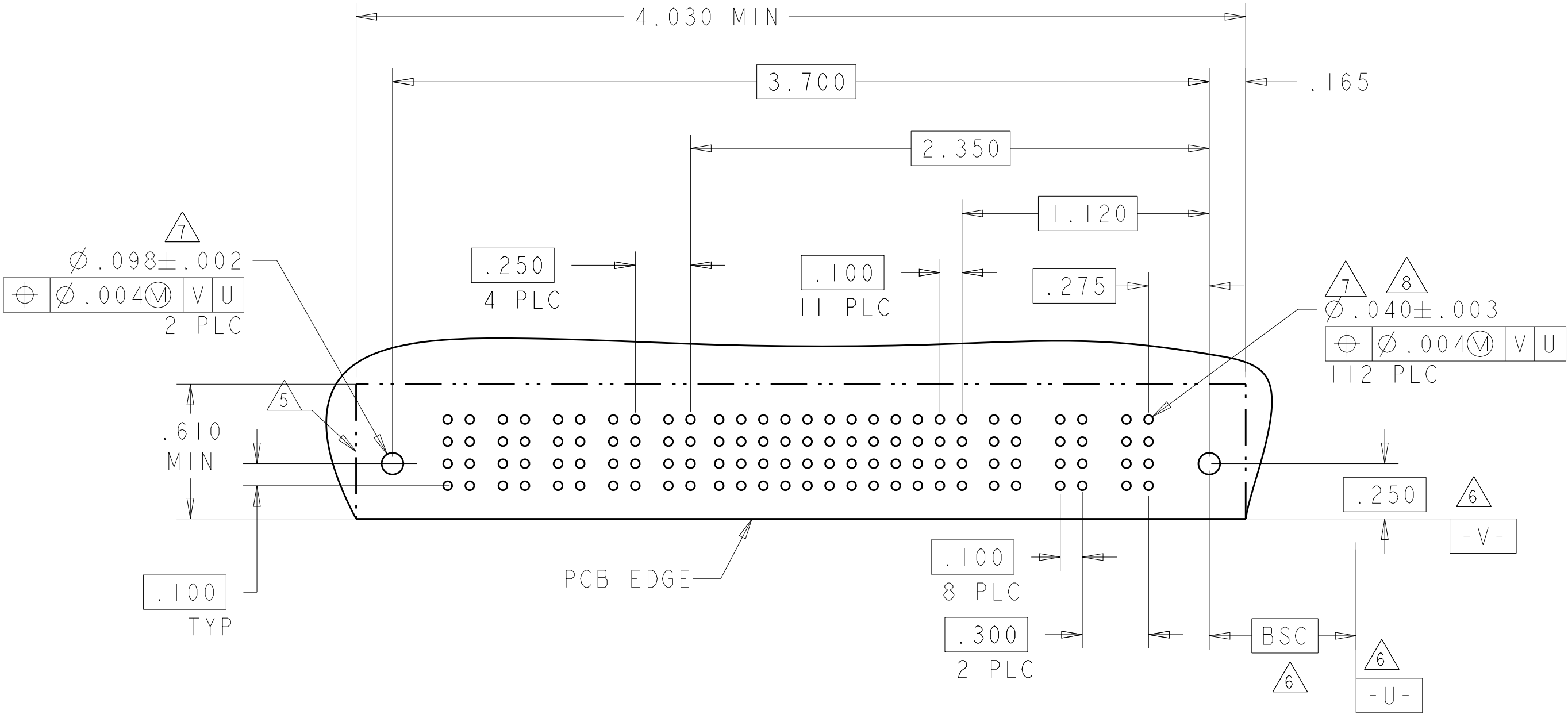
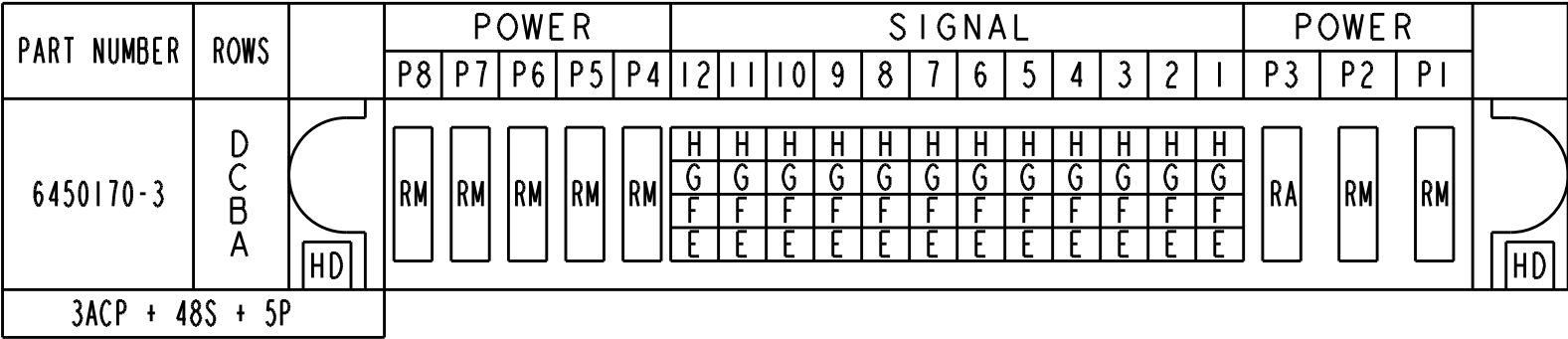
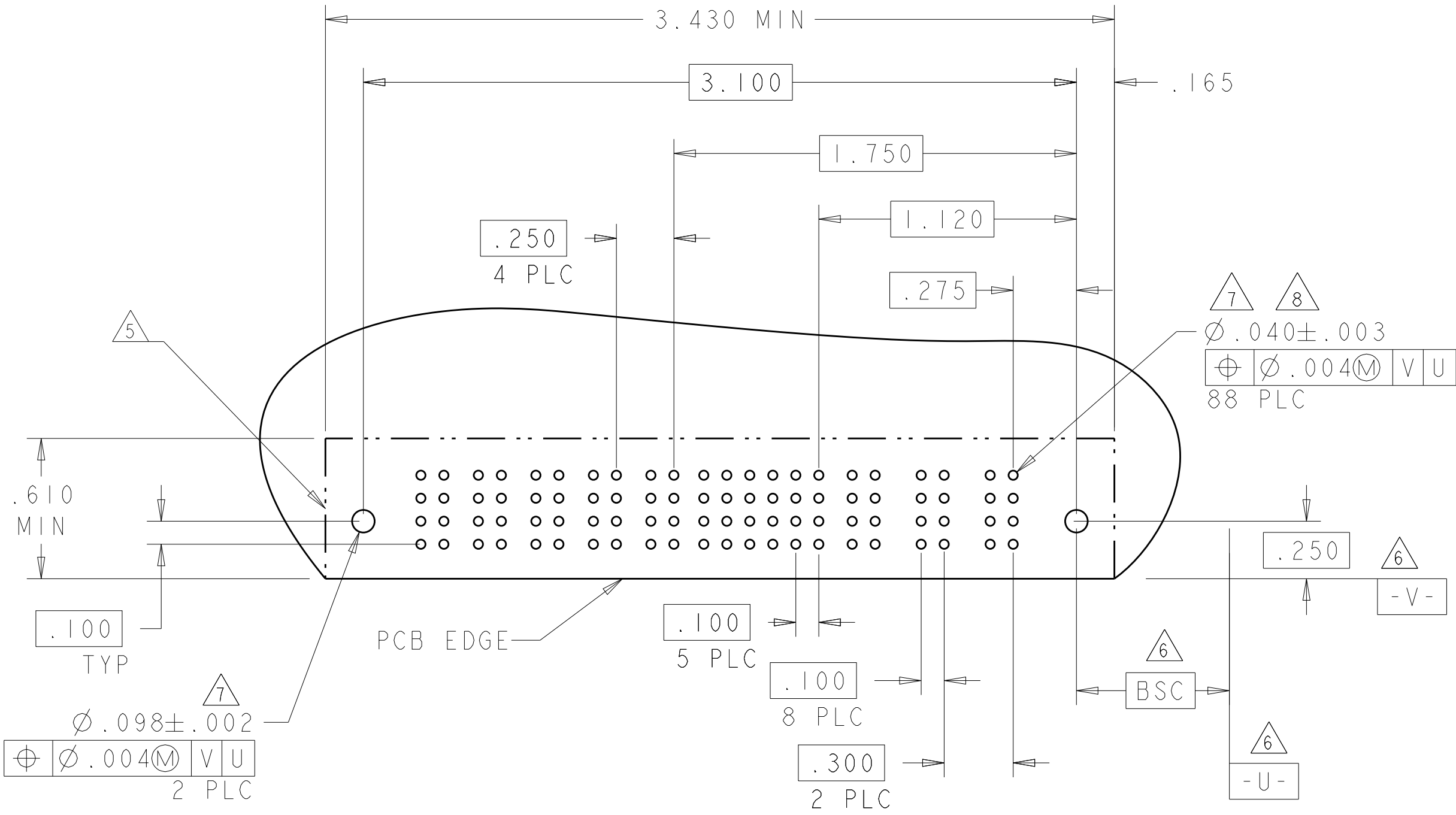
