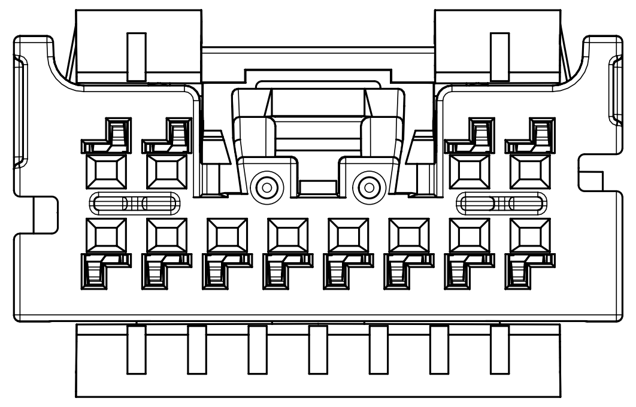
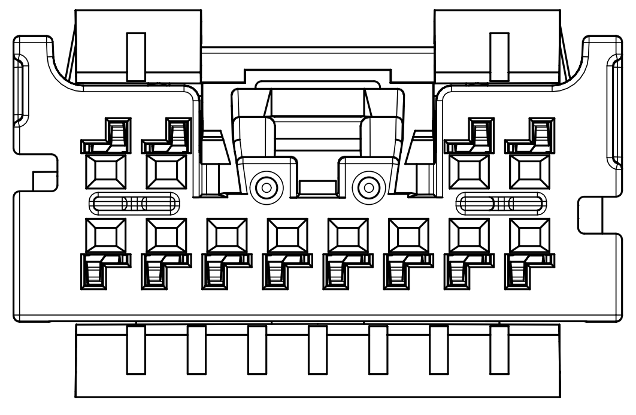
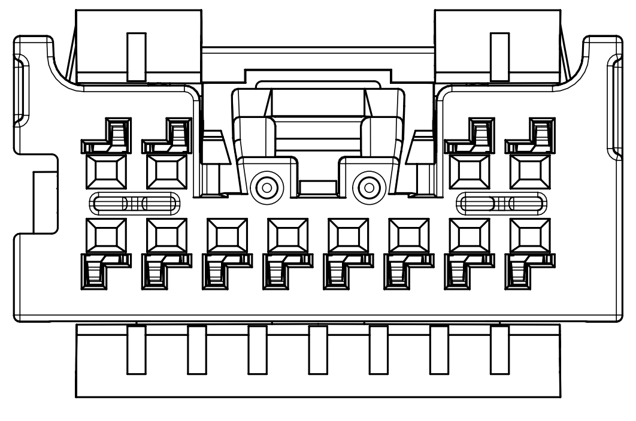


12 CIRCUIT RECEPTACLE
POLARIZATION OPTION A
USCAR COMPATIBLE



12 CIRCUIT RECEPTACLE
POLARIZATION OPTION B
USCAR COMPATIBLE



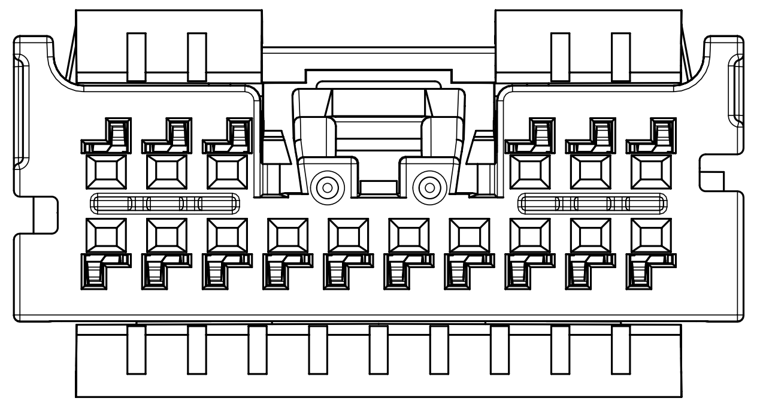
12 CIRCUIT RECEPTACLE
POLARIZATION OPTION C
USCAR COMPATIBLE

NOTES: VALID UNLESS OTHERWISE SPECIFIED

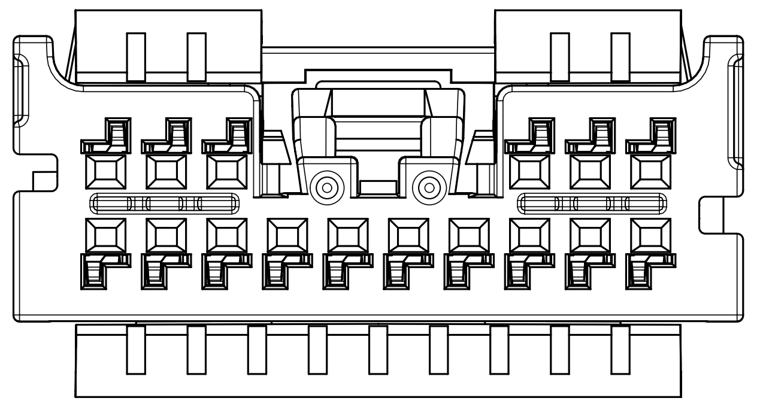
1. GENERAL:
   - a. APPLICATION SPECIFICATION SEE: 2065230000-AS
   - b. PRODUCT SPECIFICATION SEE: 2065230000-PS
   - c. PACKAGING SPECIFICATION PER MOLEX DRAWING: PK-31301-538
   - d. PARTS MUST BE IN COMPLIANCE TO MOLEX CHEMICAL SUBSTANCES FOR PRODUCTS AND PACKAGING SPECIFICATION: QEHS-699000-301
   - e. DATA MUST BE SUBMITTED UNDER THE MOLEX PART NUMBER TO IMDS (COMPANY ID#13255)
   - f. FLAMMABILITY REQUIREMENT
     1. UL 94 HB (SERIES NUMBER 206523)
     2. UL 94 V0 (SERIES NUMBER 207584)

2. DESIGN -
   - 2.1 RECEPTACLE HOUSING:
     - a. MATERIAL: PBT-GF7.5%
     - b. COLOR: SEE PART TABLE
   - 2.2 CPA:
     - a. MATERIAL: PA6-GF60%
     - b. COLOR: RED

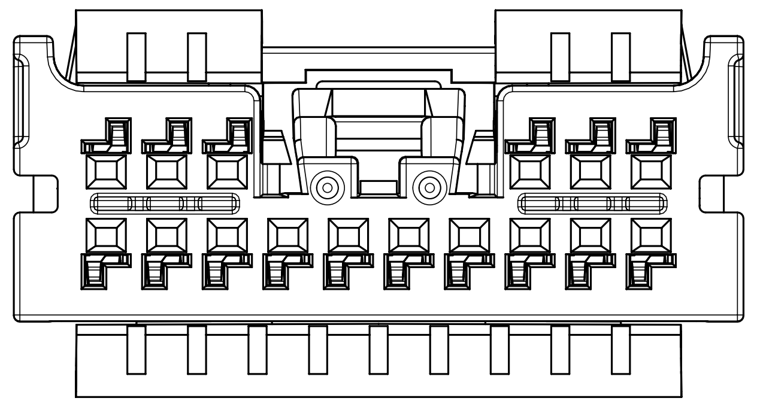
3. DESIGN - GEOMETRY:
   - a. THIS IS A 100% CAD GENERATED PART. THE CAD MATHEMATICAL DATA IS THE MASTER FOR THIS PART. FOR DIMENSIONAL OR ANY INFORMATION NOT SHOWN ON THIS DRAWING, ANALYZE THE CAD MODEL
   - b. GEOMETRIC DIMENSIONS AND TOLERANCES PER ASME Y14.5M - 2009
   - c. EDGES AND UNDIMENSIONED DETAILS PER ISO13175
   - d. CORNERS SHOWN AS SHARP TO BE R 0.2 MAX
   - e. LETTERING SHALL BE 0.1 MAX RAISED IN 0.15 MAX RECESS PAD AND NOT PROTRUDE THE SURFACE. THIS INCLUDES RECYCLING CODE, PLANT AND CAVITY ID, VENDOR ID, CIRCUIT ID, AND SERIES NUMBER



