

M	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
L																			
K																			
J																			
H																			
G																			
F																			
E																			
D																			
C																			
B																			
A																			

NOTES: VALID UNLESS OTHERWISE SPECIFIED

1. GENERAL:

a. APPLICATION SPECIFICATION: AS-31386-200

b. PRODUCT SPECIFICATION: PS-31387-200

c. PACKAGING SPECIFICATION: PK-31301-916

d. PARTS MUST BE IN COMPLIANCE TO MOLEX CHEMICAL SUBSTANCES FOR PRODUCTS AND PACKAGING SPECIFICATION: ES-40000-5016

e. DATA MUST BE SUBMITTED UNDER THE MOLEX PART NUMBER TO IMDS (COMPANY ID#13255)

f. DIMENSIONS AND TOLERANCES ARE VALID FOR AS SHIPPED SHROUD ASSEMBLY

g. REFERENCE GM INTERFACE CONTROL DRAWINGS (ICD)

1. 12582682 (Au)

2. 12642695 (Ag)

2. DESIGN - MATERIALS

a. PLASTIC: PBT 30% GF - SEE CHART FOR COLOR

b. SIGNAL PIN PLATING:

- UNDERPLATE: NICKEL 1.27-2.54 µm

- SELECT GOLD OPTION: 0.76 µm MIN.

- SELECT SILVER OPTION: 1.90-3.30 µm MIN

- SOLDER TAIL SELECT TIN: 5.08-10.16 µm BRIGHT FINISH

c. GROUND PIN PLATING:

- UNDERPLATE: NICKEL 1.27-2.54 µm

- OVERPLATE: SELECT TIN 2.54-4.06 µm, MATTE FINISH

3. DESIGN - GEOMETRY:

a. THIS IS A 100% CAD GENERATED PART. THE CAD MATHEMATICAL DATA IS THE MASTER FOR ALL NON-DIMENSIONAL FEATURES. DRAWING DIMENSIONS SHALL BE MET WHEN DIFFERENCES EXIST BETWEEN THE DRAWING AND THE CAD MODEL. UNDERLINED DIMENSIONS OR DIMENSIONS INDICATED AS "EDITED" MAY BE DIFFERENT FROMTHE 3D MODEL GEOMETRY. FOR DIMENSIONAL OR ANY INFORMATION NOT SHOWN ON THIS DRAWING, ANALYZE THE CAD MODEL.

b. PRODUCT DESIGN MODEL NUMBER(S): SEE BOM TABLE

c. GEOMETRIC DIMENSIONS AND TOLERANCES PER ASME Y14.5M-1994

d. GENERAL TOLERANCES - SEE TABLE

4. DESIGN - MANUFACTURING:

a. HUMAN READABLE LASER MARKING

1. INFORMATION TO BE PRINTED:

DDDY - 4 DIGIT JULIAN DATE CODE

S_HH - STITHCER NUMBER_HOUR NUMBER (24 HOUR CLOCK)

MMMM - LAST FOUR DIGITS OF MOLEX MATERIAL NUMBER

2. SIZE: HUMAN LEGIBLE

b. PIN MATE SIDE AND PCB SIDE TRUE POSITION TO BE VERIFIED ONLINE WITH A GO/NO-GO FUNCTIONAL GAGE.

c. ANTI-TARNISH FOR Ag PLATING ONLY: SYTHETIC HYDROCARBON CONTACT SURFACE FINISH OR EQUIVALENT APPLIED WITHOUT VOID TO CONTACT AREA (MIN. 3.7mm FROM PIN TIP).

d. VISUAL DEFECTS SHALL MEET COSMETIC STANDARD PS-45499-002 (CLASS B).