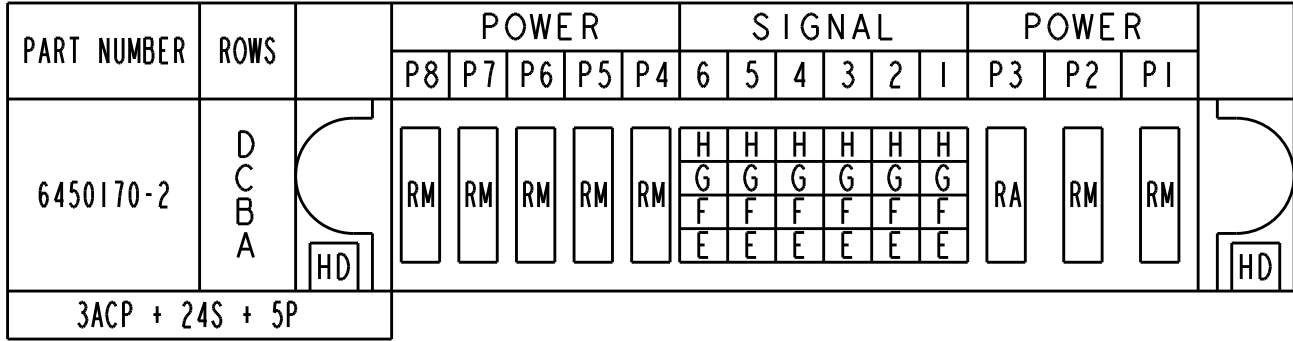
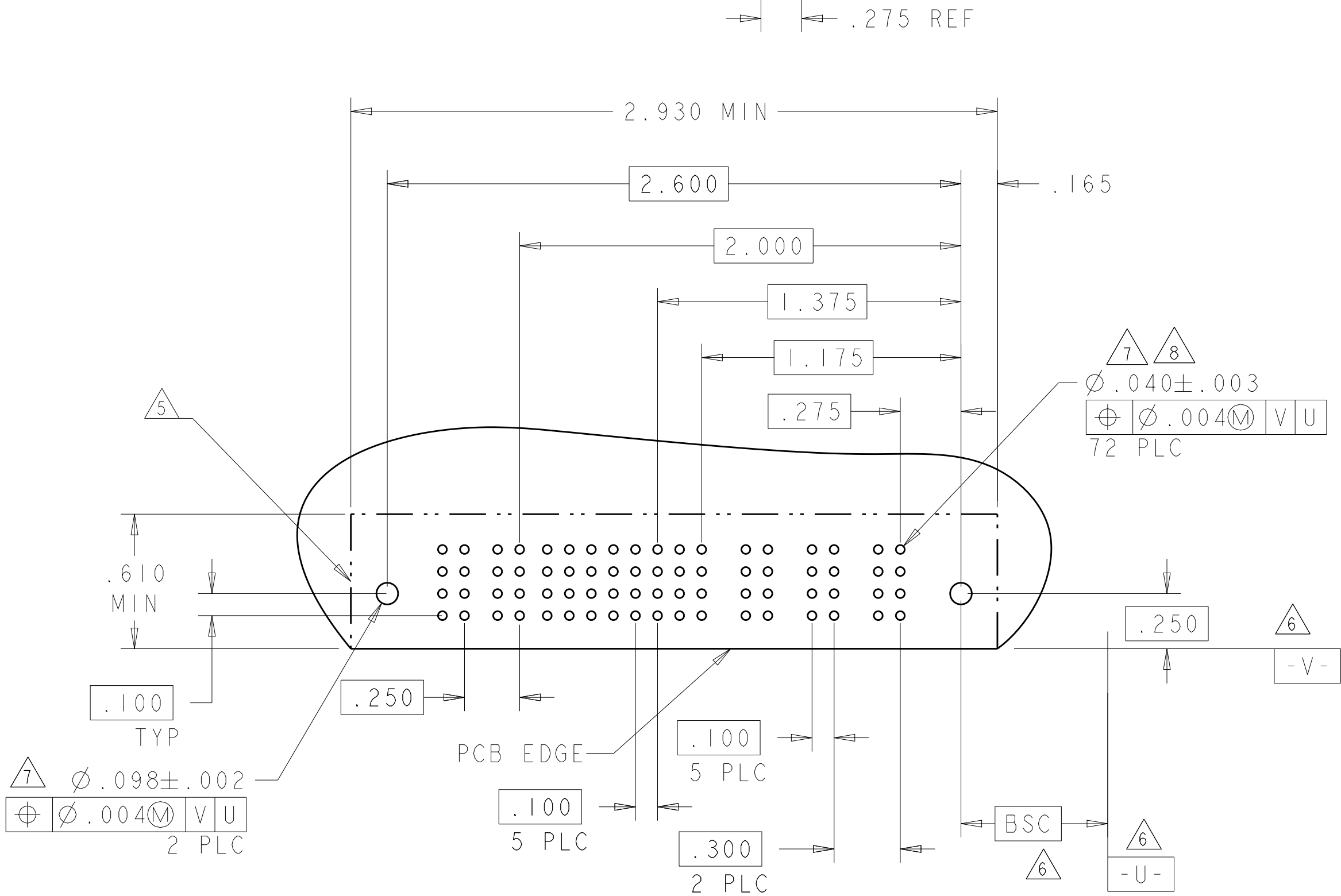
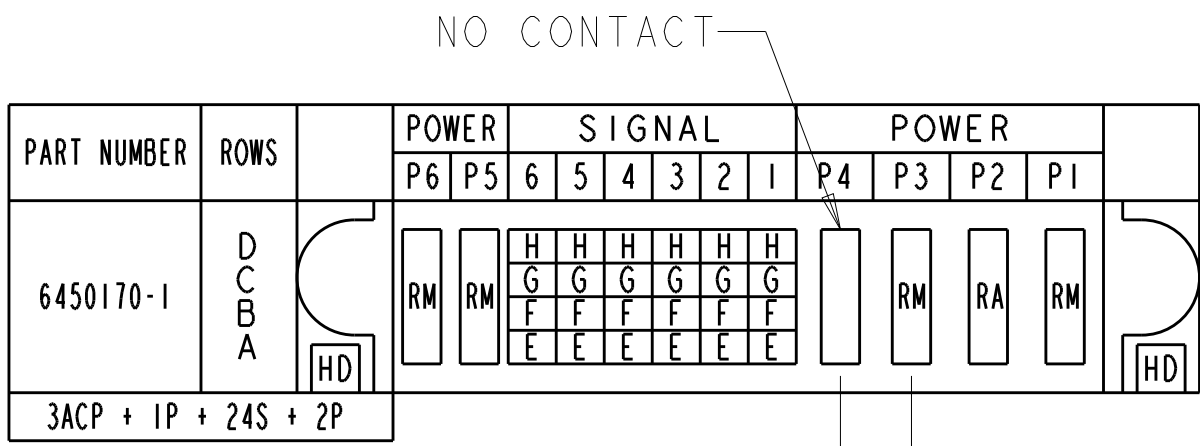
SHEET
2