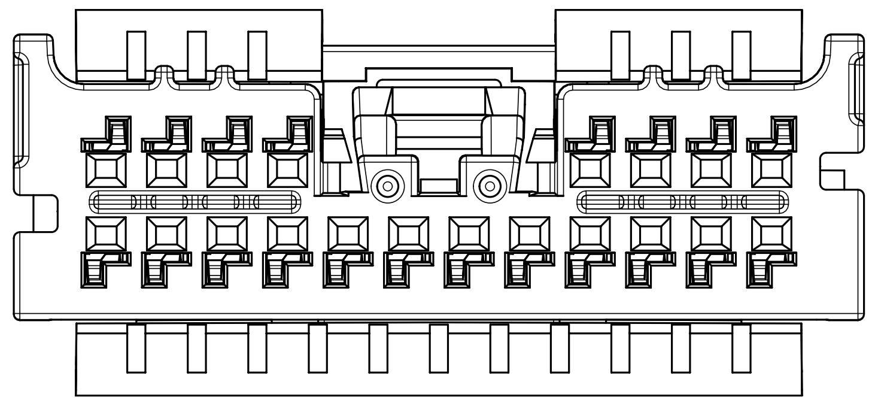
16 CIRCUIT RECEPTACLE
POLARIZATION OPTION A
USCAR COMPATIBLE



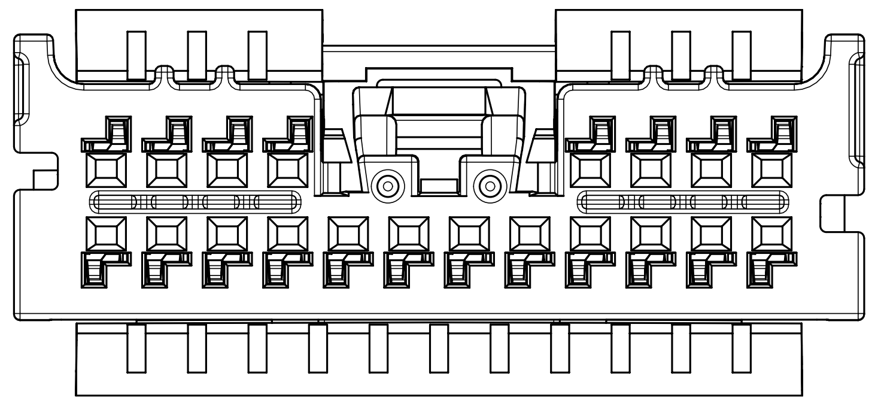
16 CIRCUIT RECEPTACLE
POLARIZATION OPTION B
USCAR COMPATIBLE



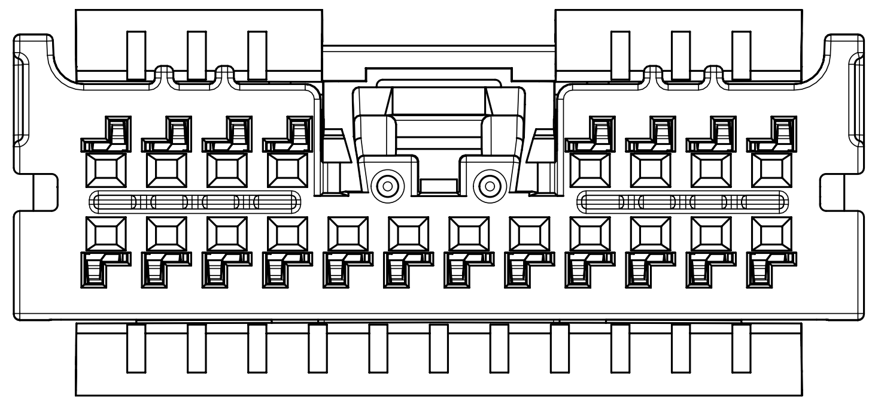
16 CIRCUIT RECEPTACLE
POLARIZATION OPTION C
USCAR COMPATIBLE



20 CIRCUIT RECEPTACLE
POLARIZATION OPTION A
USCAR COMPATIBLE

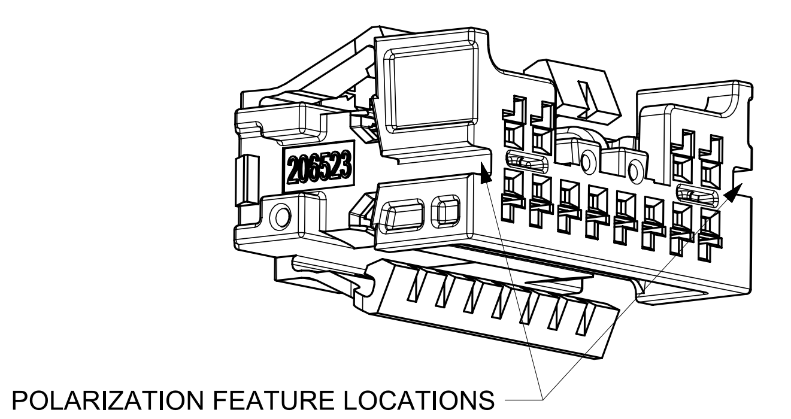


20 CIRCUIT RECEPTACLE
POLARIZATION OPTION B
USCAR COMPATIBLE

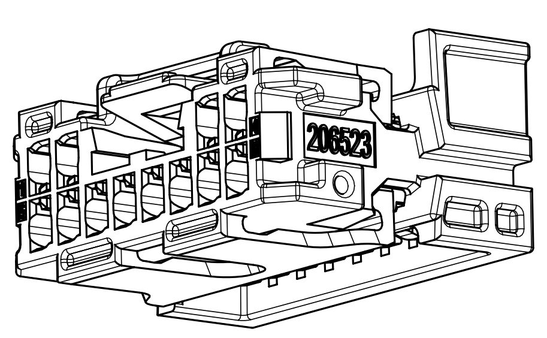


20 CIRCUIT RECEPTACLE
POLARIZATION OPTION C
USCAR COMPATIBLE

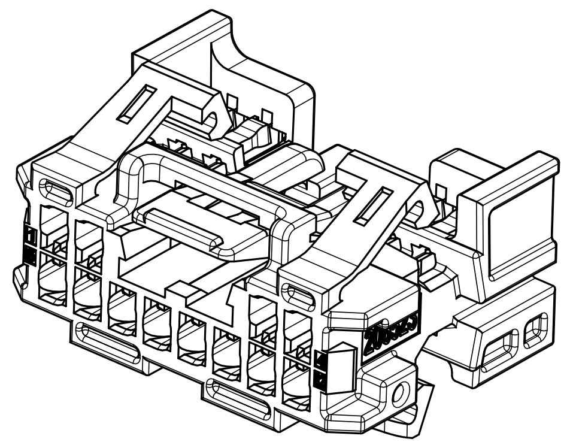
HINGES OPEN
12 CIRCUIT RECEPTACLE SHOWN
(AS SHIPPED)



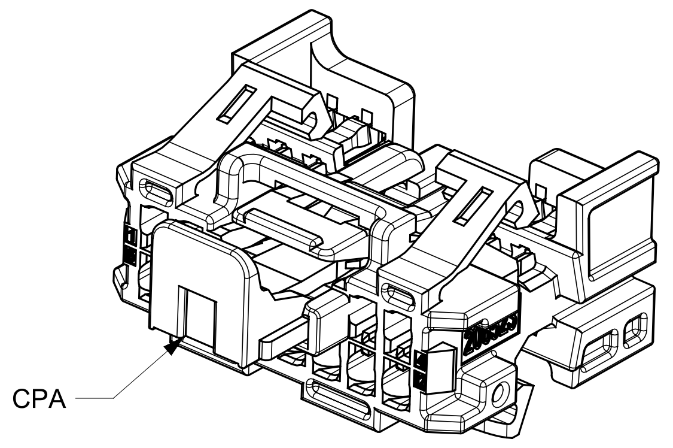
HINGES CLOSED
12 CIRCUIT RECEPTACLE SHOWN
(AS ASSEMBLED)