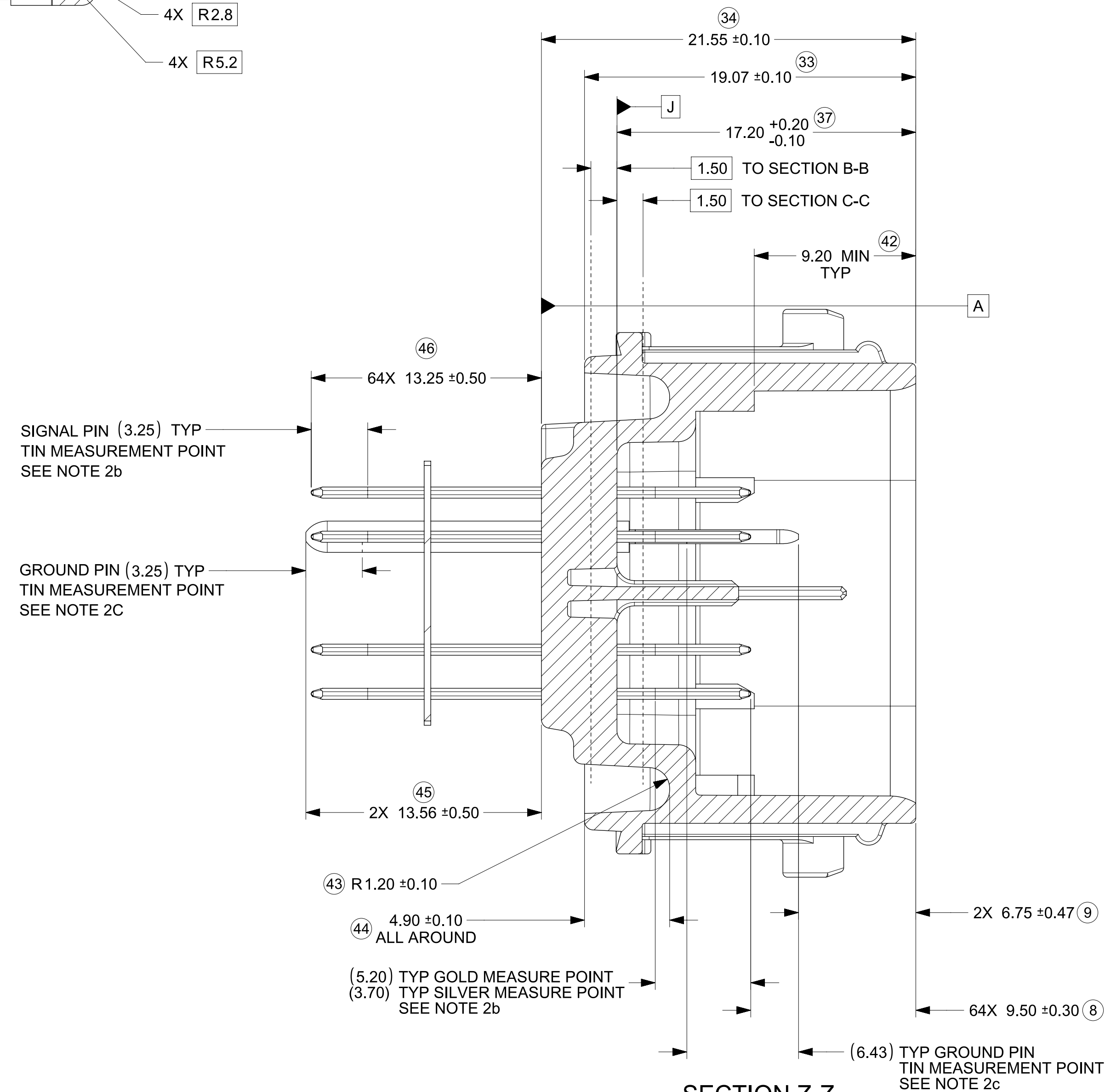
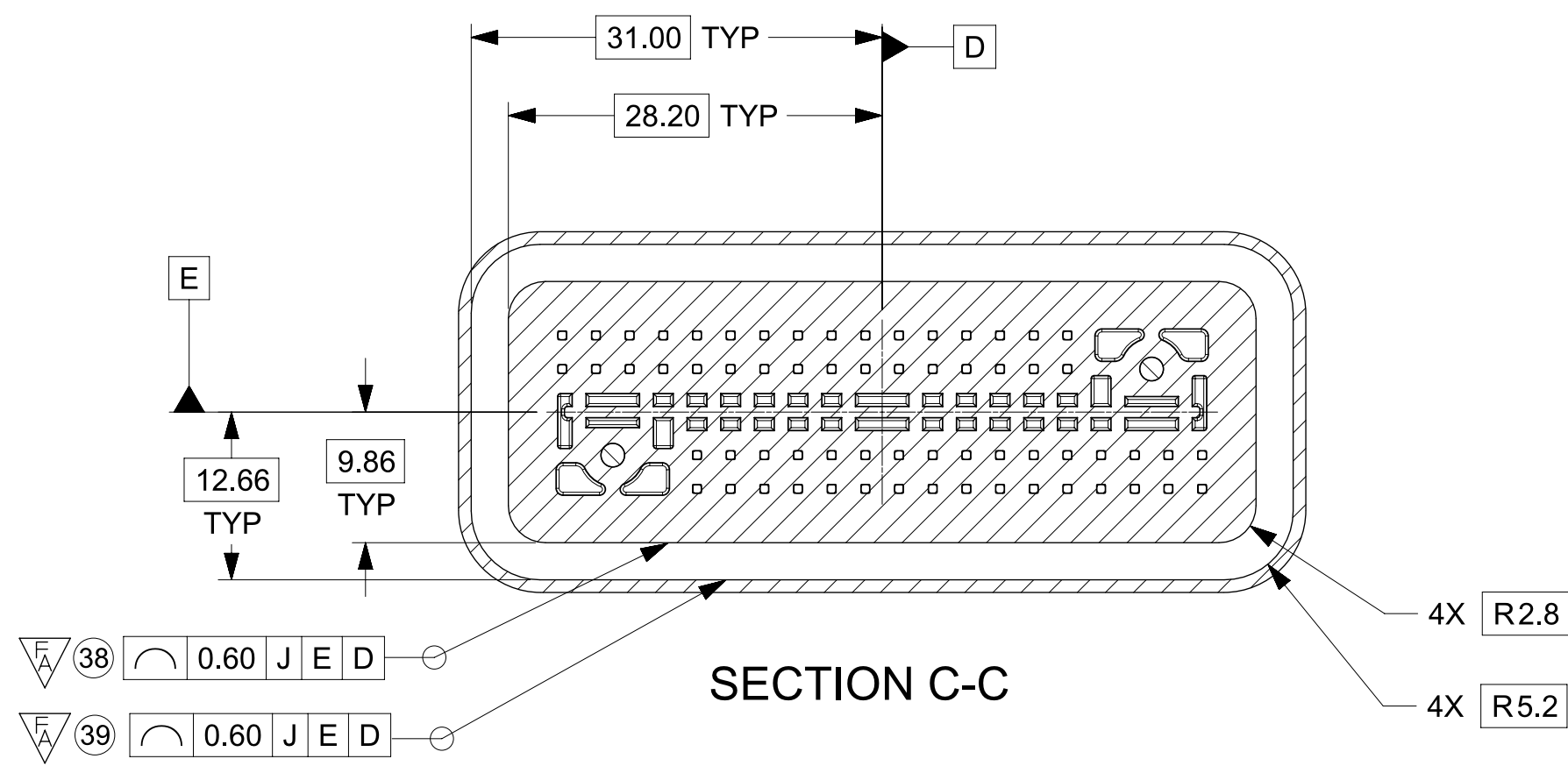
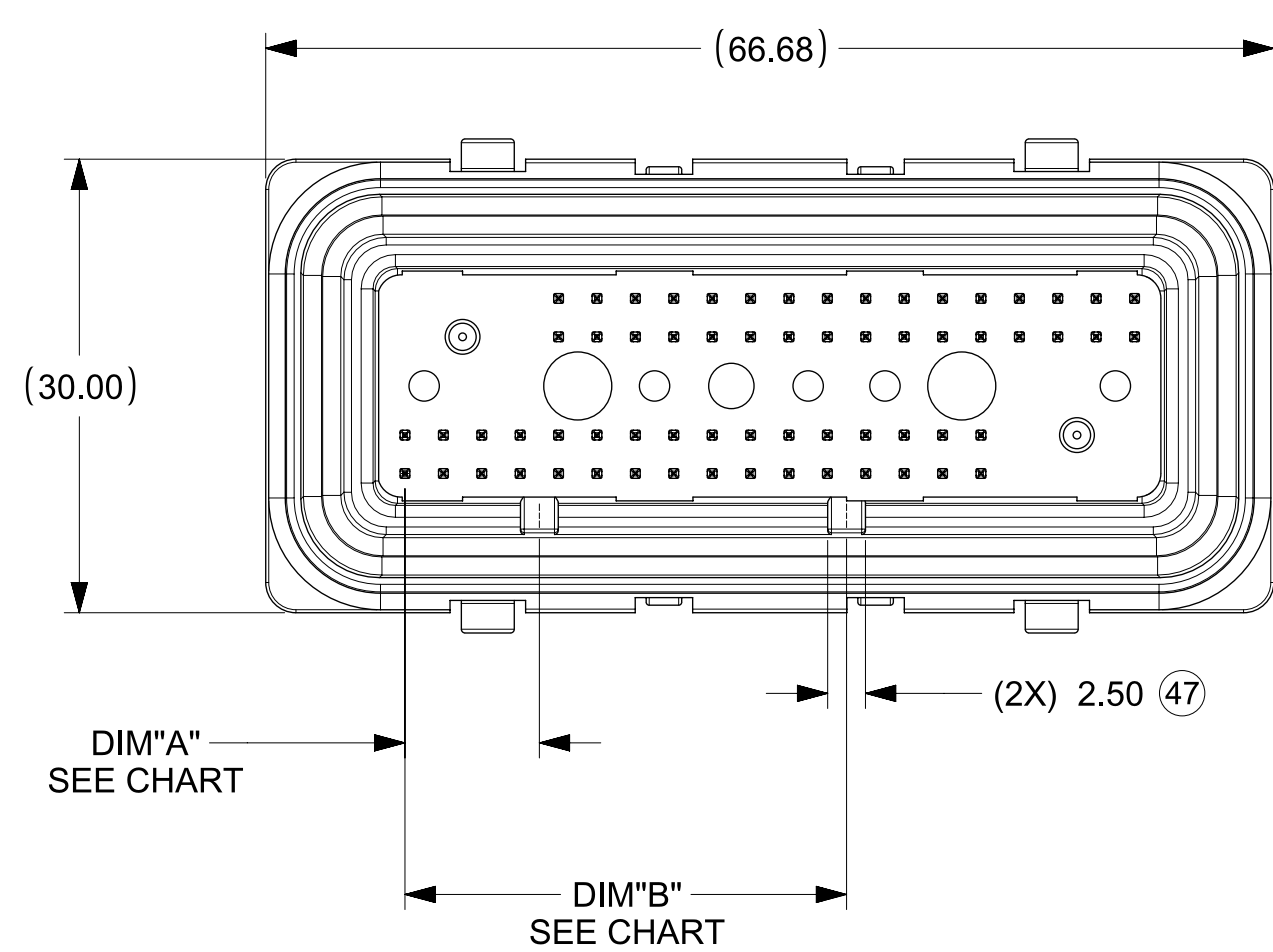
e. THERE SHALL BE NO PERMISSIBLE DEFECTS THAT COULD POTENTIALLY PROHIBIT THE FUNCTIONALITY WITHIN THE SEALING SURFACE/ZONE SUCH AS PARTING LINES, MISMATCHES, SINK, TEXTURE VARIATIONS, SCRATCHES/GOUGES, SHORT FILL, PROTRUSIONS, PITS, DENTS/NICKS, BLISTERS OR EJECTOR MARKS.