OF
13

REV
J5

4805 (3/11)

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



RM	.135	STD	F	.135	B
RA	.135	MFBL	E	.135	A
CODE	TAIL LENGTH	TYPE	CODE	TAIL LENGTH	ROW
POWER CONTACT			SIGNAL CONTACT		

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS:

INCHES

MATERIAL

:

TOLERANCES UNLESS OTHERWISE SPECIFIED:

0 PLC ±.01

1 PLC ±.01

2 PLC ±.01

3 PLC ±.01

4 PLC ±.002

ANGLES ±.002

FINISH

:

OWN: R. GRZYBOWSKI

CHK: M. PERCHERKE

APVD: M. PERCHERKE

PRODUCT SPEC: 108-1973

APPLICATION SPEC: 114-13038

WEIGHT:

CUSTOMER DRAWING

21FEB05

21FEB05

-

NAME: RIGHT ANGLE RECEPTACLE ASSEMBLY WITH GUIDES MULTI-BEAM XL

SIZE: A1

CAGE CODE: 00779

DRAWING NO: 6450170

RESTRICTED TO: -

SCALE: 1:1

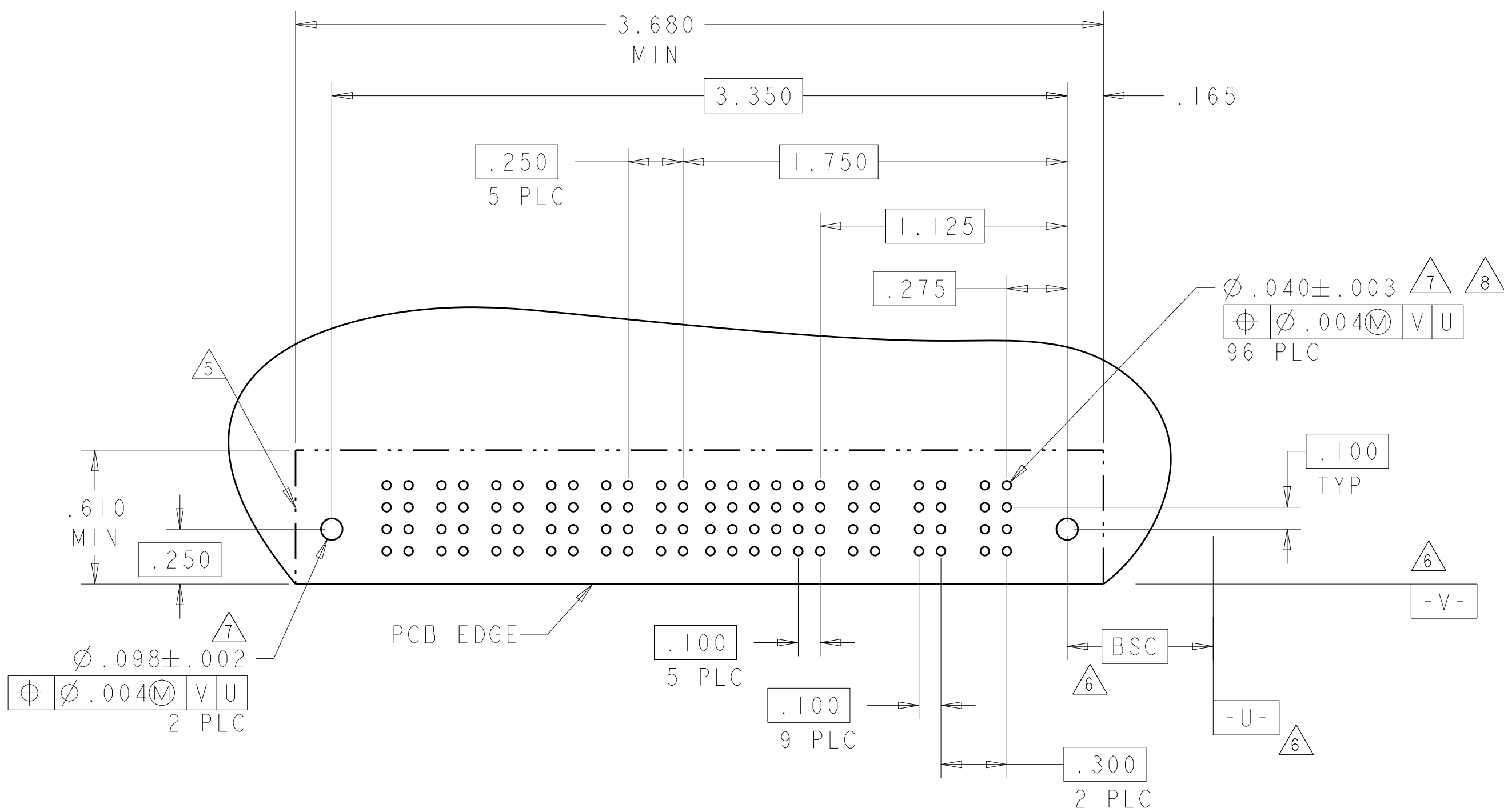
SHEET: 3

OF: 13

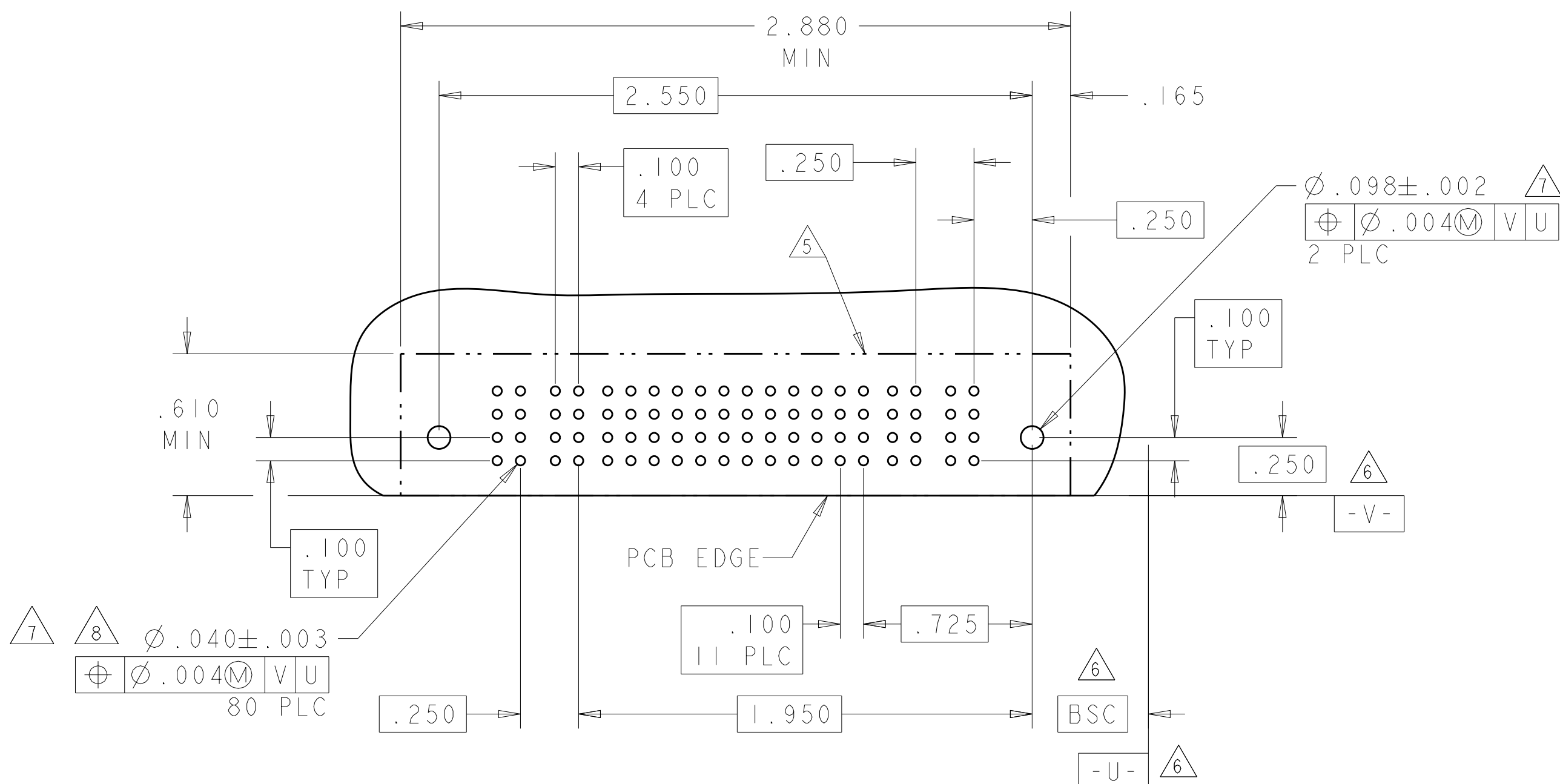
REV: J5

TE Connectivity

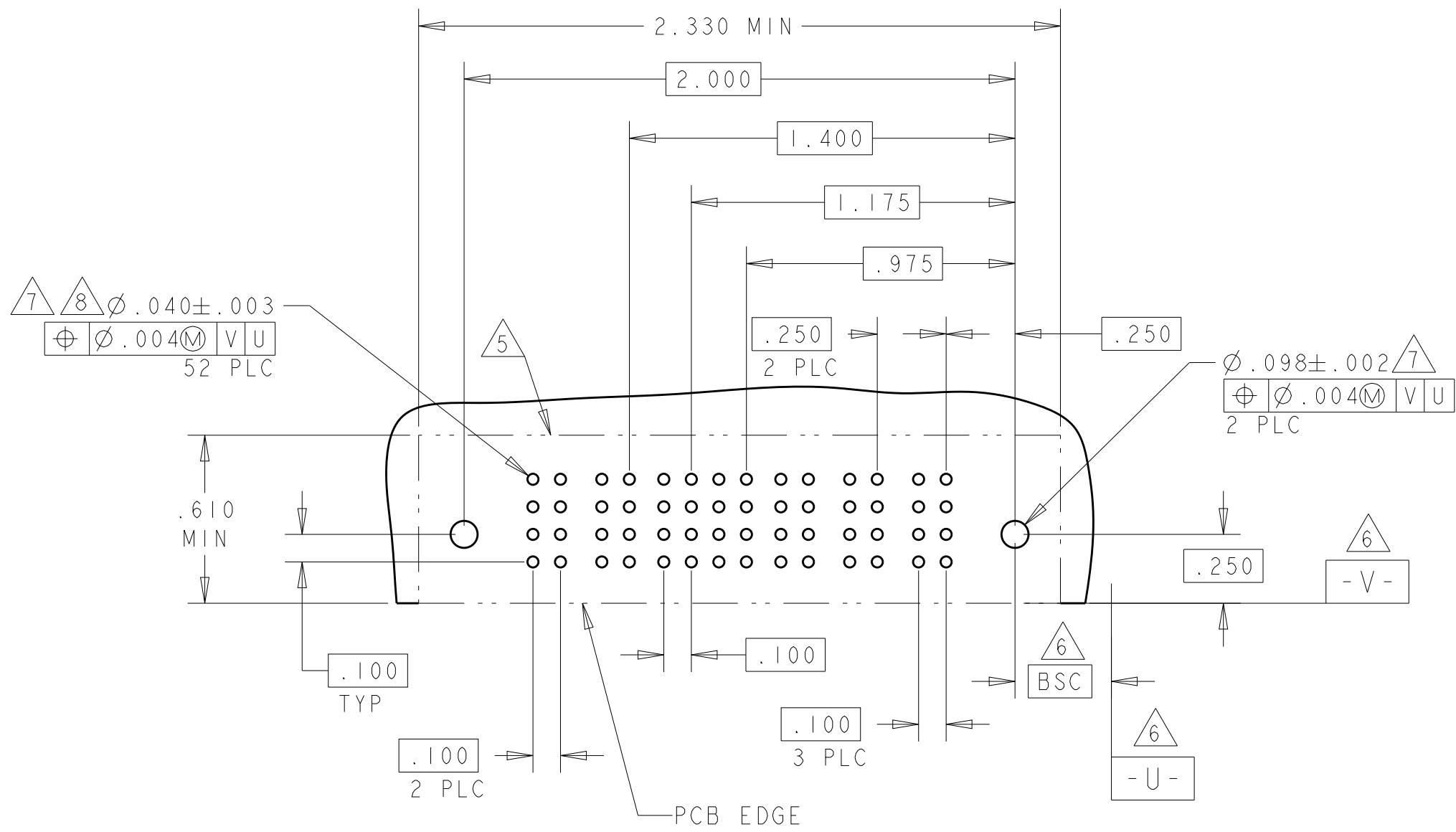
PART NUMBER	ROWS		POWER						SIGNAL						POWER			
			P9	P8	P7	P6	P5	P4	6	5	4	3	2	1	P3	P2	P1	
6450170-8	D C B A																	
																		
3ACP + 24S + 6P																		



PART NUMBER	ROWS			POWER		SIGNAL												POWER																																																																																																																																																																																																																																																																																																																											
		P4	P3	12	11	10	9	8	7	6	5	4	3	2	1	P2	P1																																																																																																																																																																																																																																																																																																																												
6450170-9	D C B A																																																																																																																																																																																																																																																																																																																																												
																																																																																																																																																																																																																																																																																																																																													
																																																																																																																																																																																																																																																																																																																																													
																																																																																																																																																																																																																																																																																																																																													