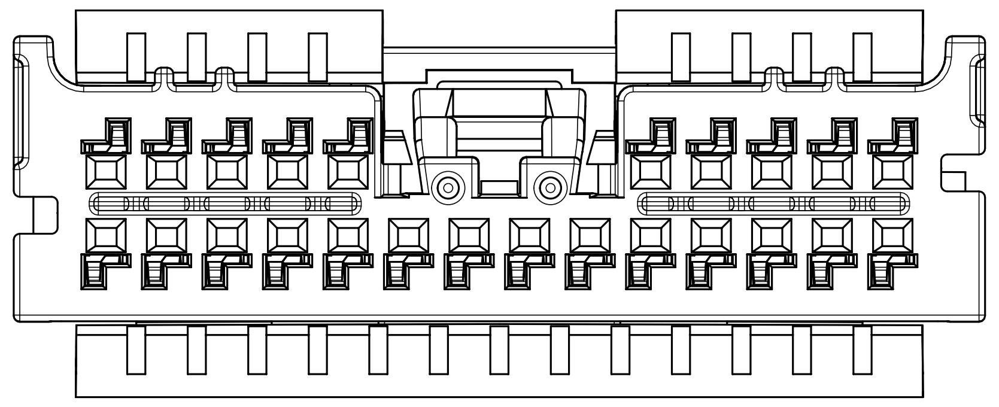


NON-CPA VERSION

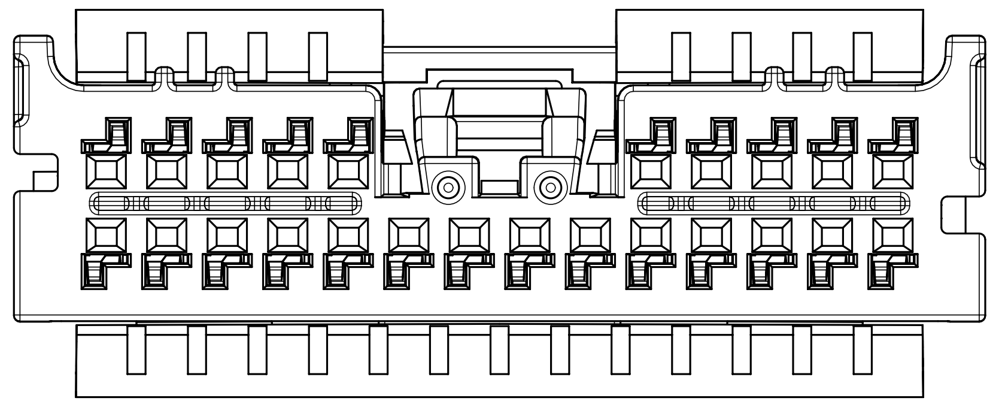


CPA VERSION

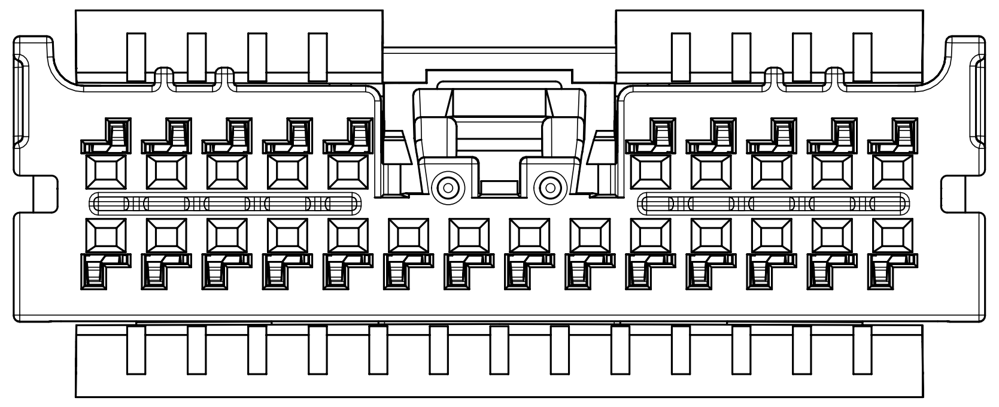




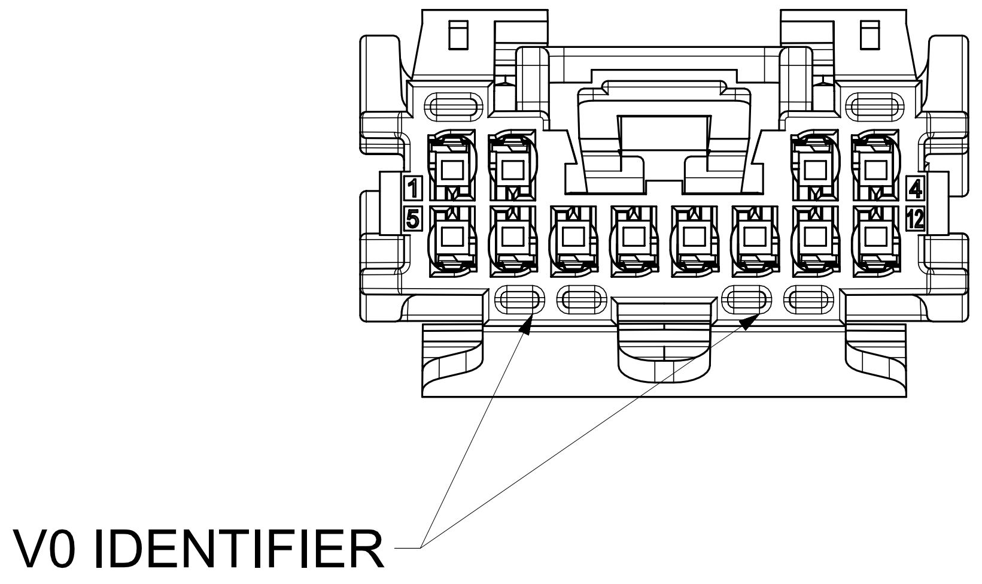
24 CIRCUIT RECEPTACLE
POLARIZATION OPTION A
USCAR COMPATIBLE

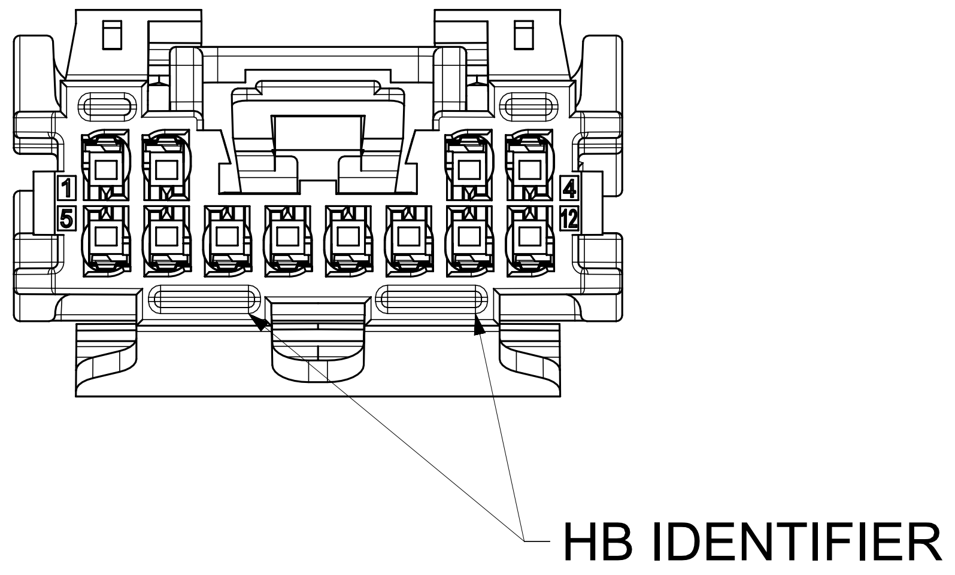


24 CIRCUIT RECEPTACLE
POLARIZATION OPTION B
USCAR COMPATIBLE



24 CIRCUIT RECEPTACLE
POLARIZATION OPTION C
USCAR COMPATIBLE





REV	DESCRIPTION
A7	PAGE 2: UPDATED CTX50 UNSEALED RCPT TERMINAL PART NUMBER AND STATUS
A6	PAGE 2: UPDATED CTX50 SMALL GRIP PNs ON BOM
A5	PAGE 1: ADDED V0 AND HB IDENTIFIER VIEW
A4	PAGE 2: UPDATED 12 & 16CKT V0 WITH & WITHOUT CPA TO AVAILABLE
A3	PAGE 1: ADDED NOTES 2.1 & 2.2 PAGE 2: UPDATED HB PART AVAILABILITY IN THE TABLE
A2	UPDATED RESTRICTION FROM INTERNAL TO GENERAL MARKET PAGE 3: ADDED VERTICAL PITCH REFERENCE DIMS ON CAVITIES

FUNCTIONAL SYMBOLS
FA = 0
FC = 0
FP = 0
DIVISIONAL SYMBOLS

DIMENSION UNITS	SCALE
MM	NTS

~~GENERAL TOLERANCES (UNLESS SPECIFIED)~~

~~ANGULAR TOL~~	~~±~~	~~0.5°~~
~~4 PLACES~~	~~±~~	
~~3 PLACES~~	~~±~~	
~~2 PLACES~~	~~±~~	
~~1 PLACE~~	~~±~~	
~~0 PLACES~~	~~±~~	

DRAFT WHERE APPLICABLE
MUST REMAIN
WITHIN DIMENSIONS

CURRENT REV DESC: Updated CTX50 Terminal PN Status.

STATUS: Production
DRWN: Yann Chen 2023-11-16
CHK'D: Gang Li 2023-12-18
APPR: Colin Zhang 2023-12-19

THIRD ANGLE PROJECTION

DRAWING	SERIES
A1-SIZE	206523

molex

MINI50 GEN II RECEPTACLE SALES DRAWING

PRODUCT SALES DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
2065230000	PSD	000	A7

MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
SEE CHART	GENERAL MARKET	1 OF 3