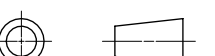
INSPECTION BALLOON NUMBER LOG	
PER DRAWING REVISION: A6 LAST BALLOON NUMBER: 47 ADDED BALLOON NUMBER: 1 2 6 7 8 9 10 11 12 13 14 15 19 20 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 DELETED INSPECTION BALLOON NUMBER: 3 4 5 16 17 18 21 22 23	
A12	Added Updated PN# for Female Connectors
A11	CORRECTED DIMENSION 37 EC# 642576
A10	UPDATED PCN 505530 FOR MINOR DRAFT AND RADII
A9	NX REMASTERING
A8	UPDATE STATUS TO SALEABLE
A7	UPDATED NOTE 1c SAP# 10595870
A6	ADDED NOTE 4d, e & SEALING ZONE ON PG 2 SAP# 10586362
A5	MODIFIED HIGH RETENTION CAVITY FOR 2.8 GROUND PIN SAP# 10584227
A4	ADDED BALLOONS 1,2,6-15,19,20,24-47 REMOVED BALLOONS 3-5,17,18,21-23 EDITED ALL NOTES, STATUS & MATING HARNESS PART NUMBER SAP# 10580347
REV	DESCRIPTION

FUNCTIONAL SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						
	DIMENSION UNITS	SCALE					
	MM	2:1					
	GENERAL TOLERANCES (UNLESS SPECIFIED)						
	ANGULAR TOL ± 3°						
DIVISIONAL SYMBOLS	4 PLACES	±					
	3 PLACES	±					
	2 PLACES	± 0.130					
	1 PLACE	± 0.25					
	0 PLACES	±					
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
			D-SIZE	31387	SEE CHART	GENERAL MARKET	1 OF 3