																																																																																																																																																																																																																																																																																																																																													
																																																																																																																																																																																																																																																																																																																																													
																																																																																																																																																																																																																																																																																																																																													
																																																																																																																																																																																																																																																																																																																																													
																																																																																																																																																																																																																																																																																																																																													
																																																																																																																																																																																																																																																																																																																																													
																																																																																																																																																																																																																																																																																																																																													

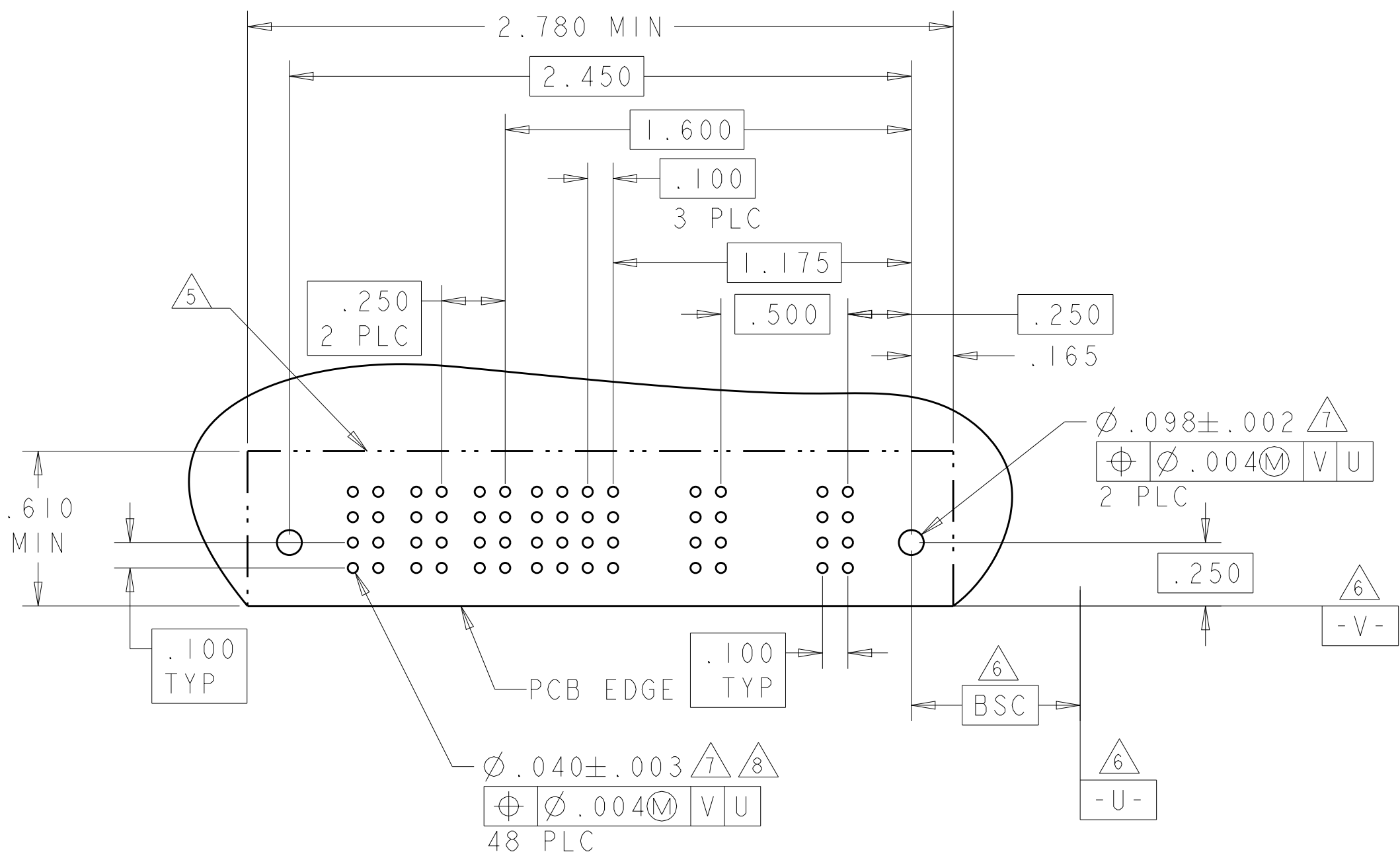
4805 (3/11)

PART NUMBER	ROWS	POWER		SIGNAL				POWER								
		P5	P4	4	3	2	1	P3	P2	P1						
2-6450170-6	D C B A	(HD)	RM	RM	H	H	H	G	H	G	RA	RA	RA	(HD)		
3P + 16S + 2P																



PART NUMBER	ROWS		POWER			SIGNAL							POWER		
			P6	P5	P4	6	5	4	3	2	1	P3	P2	P1	
2-6450170-7	D C B A														
3P + 24S + 3P															

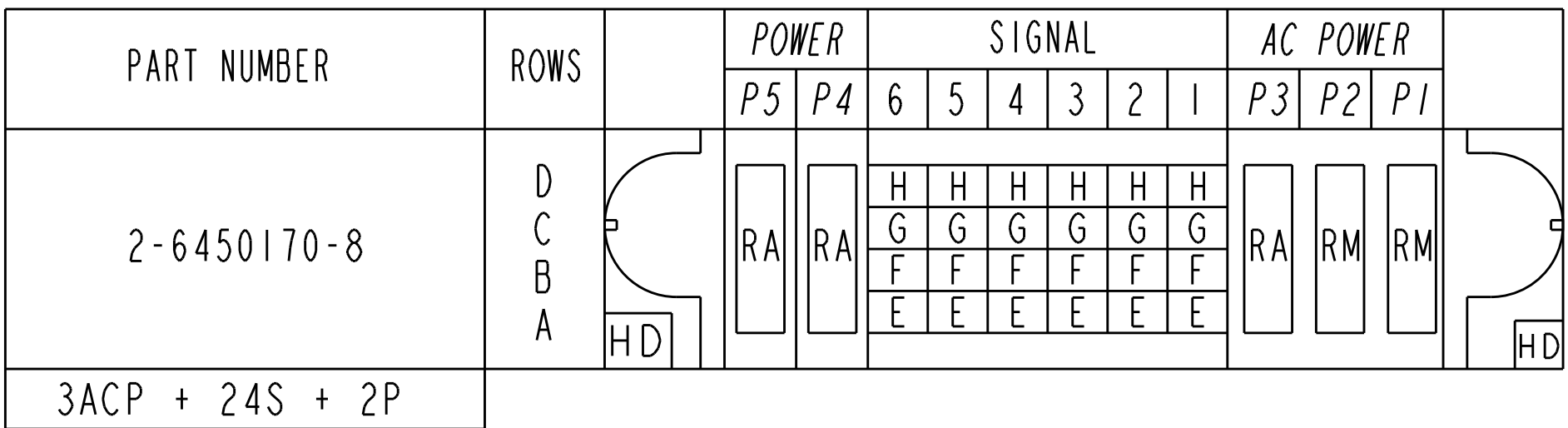
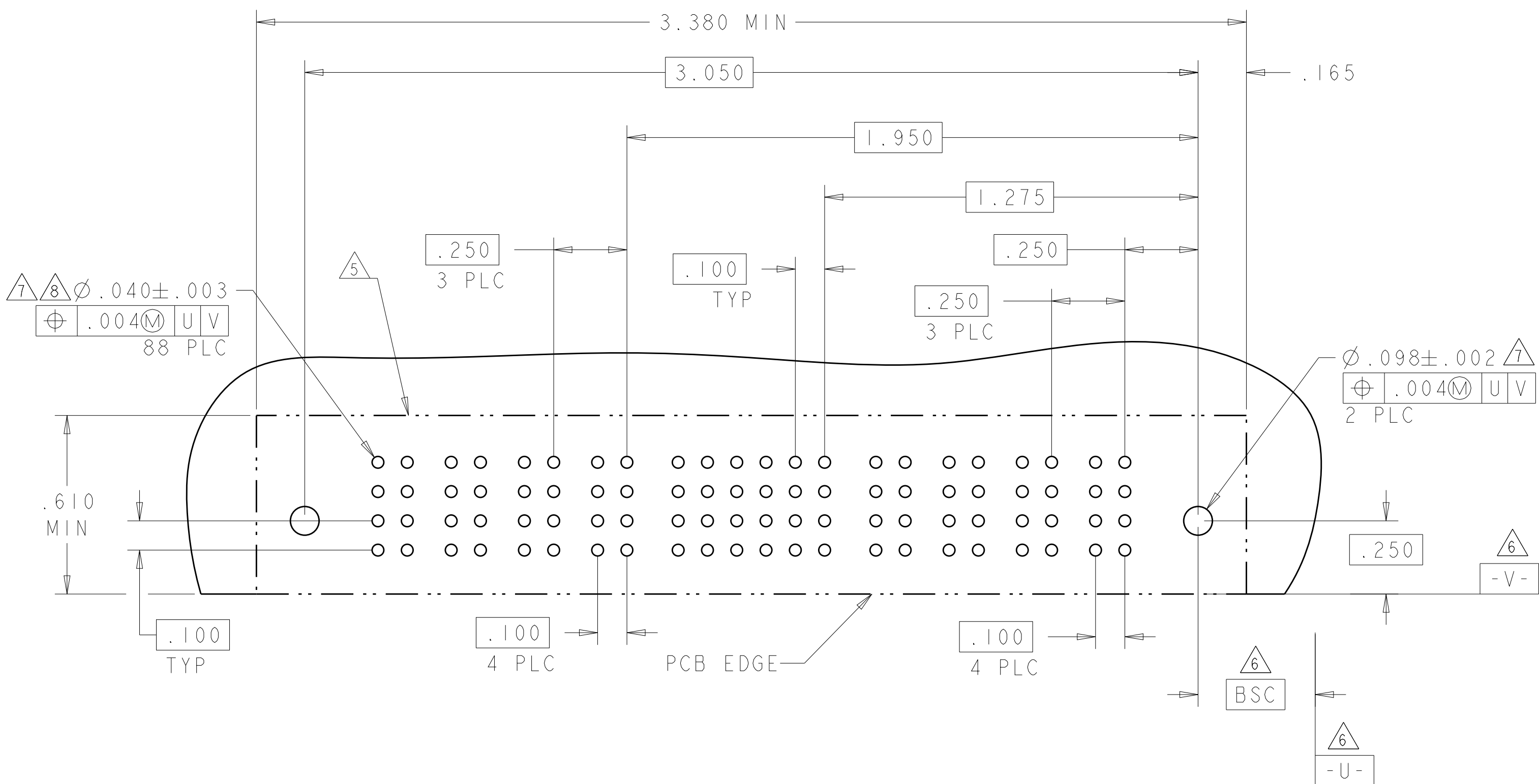
PART NUMBER	ROWS		POWER			SIGNAL							POWER						
			P6	P5	P4	6	5	4	3	2	1	P3	P2	P1					
2-6450170-9	D C B A		RM	RM	RA	H G F E	H G F E	H G F E					RM		RM				
3P + 24S + 3P																	HD		