MINI50 GEN II RECEPTACLE

MATERIAL NUMBER	ASSEMBLY STATUS	FLAMMABILITY UL94	CONFIGURATION	CIRCUIT	POL	COLOR	NOTE	MATING COMPONENT					
								SURFACE MOUNT TECHNOLOGY (SMT) HEADER		VERTICAL THRU HOLE HEADER		RIGHT ANGLE THRU HOLE HEADER	
								TAPE AND REEL PACKAGING PK-31301-786	TUBE PACKAGING PK-31301-688	TRAY PACKAGING PK-31301-440	TUBE PACKAGING PK-31301-688	TRAY PACKAGING PK-31301-440	TUBE PACKAGING PK-31301-688
2065230121	HOUSING ONLY	HB	USCAR COMPATIBLE	12	A	BLACK	AVAILABLE	34897-8120	34897-9120	34825-0124	34825-9124	34826-0124	34826-9124
2065230122	HOUSING ONLY	HB	USCAR COMPATIBLE	12	B	GRAY	AVAILABLE	34897-8121	34897-9121	34825-0125	34825-9125	34826-0125	34826-9125
2065230123	HOUSING ONLY	HB	USCAR COMPATIBLE	12	C	DARK GRAY	AVAILABLE	34897-8122	34897-9122	34825-0126	34825-9126	34826-0126	34826-9126
2065230161	HOUSING ONLY	HB	USCAR COMPATIBLE	16	A	BLACK	AVAILABLE	34897-8160	34897-9160	34825-0160	34825-9160	34826-0160	34826-9160
2065230162	HOUSING ONLY	HB	USCAR COMPATIBLE	16	B	GRAY	AVAILABLE	34897-8161	34897-9161	34825-0161	34825-9161	34826-0161	34826-9161
2065230163	HOUSING ONLY	HB	USCAR COMPATIBLE	16	C	DARK GRAY	AVAILABLE	34897-8162	34897-9162	34825-0162	34825-9162	34826-0162	34826-9162
2065230201	HOUSING ONLY	HB	USCAR COMPATIBLE	20	A	BLACK	AVAILABLE	34897-8200	34897-9200	34825-0200	34825-9200	34826-0200	34826-9200
2065230202	HOUSING ONLY	HB	USCAR COMPATIBLE	20	B	GRAY	AVAILABLE	34897-8201	34897-9201	34825-0201	34825-9201	34826-0201	34826-9201
2065230203	HOUSING ONLY	HB	USCAR COMPATIBLE	20	C	DARK GRAY	AVAILABLE	34897-8202	34897-9202	34825-0202	34825-9202	34826-0202	34826-9202
2065230241	HOUSING ONLY	HB	USCAR COMPATIBLE	24	A	BLACK	AVAILABLE	34897-8240	34897-9240	34825-0240	34825-9240	34826-0240	34826-9240
2065230242	HOUSING ONLY	HB	USCAR COMPATIBLE	24	B	GRAY	AVAILABLE	34897-8241	34897-9241	34825-0241	34825-9241	34826-0241	34826-9241
2065230243	HOUSING ONLY	HB	USCAR COMPATIBLE	24	C	DARK GRAY	AVAILABLE	34897-8242	34897-9242	34825-0242	34825-9242	34826-0242	34826-9242
2065232121	ASSEMBLED WITH CPA	HB	USCAR COMPATIBLE	12	A	BLACK	AVAILABLE	34897-8120	34897-9120	34825-0124	34825-9124	34826-0124	34826-9124
2065232122	ASSEMBLED WITH CPA	HB	USCAR COMPATIBLE	12	B	GRAY	AVAILABLE	34897-8121	34897-9121	34825-0125	34825-9125	34826-0125	34826-9125
2065232123	ASSEMBLED WITH CPA	HB	USCAR COMPATIBLE	12	C	DARK GRAY	AVAILABLE	34897-8122	34897-9122	34825-0126	34825-9126	34826-0126	34826-9126
2065232161	ASSEMBLED WITH CPA	HB	USCAR COMPATIBLE	16	A	BLACK	AVAILABLE	34897-8160	34897-9160	34825-0160	34825-9160	34826-0160	34826-9160
2065232162	ASSEMBLED WITH CPA	HB	USCAR COMPATIBLE	16	B	GRAY	AVAILABLE	34897-8161	34897-9161	34825-0161	34825-9161	34826-0161	34826-9161
2065232163	ASSEMBLED WITH CPA	HB	USCAR COMPATIBLE	16	C	DARK GRAY	AVAILABLE	34897-8162	34897-9162	34825-0162	34825-9162	34826-0162	34826-9162
2065232201	ASSEMBLED WITH CPA	HB	USCAR COMPATIBLE	20	A	BLACK	AVAILABLE	34897-8200	34897-9200	34825-0200	34825-9200	34826-0200	34826-9200
2065232202	ASSEMBLED WITH CPA	HB	USCAR COMPATIBLE	20	B	GRAY	AVAILABLE	34897-8201	34897-9201	34825-0201	34825-9201	34826-0201	34826-9201
2065232203	ASSEMBLED WITH CPA	HB	USCAR COMPATIBLE	20	C	DARK GRAY	AVAILABLE	34897-8202	34897-9202	34825-0202	34825-9202	34826-0202	34826-9202
2065232241	ASSEMBLED WITH CPA	HB	USCAR COMPATIBLE	24	A	BLACK	AVAILABLE	34897-8240	34897-9240	34825-0240	34825-9240	34826-0240	34826-9240
2065232242	ASSEMBLED WITH CPA	HB	USCAR COMPATIBLE	24	B	GRAY	AVAILABLE	34897-8241	34897-9241	34825-0241	34825-9241	34826-0241	34826-9241
2065232243	ASSEMBLED WITH CPA	HB	USCAR COMPATIBLE	24	C	DARK GRAY	AVAILABLE	34897-8242	34897-9242	34825-0242	34825-9242	34826-0242	34826-9242
2075840121	HOUSING ONLY	V0	USCAR COMPATIBLE	12	A	BLACK	AVAILABLE	34897-8120	34897-9120	34825-0124	34825-9124	34826-0124	34826-9124
2075840122	HOUSING ONLY	V0	USCAR COMPATIBLE	12	B	GRAY	AVAILABLE	34897-8121	34897-9121	34825-0125	34825-9125	34826-0125	34826-9125
2075840123	HOUSING ONLY	V0	USCAR COMPATIBLE	12	C	DARK GRAY	AVAILABLE	34897-8122	34897-9122	34825-0126	34825-9126	34826-0126	34826-9126
2075840161	HOUSING ONLY	V0	USCAR COMPATIBLE	16	A	BLACK	AVAILABLE	34897-8160	34897-9160	34825-0160	34825-9160	34826-0160	34826-9160
2075840162	HOUSING ONLY	V0	USCAR COMPATIBLE	16	B	GRAY	AVAILABLE	34897-8161	34897-9161	34825-0161	34825-9161	34826-0161	34826-9161
2075840163	HOUSING ONLY	V0	USCAR COMPATIBLE	16	C	DARK GRAY	AVAILABLE	34897-8162	34897-9162	34825-0162	34825-9162	34826-0162	34826-9162
2075840201	HOUSING ONLY	V0	USCAR COMPATIBLE	20	A	BLACK	NOT YET AVAILABLE	34897-8200	34897-9200	34825-0200	34825-9200	34826-0200	34826-9200
2075840202	HOUSING ONLY	V0	USCAR COMPATIBLE	20	B	GRAY	NOT YET AVAILABLE	34897-8201	34897-9201	34825-0201	34825-9201	34826-0201	34826-9201
2075840203	HOUSING ONLY	V0	USCAR COMPATIBLE	20	C	DARK GRAY	NOT YET AVAILABLE	34897-8202	34897-9202	34825-0202	34825-9202	34826-0202	34826-9202
2075840241	HOUSING ONLY	V0	USCAR COMPATIBLE	24	A	BLACK	NOT YET AVAILABLE	34897-8240	34897-9240	34825-0240	34825-9240	34826-0240	34826-9240
2075840242	HOUSING ONLY	V0	USCAR COMPATIBLE	24	B	GRAY	NOT YET AVAILABLE	34897-8241	34897-9241	34825-0241	34825-9241	34826-0241	34826-9241
2075840243	HOUSING ONLY	V0	USCAR COMPATIBLE	24	C	DARK GRAY	NOT YET AVAILABLE	34897-8242	34897-9242	34825-0242	34825-9242	34826-0242	34826-9242
2075842121	ASSEMBLED WITH CPA	V0	USCAR COMPATIBLE	12	A	BLACK	AVAILABLE	34897-8120	34897-9120	34825-0124	34825-9124	34826-0124	34826-9124
2075842122	ASSEMBLED WITH CPA	V0	USCAR COMPATIBLE	12	B	GRAY	AVAILABLE	34897-8121	34897-9121	34825-0125	34825-9125	34826-0125	34826-9125
2075842123	ASSEMBLED WITH CPA	V0	USCAR COMPATIBLE	12	C	DARK GRAY	AVAILABLE	34897-8122	34897-9122	34825-0126	34825-9126	34826-0126	34826-9126
2075842161	ASSEMBLED WITH CPA	V0	USCAR COMPATIBLE	16	A	BLACK	AVAILABLE	34897-8160	34897-9160	34825-0160	34825-9160	34826-0160	34826-9160
2075842162	ASSEMBLED WITH CPA	V0	USCAR COMPATIBLE	16	B	GRAY	AVAILABLE	34897-8161	34897-9161	34825-0161	34825-9161	34826-0161	34826-9161
2075842163	ASSEMBLED WITH CPA	V0	USCAR COMPATIBLE	16	C	DARK GRAY	AVAILABLE	34897-8162	34897-9162	34825-0162	34825-9162	34826-0162	34826-9162
2075842201	ASSEMBLED WITH CPA	V0	USCAR COMPATIBLE	20	A	BLACK	NOT YET AVAILABLE	34897-8200	34897-9200	34825-0200	34825-9200	34826-0200	34826-9200
2075842202	ASSEMBLED WITH CPA	V0	USCAR COMPATIBLE	20	B	GRAY	NOT YET AVAILABLE	34897-8201	34897-9201	34825-0201	34825-9201	34826-0201	34826-9201
2075842203	ASSEMBLED WITH CPA	V0	USCAR COMPATIBLE	20	C	DARK GRAY	NOT YET AVAILABLE	34897-8202	34897-9202	34825-0202	34825-9202	34826-0202	34826-9202
2075842241	ASSEMBLED WITH CPA	V0	USCAR COMPATIBLE	24	A	BLACK	NOT YET AVAILABLE	34897-8240	34897-9240	34825-0240	34825-9240	34826-0240	34826-9240
2075842242	ASSEMBLED WITH CPA	V0	USCAR COMPATIBLE	24	B	GRAY	NOT YET AVAILABLE	34897-8241	34897-9241	34825-0241	34825-9241	34826-0241	34826-9241
2075842243	ASSEMBLED WITH CPA	V0	USCAR COMPATIBLE	24	C	DARK GRAY	NOT YET AVAILABLE	34897-8242	34897-9242	34825-0242	34825-9242	34826-0242	34826-9242

CTX50 UNSEALED RECEPTACLE TERMINAL

Ⓐ7

PART NUMBER		MATERIAL	WIRE GAGE (mm²)	GRIP	STATUS
D-WIND (LEFT PAYOFF)	B-WIND (RIGHT PAYOFF)				
5600230448	5600230450	COPPER ALLOY	0.35	LARGE	OBSOLESCENCE IN 2024
5600230421	5600230423	COPPER ALLOY	0.22	MEDIUM	OBSOLESCENCE IN 2024
5600230444	5600230445	COPPER ALLOY	0.13	SMALL	OBSOLESCENCE IN 2024
5600230748	5600230750	COPPER ALLOY	0.35	LARGE	SALEABLE
5600230721	5600230723	COPPER ALLOY	0.22	MEDIUM	SALEABLE
5600230744	5600230745	COPPER ALLOY	0.13	SMALL	SALEABLE

FUNCTIONAL SYMBOLS
FA = 0
FC = 0
FP = 0
DIVISIONAL SYMBOLS

DIMENSION UNITS	SCALE
MM	NTS

GENERAL TOLERANCES (UNLESS SPECIFIED)

ANGULAR TOL	± 0.5°
4 PLACES	±
3 PLACES	±
2 PLACES	±
1 PLACE	±
0 PLACES	±

DRAFT WHERE APPLICABLE
MUST REMAIN
WITHIN DIMENSIONS

CURRENT REV DESC: Updated CTX50 Terminal PN Status.