molex			
66 CKT SHROUD ASSY GENERAL MAKRET			
PRODUCT CUSTOMER DRAWING			
DOCUMENT NUMBER		DOC TYPE	DOC PART
SD-31387-066		PSD	000
REVISION		A12	

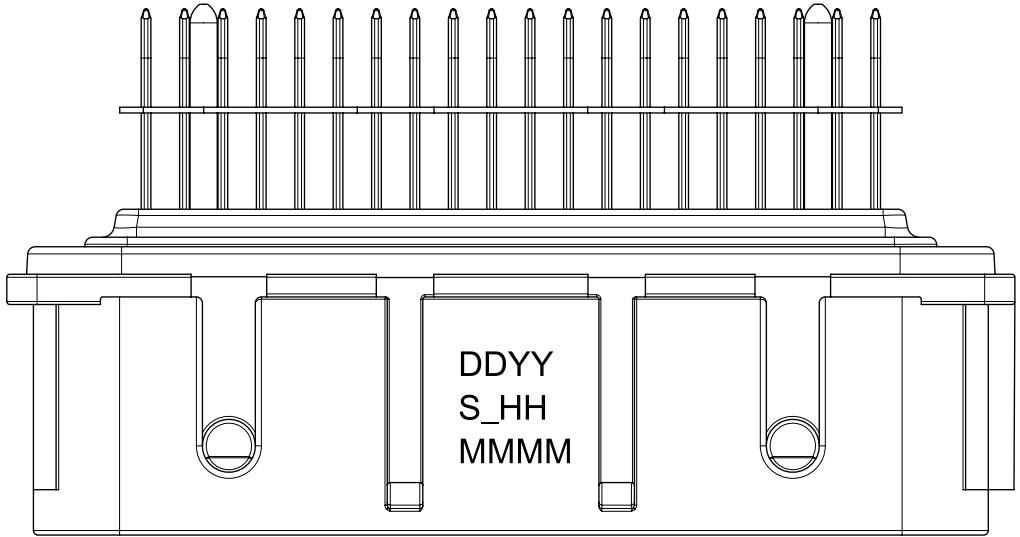
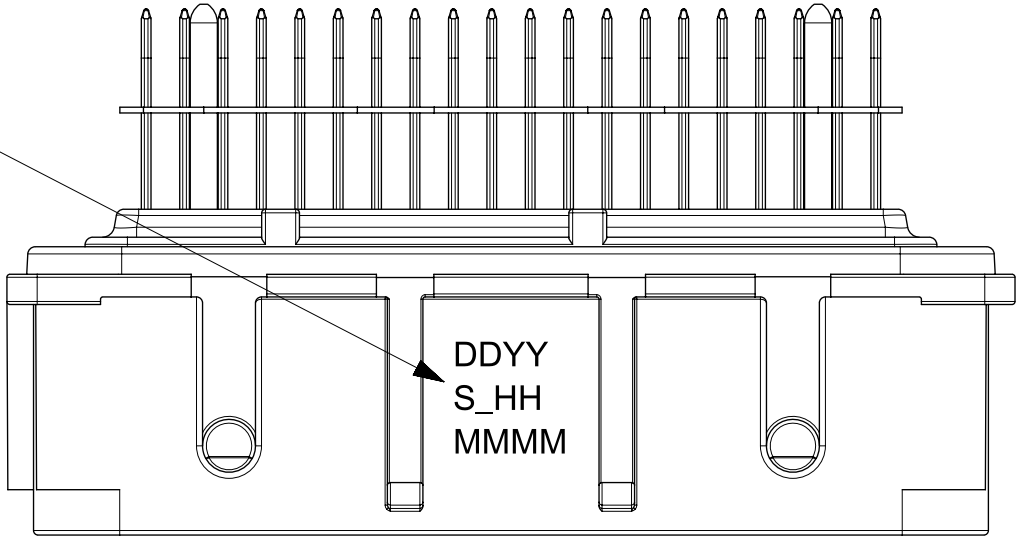
STATUS: Production	2025-11-19
DRWN: Jayasuriyaa R	2025-11-19
CHK'D: Jayasuriyaa R	2025-11-19
APPR: M Prashanth Nagaraj	2025-11-19