NO CONTACTS LOADED

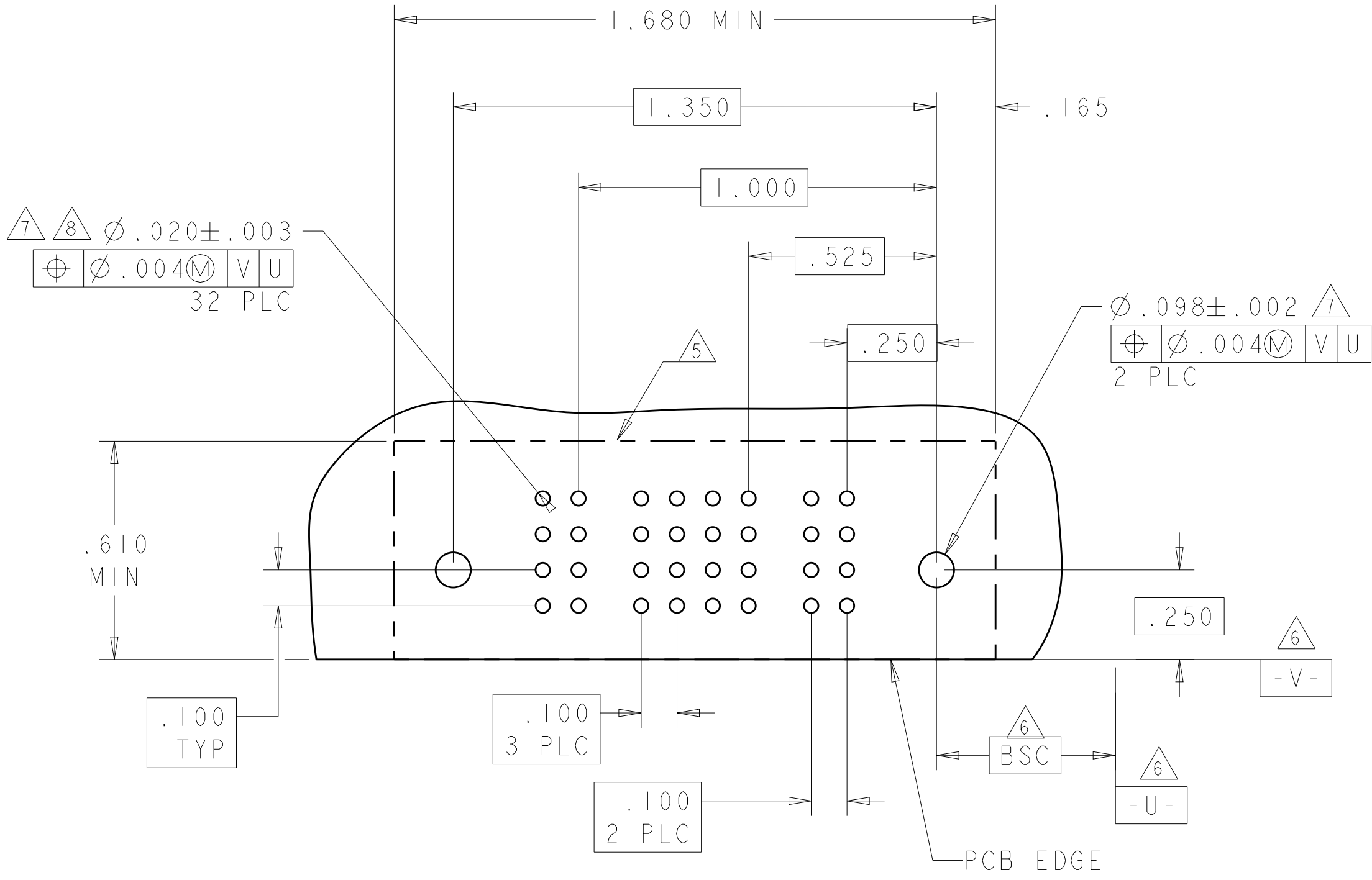
4805 (3/11)

PART NUMBER	ROWS		POWER				SIGNAL						POWER				
			P8	P7	P6	P5	6	5	4	3	2	1	P4	P3	P2	P1	
I-6450170-4	D C B A	C HD	RA	RA	RA	RA	H	H	H	H	H	H	RA	RA	RA	RA	
							G	G	G	G	G	G					
							F	F	F	F	F	F					
							E	E	E	E	E	E					
4P + 24S + 4P																	

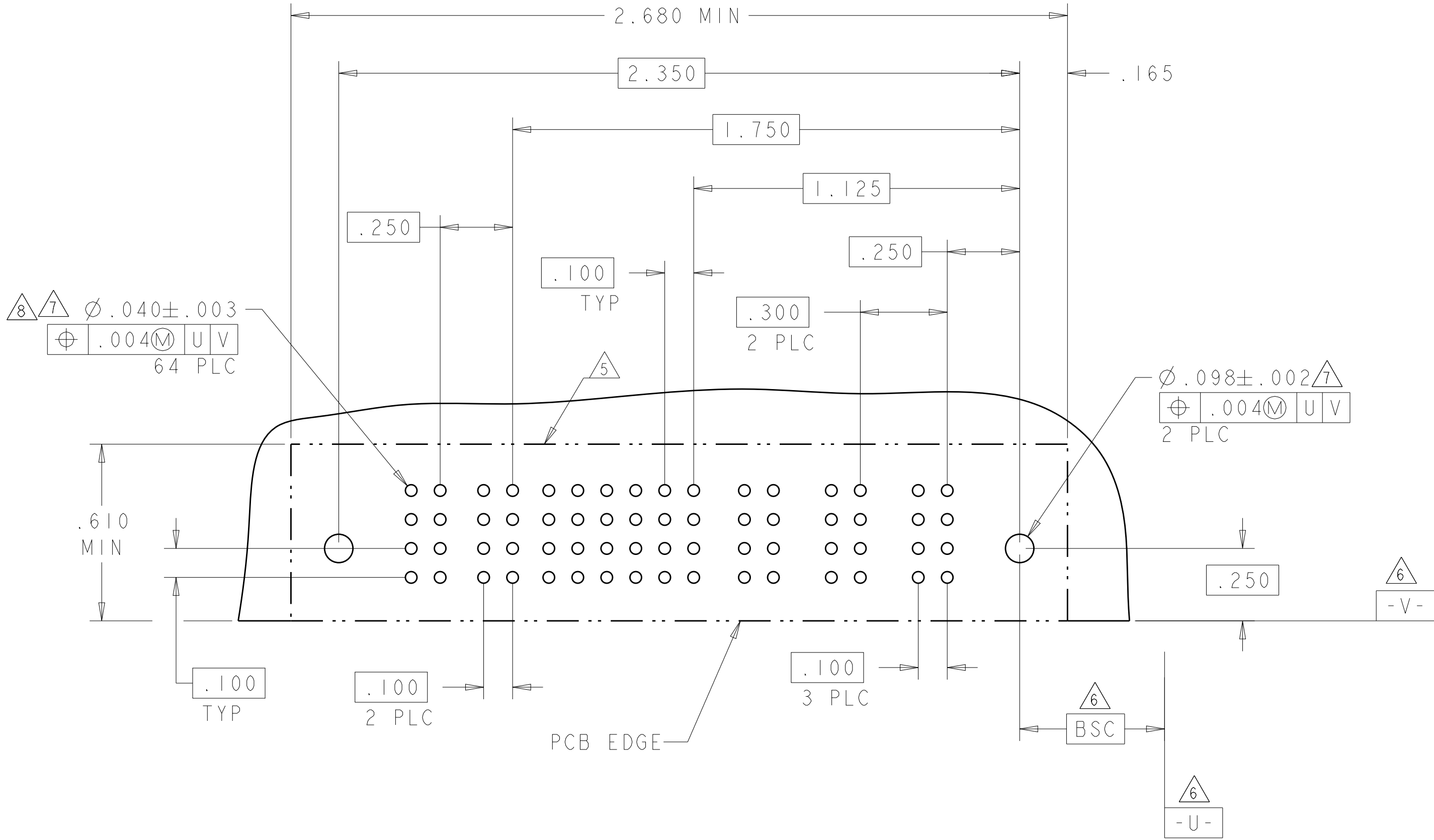
4805 (3/11)

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

PART NUMBER	ROWS		POWER	SIGNAL				POWER	
			P2	4	3	2	1	P1	
2-6450170-0	D C B A		RM	H	H	H	H	RM	
				G	G	G	G		
				F	F	F	F		
				E	E	E	E		
IP + 16S + IP									



PART NUMBER	ROWS		POWER		SIGNAL							AC POWER			
			P5	P4	6	5	4	3	2	1	P3	P2	P1		
3-6450170-0	D C B A				H	H	H	H	H	H					
					G	G	G	G	G	G					
					F	F	F	F	F	F					
					E	E	E	E	E	E					
3ACP + 24S + 2P															



THIS DRAWING IS A CONTROLLED DOCUMENT.