STATUS: Production
DRWN: Yann Chen 2023-11-16
CHK'D: Gang Li 2023-12-18
APPR: Colin Zhang 2023-12-19

THIRD ANGLE PROJECTION

DRAWING: A1-SIZE
SERIES: 206523

molex

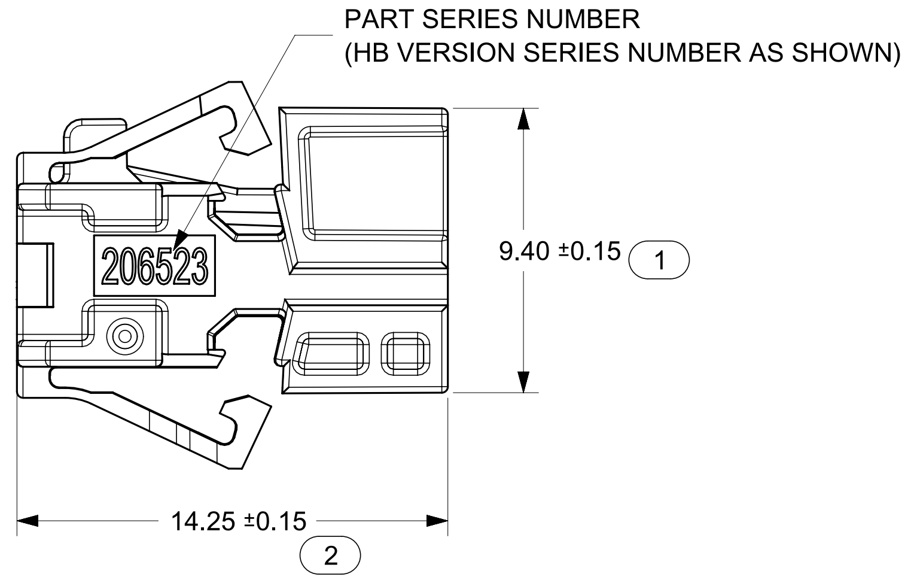
MINI50 GEN II RECEPTACLE SALES DRAWING

PRODUCT SALES DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
2065230000	PSD	000	A7

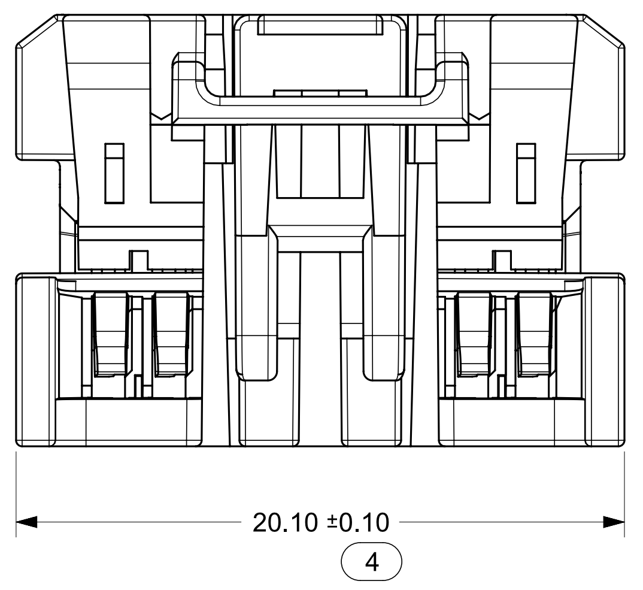
MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
SEE CHART	GENERAL MARKET	2 OF 3