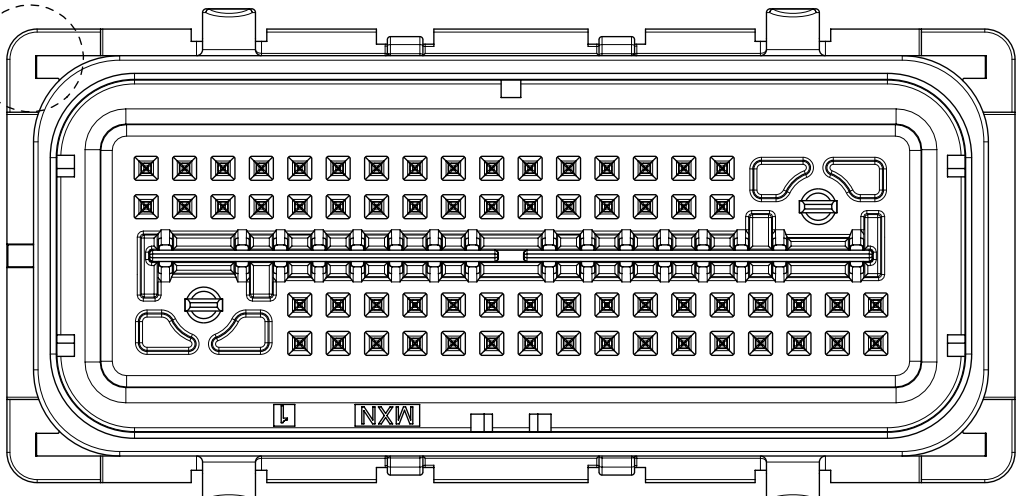
FUNCTIONAL SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION												
	DIMENSION UNITS		SCALE		CURRENT REV DESC: Added Updated PN# for Female Connectors			molex					
	MM		2:1										
	GENERAL TOLERANCES (UNLESS SPECIFIED)												
	ANGULAR TOL ± 3°												
	4 PLACES		±										
	3 PLACES		±										
	2 PLACES		± 0.130										
	1 PLACE		± 0.25										
	0 PLACES		±										
DIVISIONAL SYMBOLS	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		DRAWING	SERIES	MATERIAL NUMBER		CUSTOMER		SHEET NUMBER		
					D-SIZE	31387	SEE CHART		GENERAL MARKET		2 OF 3		
F/A = 4		66 CKT SHROUD ASSY GENERAL MAKRET								PRODUCT CUSTOMER DRAWING			
F/C = 3													
F/D = 0													
STATUS: Production					DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION				
DRWN: Jayasuriyaa R 2025-11-19					SD-31387-066		PSD	000	A12				
CHK'D: Jayasuriyaa R 2025-11-19													
APPR: M Prashanth Nagaraj 2025-11-19													

M	SHROUD ASSEMBLY NUMBER	MATE SIDE PIN FINISH	COLOR	HARNESS SIDE KEY CODE	PCB SIDE KEY LOCATION		MATING HARNESS PART NUMBER (OPT 0, OPT 9)	STATUS
					DIM. "A" ±0.30	DIM. "B" ±0.30		
L	31387-8001	GOLD	BLACK	A	8.89	29.21	348220013 / 2167410001 348220023 / 2167410002	SALEABLE
	31387-8003	GOLD	BLUE	C	8.89	34.29	348220033 / 2167410003 348220043 / 2167410004	SALEABLE
	31387-8004	SILVER	BLACK	A	8.89	29.21	348220013 / 2167410001 348220023 / 2167410002	SALEABLE
	31387-8006	SILVER	BLUE	C	8.89	34.29	348220033 / 2167410003 348220043 / 2167410004	SALEABLE