DWN

R. GRZYBOWSKI

21FEB05

CHK

M. PERCHERKE

21FEB05

APVD

M. PERCHERKE

-

DIMENSIONS:

INCHES

TOLERANCES UNLESS OTHERWISE SPECIFIED:

0 PLC ±

1 PLC ±.01

2 PLC ±.01

3 PLC ±.005

4 PLC ±.0020

ANGLES ±2°

FINISH

MATERIAL

-

PRODUCT SPEC

108-1973

APPLICATION SPEC

114-13038

WEIGHT

-

CUSTOMER DRAWING

NAME

RIGHT ANGLE RECEPTACLE ASSEMBLY WITH GUIDES MULTI-BEAM XL

SIZE

CAGE CODE

DRAWING NO

100779

©=6450170

RESTRICTED TO

-

SCALE

4:1

SHEET

7

OF

13

REV

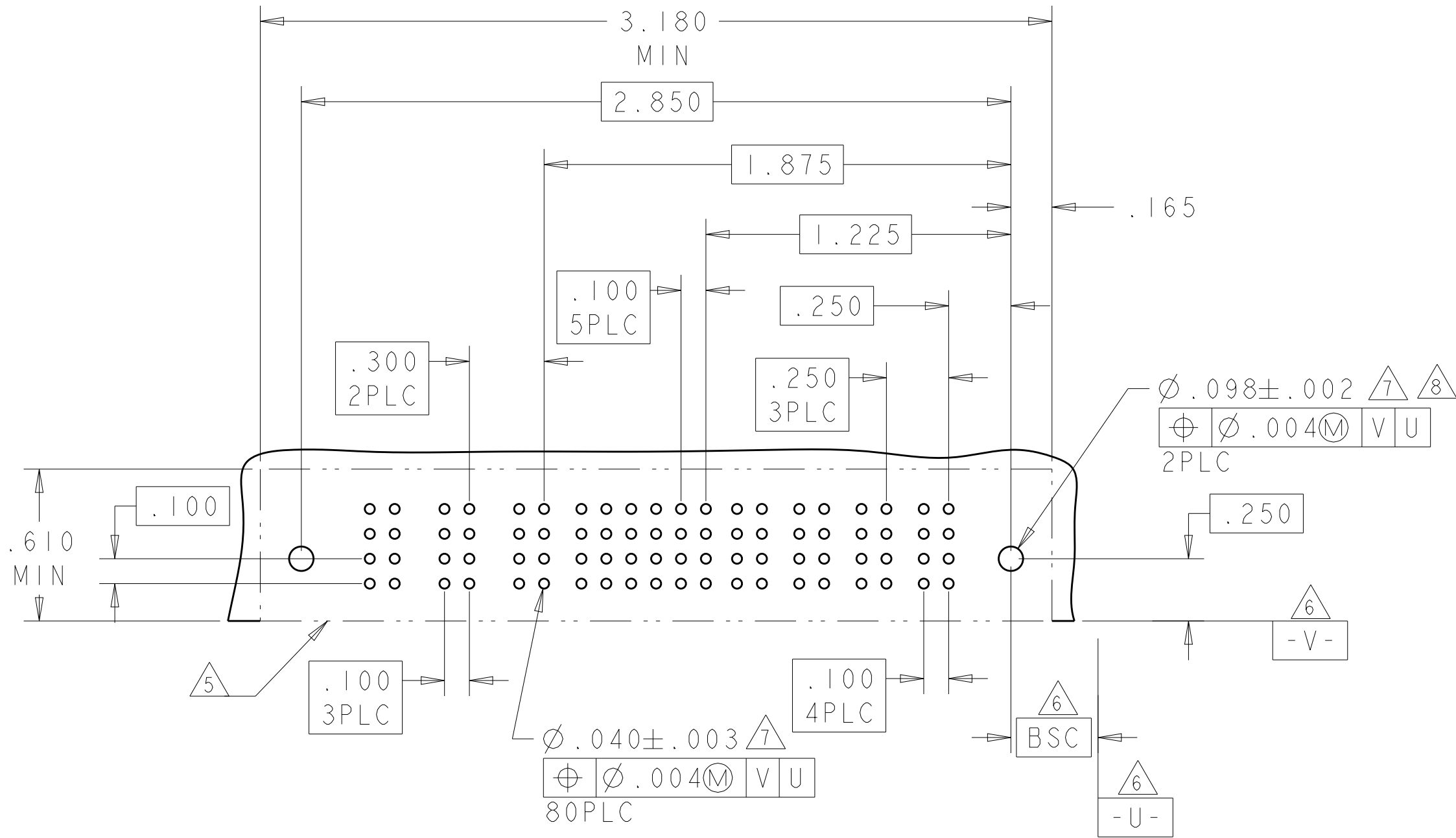
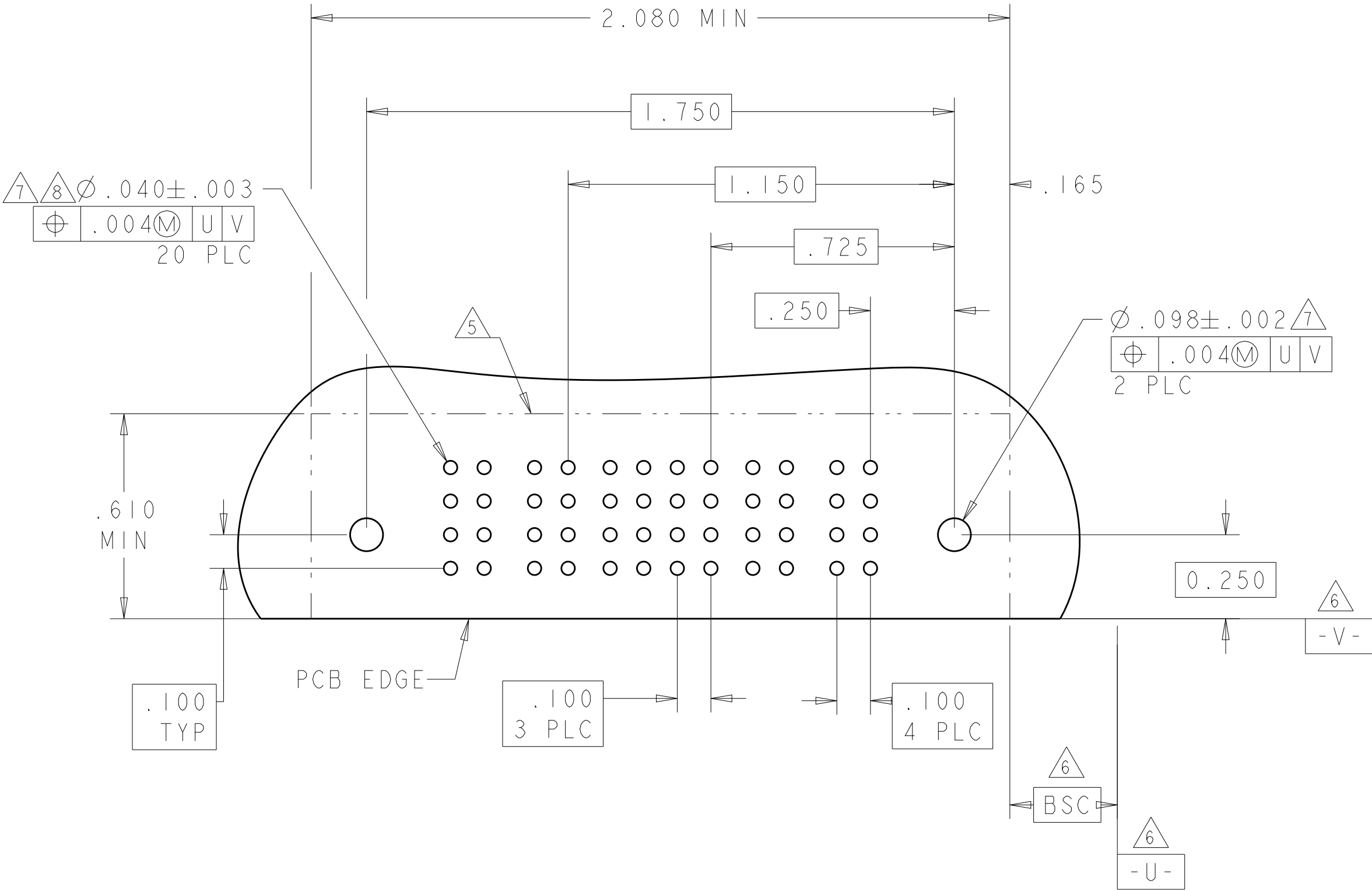
J5

TE Connectivity

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

PART NUMBER	ROWS		POWER		SIGNAL				POWER		
			P4	P3	4	3	2	1	P2	P1	
3-6450170-1	D		RM	RA	H	H	H	H	RA	RM	
	C				G	G	G	G			
	B				E	E	E	E			
	A	HD			F	F	F	F			HD
2P + 16S + 2P											

PART NUMBER	ROWS		POWER			SIGNAL						POWER				
			P7	P6	P5	6	5	4	3	2	1	P4	P3	P2	P1	
1-6450170-8	D C B A		RM	RM	RA	H	H	H	H	H	H	RM	RM	RM	RM	
						G	G	G	G	G	G					
						F	F	F	F	F	F					
						E	E	E	E	E	E					
4P + 24S + 3ACP																



THIS DRAWING IS A CONTROLLED DOCUMENT.