NON-CPA VERSION SIDE VIEW

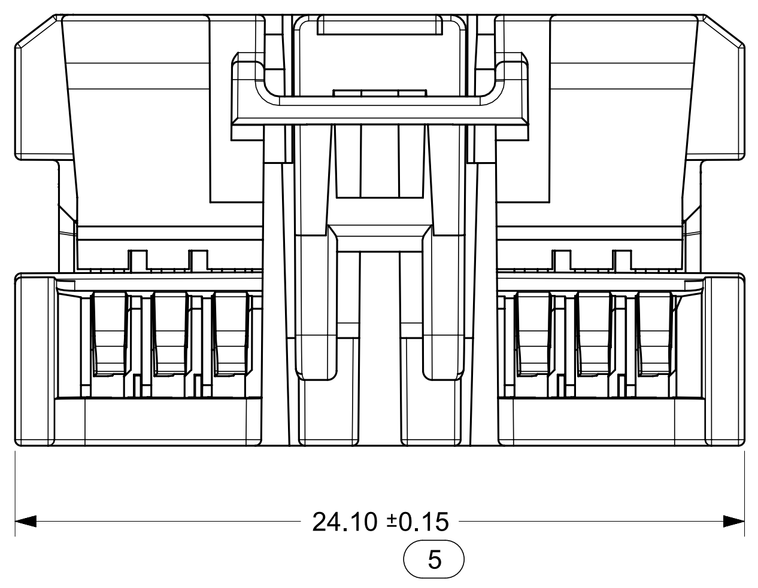


DIMENSIONS IN THIS VIEW ARE SHARED BOTH CPA AND NON-CPA VERSION

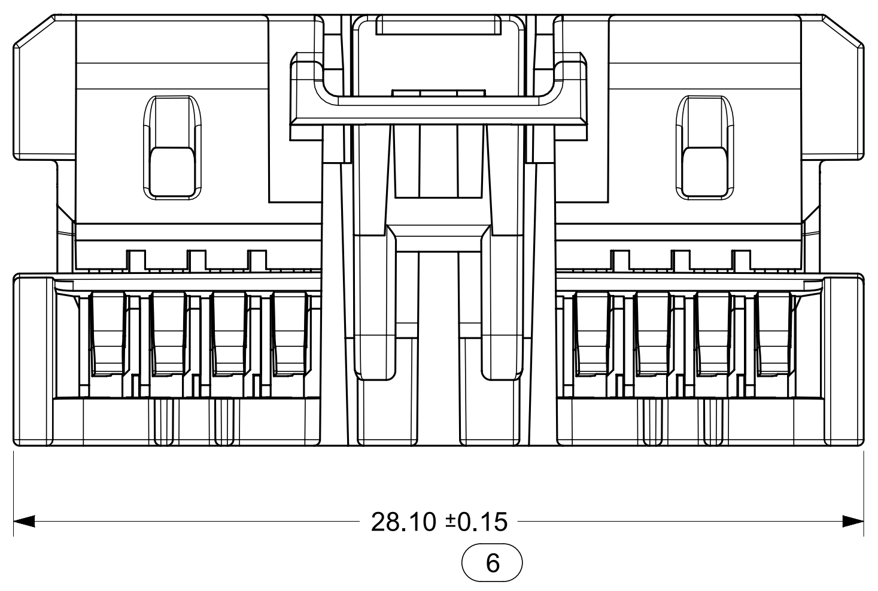
12 CIRCUIT RECEPTACLE NON-CPA VERSION



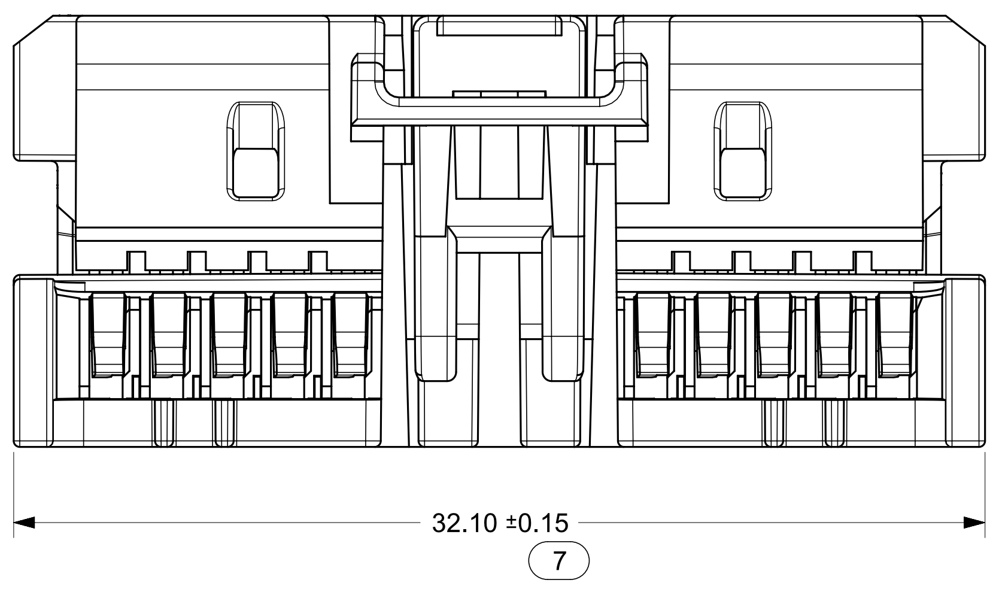
16 CIRCUIT RECEPTACLE NON-CPA VERSION



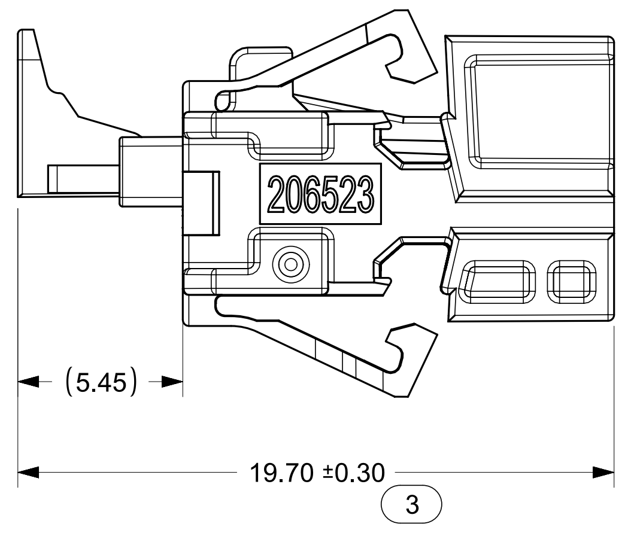
20 CIRCUIT RECEPTACLE NON-CPA VERSION



24 CIRCUIT RECEPTACLE NON-CPA VERSION

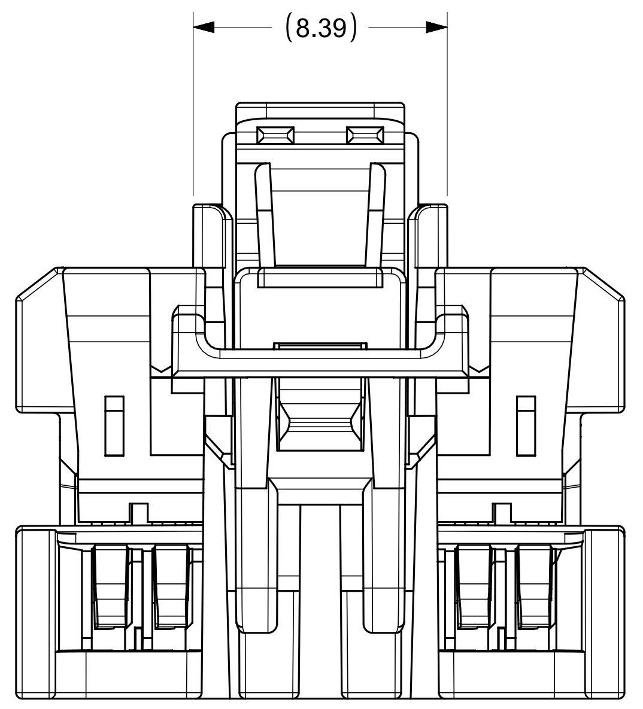


CPA VERSION SIDE VIEW

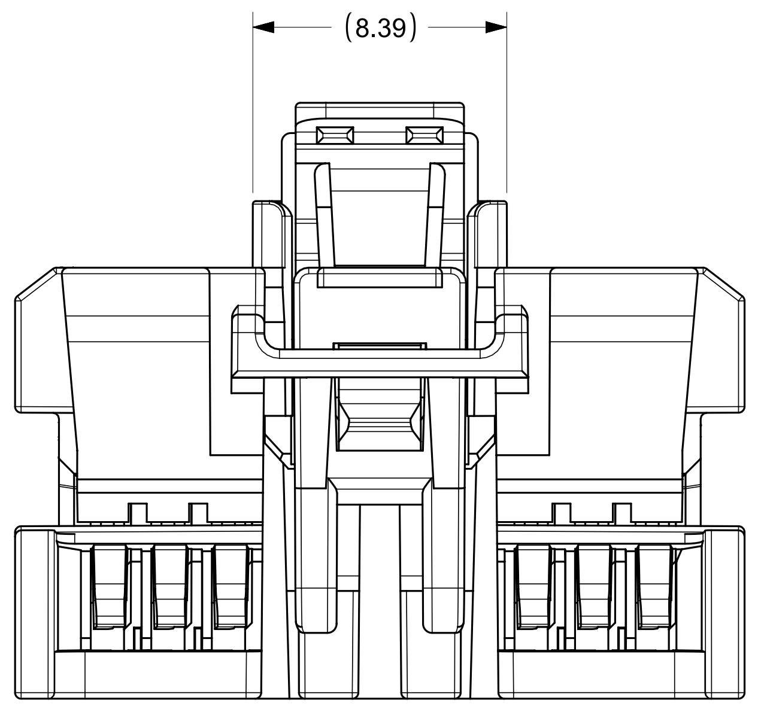


DIMENSION IN THIS VIEW APPLY FOR CPA VERSION ONLY
REFERRING TO THE FOLLOWING P/Ns
2065231121/1122/1123/1161/1162/1163/1201/1202/1203/1241/1242/1243
2075840121/1122/1123/1161/1162/1163/1201/1202/1203/1241/1242/1243