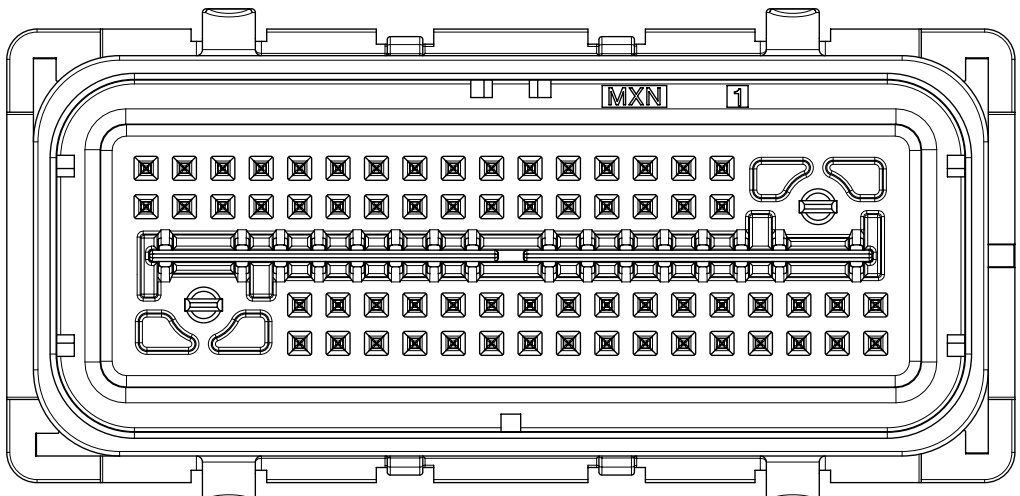
SHROUD ASSEMBLY
TRACEABILITY INFORMATION
FOR MOLEX INTERNAL USE ONLY
(SEE NOTE 4a)



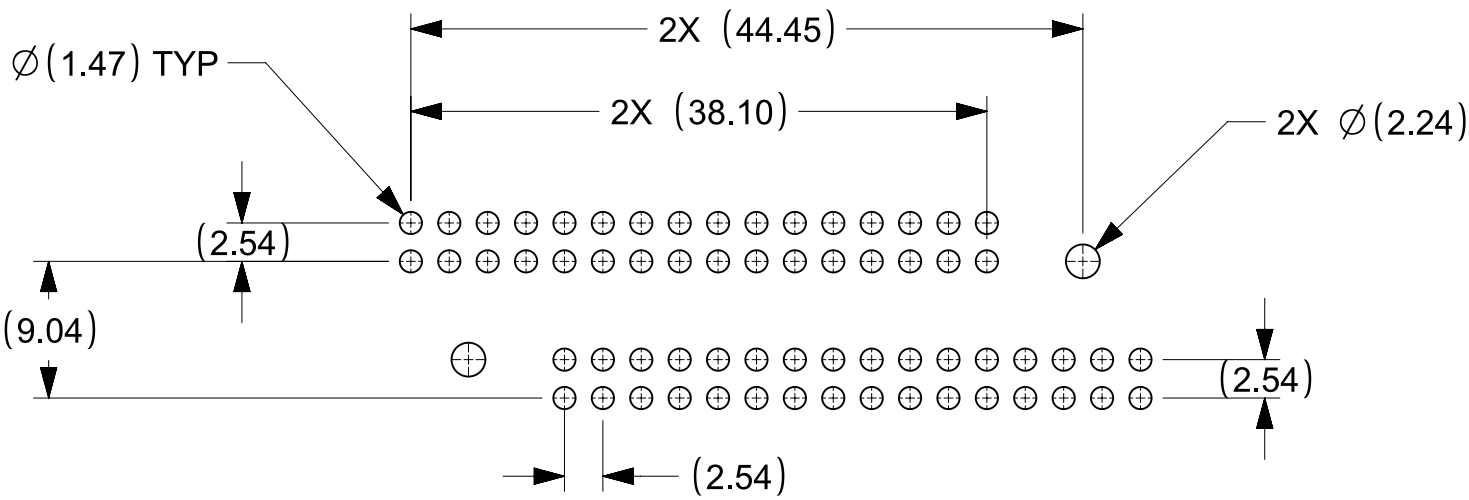
MATE SIDE
POLARIZATION KEY
AT CORNERS



KEY OPTION "A"