DWN: R. GRZYBOWSKI 21FEB05
CHK: M. PERCHERKE 21FEB05
APVD: M. PERCHERKE

DIMENSIONS: INCHES
TOLERANCES UNLESS OTHERWISE SPECIFIED:
0 PLC ±.01
1 PLC ±.01
2 PLC ±.01
3 PLC ±.005
4 PLC ±.0020
ANGLES ±2°
FINISH

MATERIAL

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

CUSTOMER DRAWING

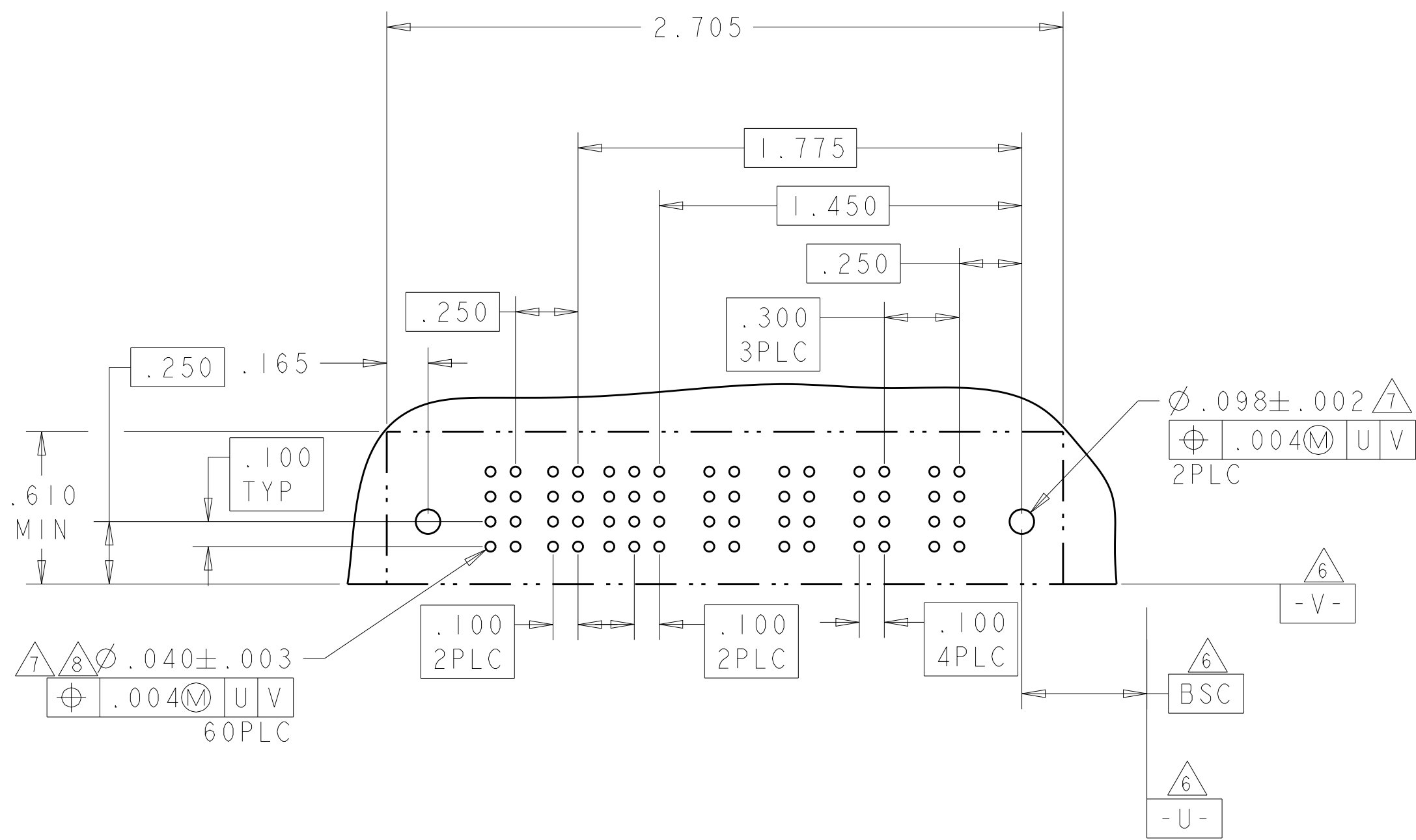
NAME: RIGHT ANGLE RECEPTACLE ASSEMBLY WITH GUIDES MULTI-BEAM XL
SIZE: A1
CAGE CODE: 00779
DRAWING NO: C=6450170