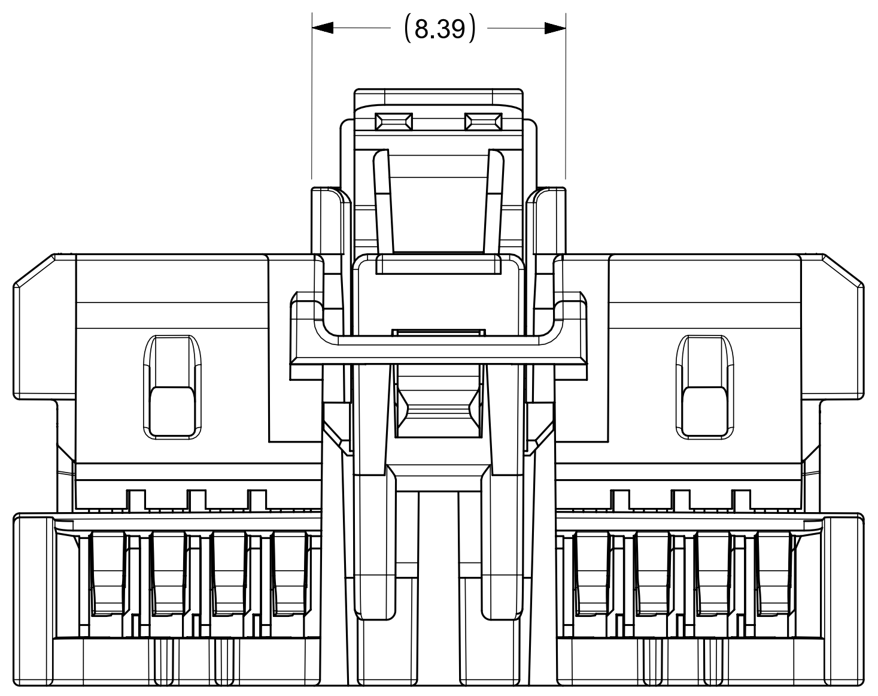
12 CIRCUIT RECEPTACLE CPA VERSION



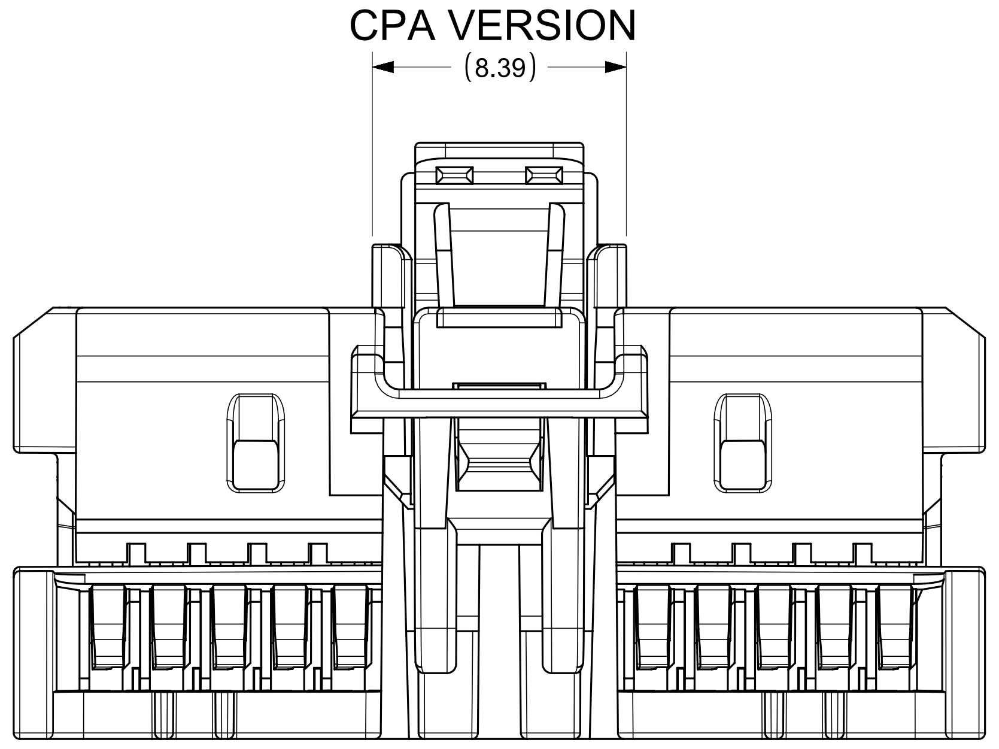
16 CIRCUIT RECEPTACLE CPA VERSION

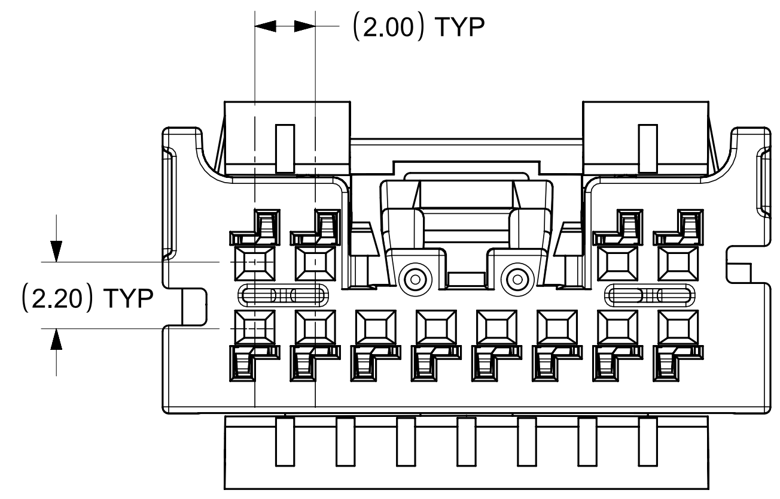


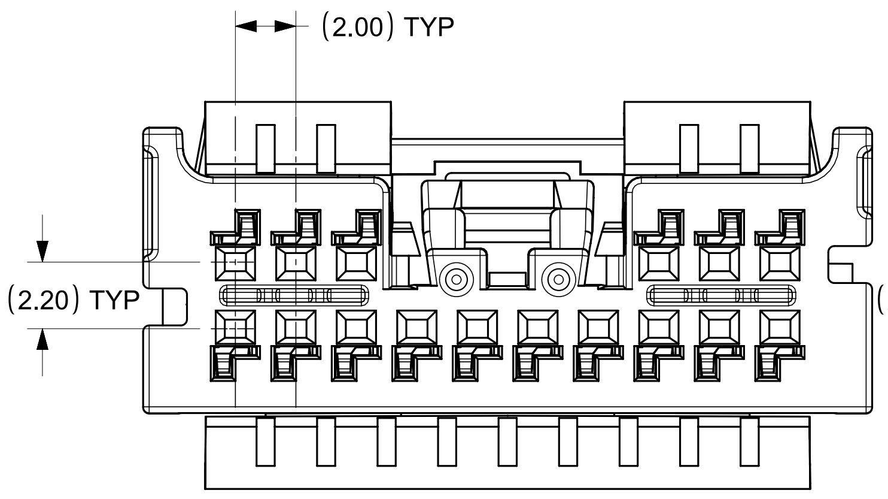
20 CIRCUIT RECEPTACLE CPA VERSION

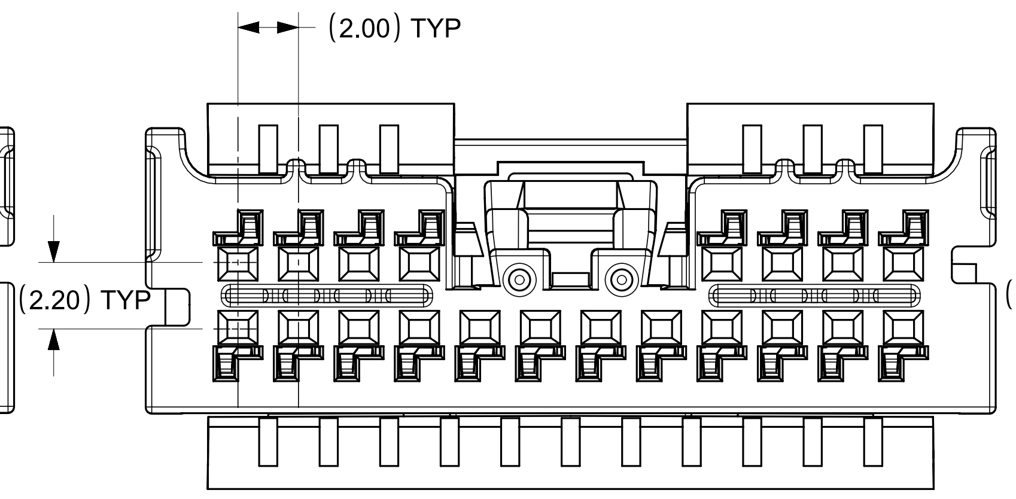


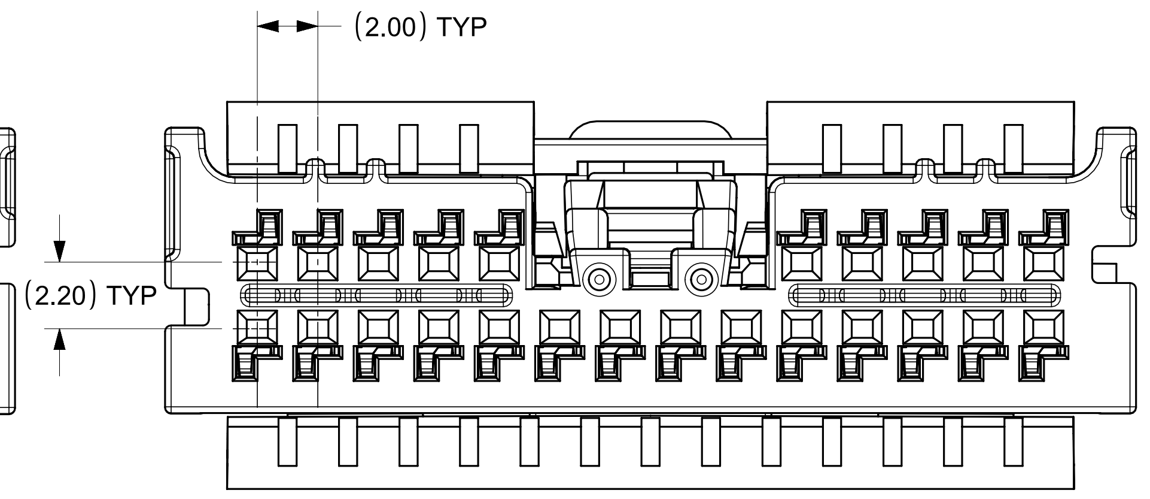
24 CIRCUIT RECEPTACLE CPA VERSION



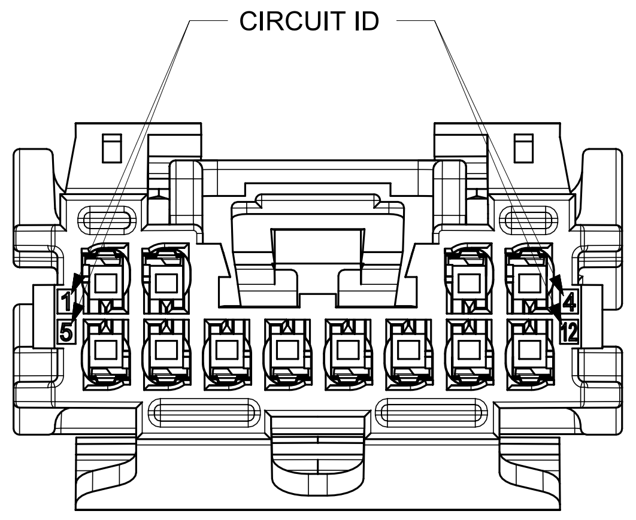


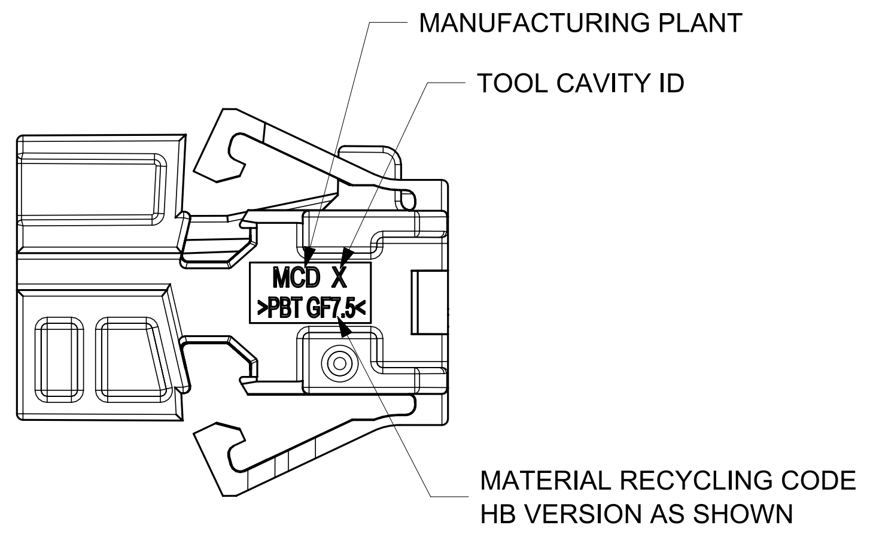


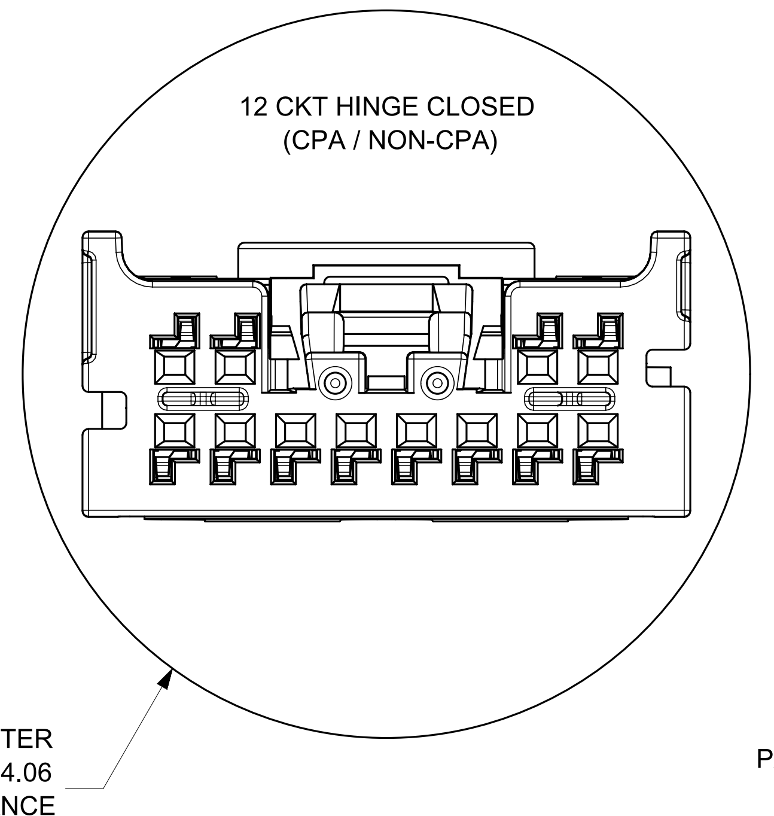




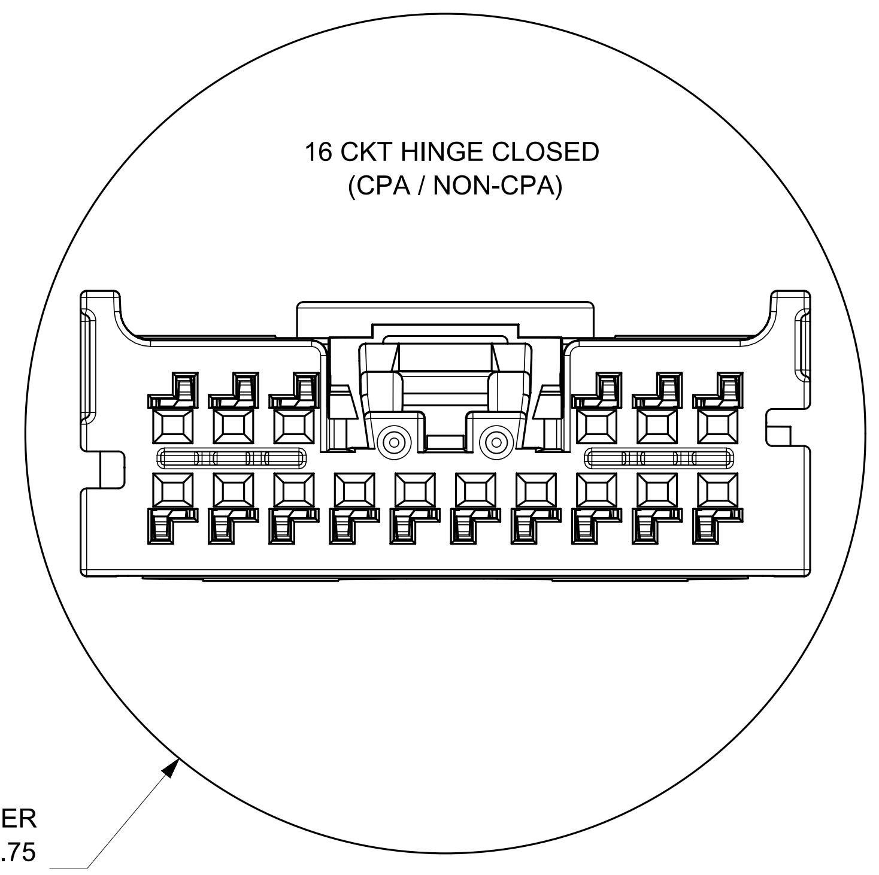
12 CKT RECEPTACLE SHOWN BELOW
16, 20 AND 24 CKT RECEPTACLE
HAS SIMILAR CIRCUIT ID LOCATION



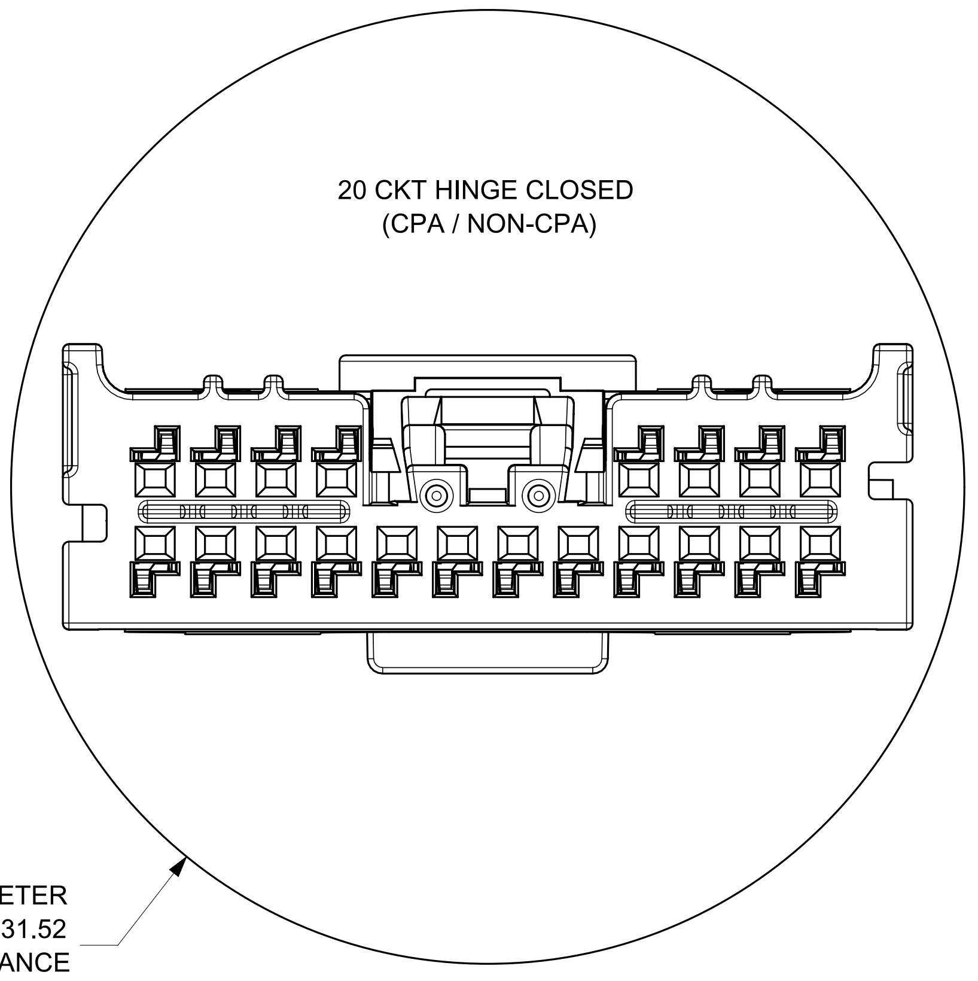



12 CKT HINGE CLOSED
(CPA / NON-CPA)

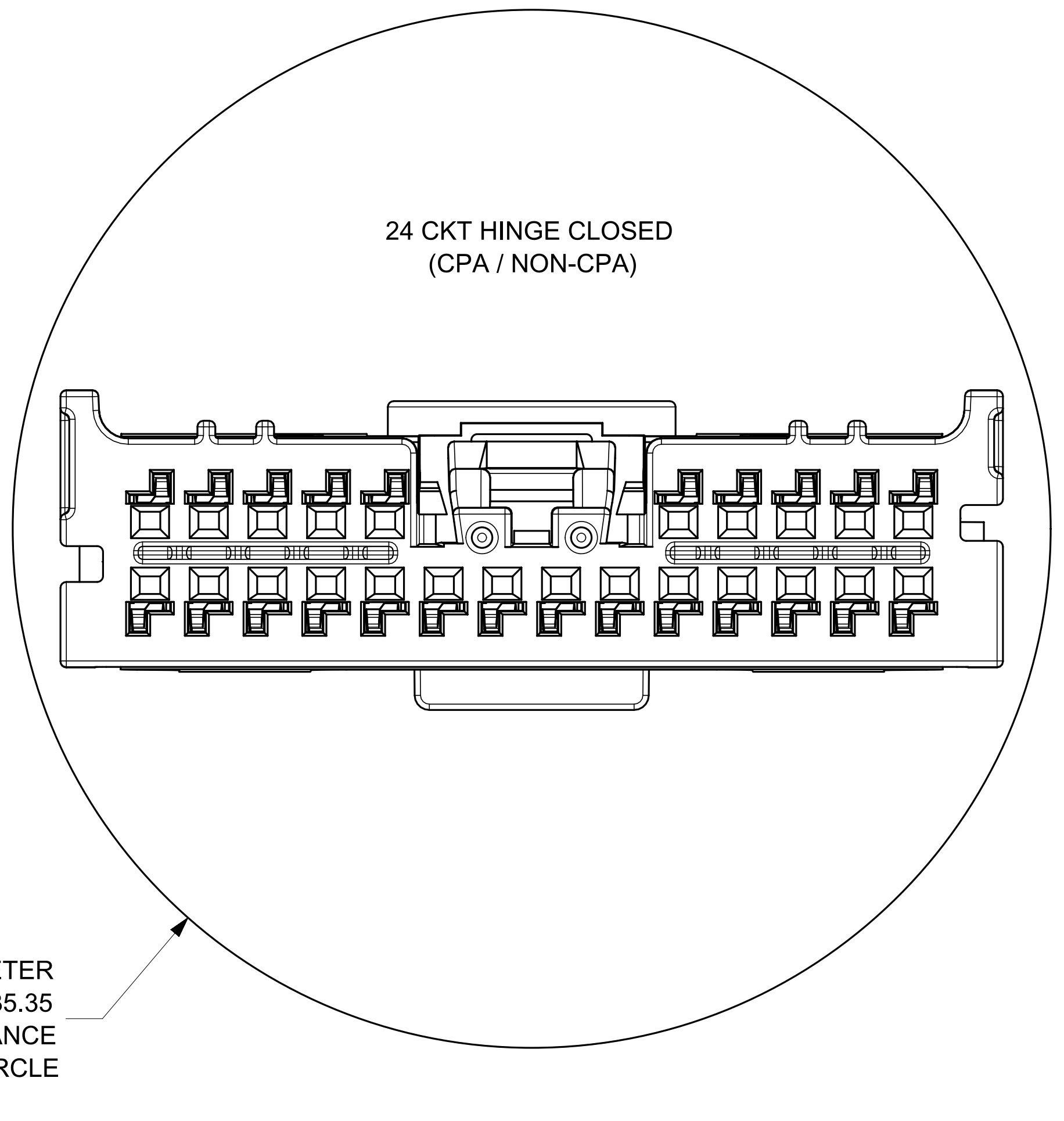
PASS THRU DIAMETER
∅24.06
1mm ADDITIONAL CLEARANCE
ADDED TO TIGHTEST FIT CIRCLE


16 CKT HINGE CLOSED
(CPA / NON-CPA)

PASS THRU DIAMETER
∅27.75
1mm ADDITIONAL CLEARANCE
ADDED TO TIGHTEST FIT CIRCLE

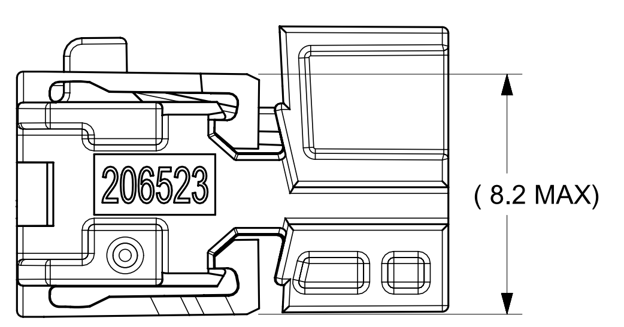

20 CKT HINGE CLOSED
(CPA / NON-CPA)

PASS THRU DIAMETER
∅31.52
1mm ADDITIONAL CLEARANCE
ADDED TO TIGHTEST FIT CIRCLE


24 CKT HINGE CLOSED
(CPA / NON-CPA)

PASS THRU DIAMETER
∅35.35
1mm ADDITIONAL CLEARANCE
ADDED TO TIGHTEST FIT CIRCLE

HINGE CLOSED



FUNCTIONAL SYMBOLS
FA = 0
FC = 0
FP = 0
DIVISIONAL SYMBOLS

DIMENSION UNITS	SCALE
MM	NTS

GENERAL TOLERANCES (UNLESS SPECIFIED)

ANGULAR TOL	±	0.5°
4 PLACES	±	
3 PLACES	±	
2 PLACES	±	
1 PLACE	±	
0 PLACES	±	

DRAFT WHERE APPLICABLE
MUST REMAIN
WITHIN DIMENSIONS

CURRENT REV DESC: Updated CTX50 Terminal PN Status.

STATUS: Production
DRWN: Yann Chen 2023-11-16
CHK'D: Gang Li 2023-12-18
APPR: Colin Zhang 2023-12-19

THIRD ANGLE PROJECTION

DRAWING: A1-SIZE
SERIES: 206523

molex

MINI50 GEN II RECEPTACLE SALES DRAWING

PRODUCT SALES DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
2065230000	PSD	000	A7

MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
SEE CHART	GENERAL MARKET	3 OF 3