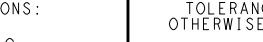
RESTRICTED TO: -

TE Connectivity

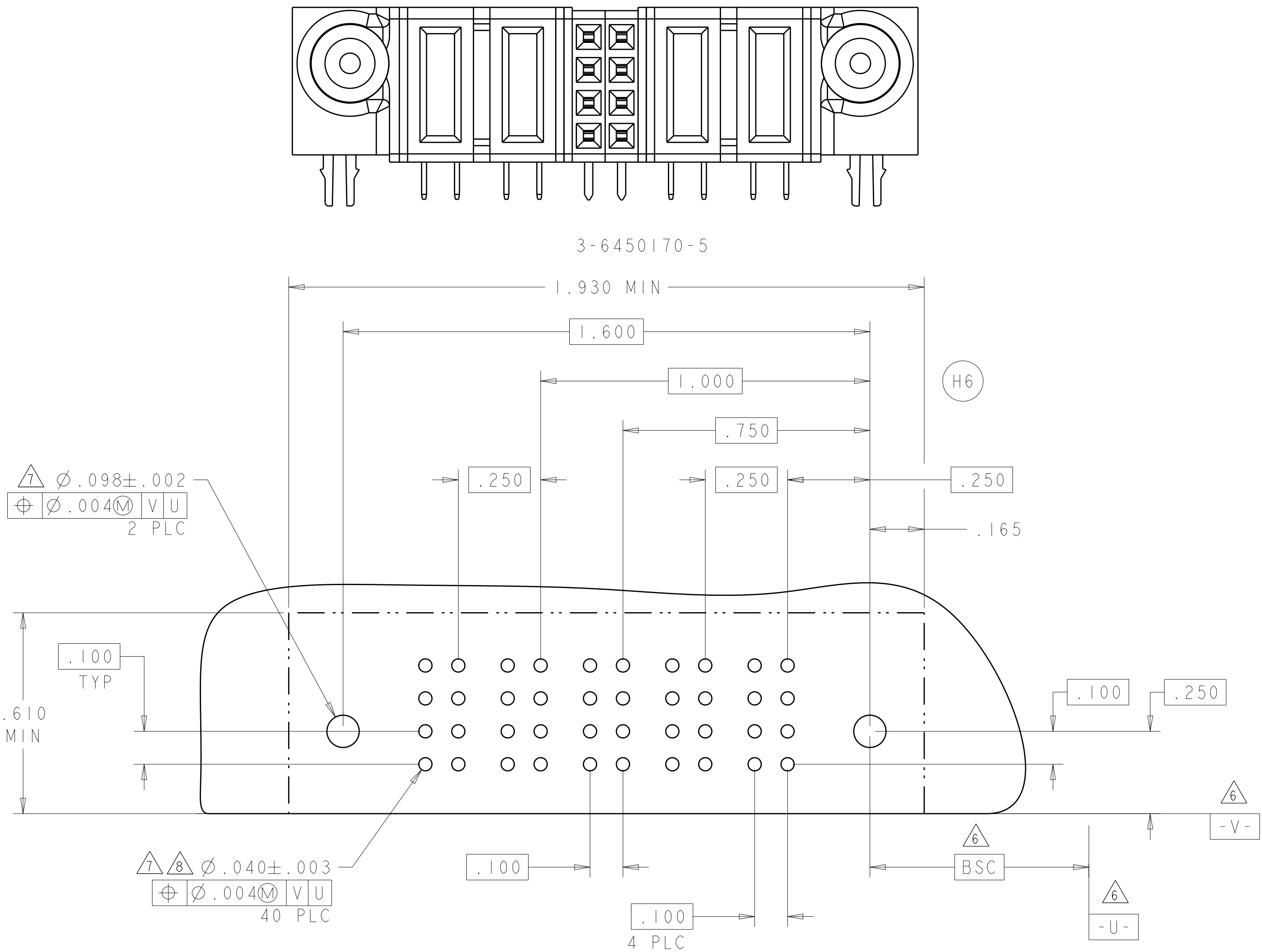
SCALE: 4:1
SHEET: 8 OF 13
REV: J5

PART NUMBER	ROWS		POWER		SIGNAL			POWER				
			P6	P5	3	2	1	P4	P3	P2	P1	
3-6450170-3	D C B A											
4ACP + 12S + 2P												

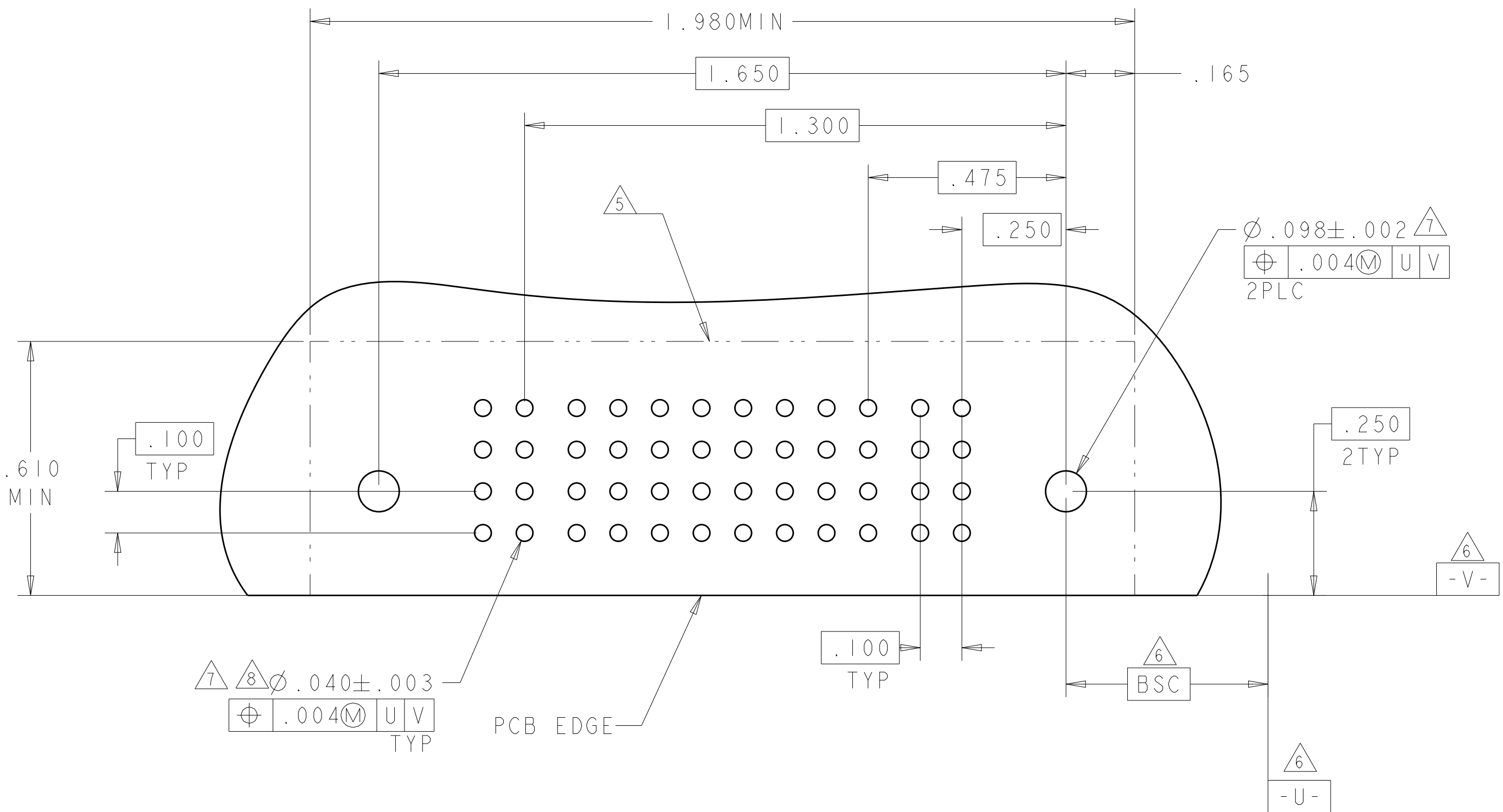


THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN R. GRZYBOWSKI 21FEB05 CHN M. PERCHERKE 21FEB05		 TE Connectivity	
DIMENSIONS: INCHES		TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 P/LC ±.01 1 P/LC ±.01 2 P/LC ±.005 3 P/LC ±.005 4 P/LC ±.0020 ANGLES ±2°		NAME RIGHT ANGLE RECEPTACLE ASSEMBLY WITH GUIDES MULTI-BEAM XL	
		PRODUCT SPEC 108-1973 APPLICATION SPEC 114-13038		SIZE CASE CODE DRAWING NO RESTRICTED TO A 00779 C-6450170 -	
MATERIAL -		FINISH -		WEIGHT -	
CUSTOMER DRAWING				SCALE 4:1 SHEET 9 OF 13 REV J5	

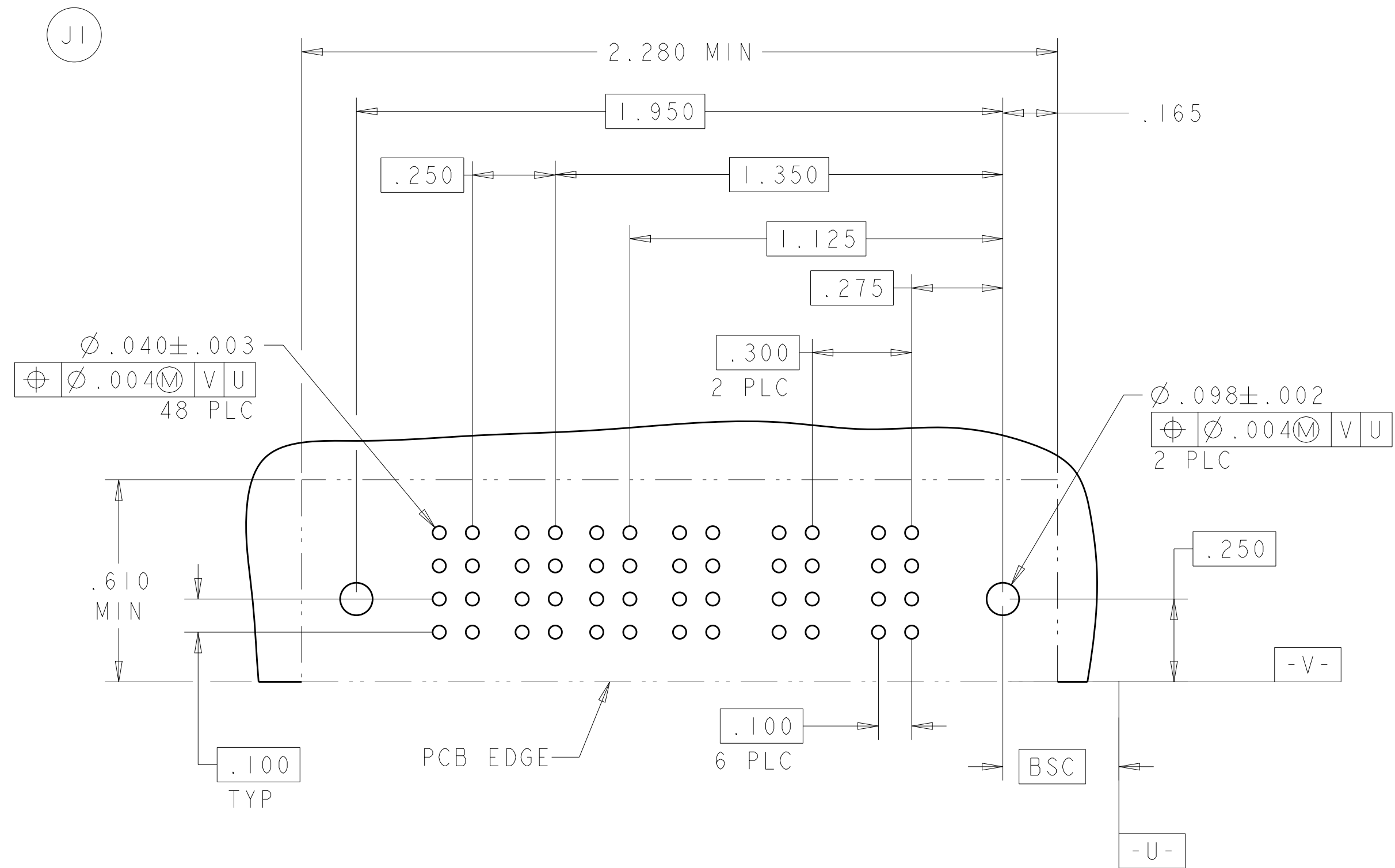
PART NUMBER	ROWS		POWER		SIGNAL		POWER		
			P4	P3	2	1	P2	P1	
3-6450170-5	D C B A								
									
2P + 8S + 2P									

4805 (3/11)

PART NUMBER	ROWS		POWER	SIGNAL								POWER		
			P2	8	7	6	5	4	3	2	1	P1		
3-6450170-7	D C B A			H	H	H	H	H	H	H	H			
				G	G	G	G	G	G	G	G			
				F	F	F	F	F	F	F	F			
				E	E	E	E	E	E	E	E			
IP + 32S + IP														

4805 (3/11)

PART NUMBER	ROWS		POWER		SIGNAL		POWER			
			P5	P4	2	1	P3	P2	P1	
3-6450170-9	D C B A				H	H				
					G	G				
					F	F				
					E	E				
3ACP + 8S + 2P										



TE RECOMMENDED PCB LAYOUT

4805 (3/11)

PART NUMBER	ROWS		POWER							SIGNAL						POWER		
			P8	P7	P6	P5	P4	P3	6	5	4	3	2	1	P2	P1		
4-6450170-1	D		RM		RM		RA		H	H	H	H	H		RM	RM		
	G								G	G	G	G						
	F								F	F	F	F						
	E								E	E	E	E						
2P + 24S + 6P		HD																HD

This mechanical drawing illustrates the dimensions and tolerances for a PCB edge connector. The overall width is specified as 3.030 MIN. The drawing includes various feature callouts and dimensions:

- Top Edge:**
 - Overall width: 3.030 MIN.
 - Distance from left edge to first feature: 2.700.
 - Distance between features: .400, 1.550.
 - Feature dimensions: .100 TYP, .825, .250.
 - Distance from last feature to right edge: .165.
- Left Edge:**
 - Feature callout: $\Delta 8 \varnothing .040 \pm .003$ (with $\oplus$ and $\ominus$ symbols).
 - Feature callout: $\varnothing .004$ (with $\oplus$ and $\ominus$ symbols).
 - Feature callout: U V TYP.
 - Feature callout: 5.
 - Distance from top edge to first feature: .610 MIN.
 - Feature dimension: .100 TYP.
- Right Edge:**
 - Feature callout: $\varnothing .098 \pm .002$ (with Δ symbol).
 - Feature callout: $\oplus \varnothing .004 \ominus$ (with $\oplus$ and $\ominus$ symbols).
 - Feature callout: U V.
 - Feature callout: 2 PLC.
 - Feature dimension: .250.
 - Feature callout: 6.
 - Feature callout: -V-.
- Bottom Edge:**
 - Feature callout: 3 PLC.
 - Feature dimension: .100.
 - Feature callout: 2 PLC.
 - Feature dimension: .100.
 - Feature callout: 6.
 - Feature callout: BSC.
 - Feature callout: 6.
 - Feature callout: -U-.
- Other Features:**
 - PCB EDGE: Indicated by a dashed line and a label.
 - Feature callout: 6.
 - Feature callout: -V-.
 - Feature callout: 6.
 - Feature callout: -U-.

4805 (3/11)