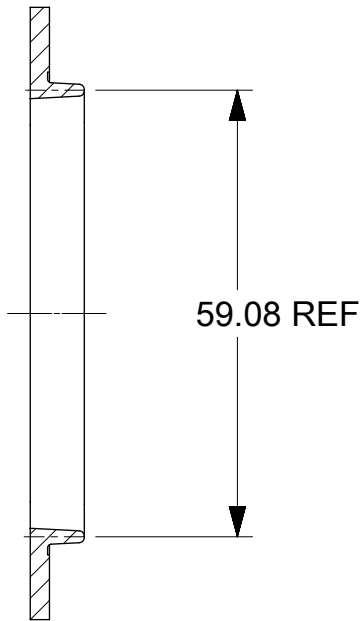
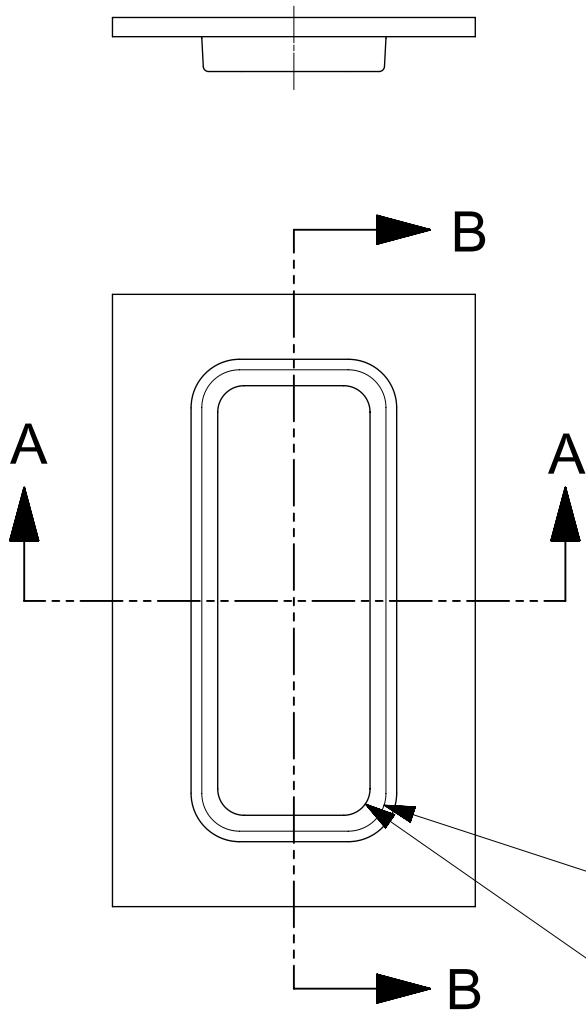
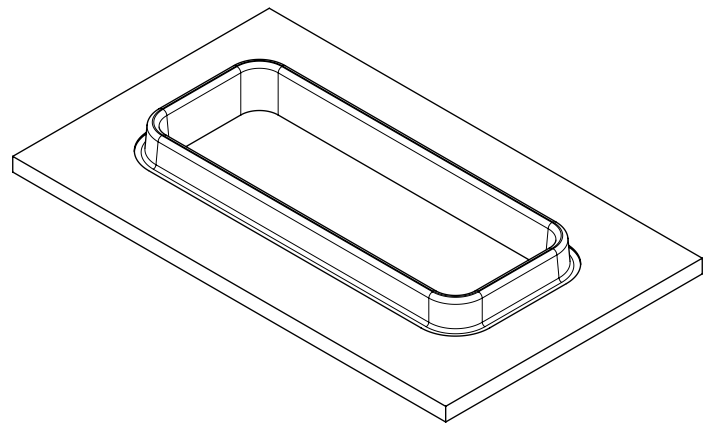


KEY OPTION "C"

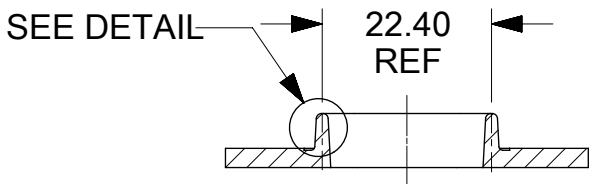


PCB LAYOUT FOR REFERENCE ONLY

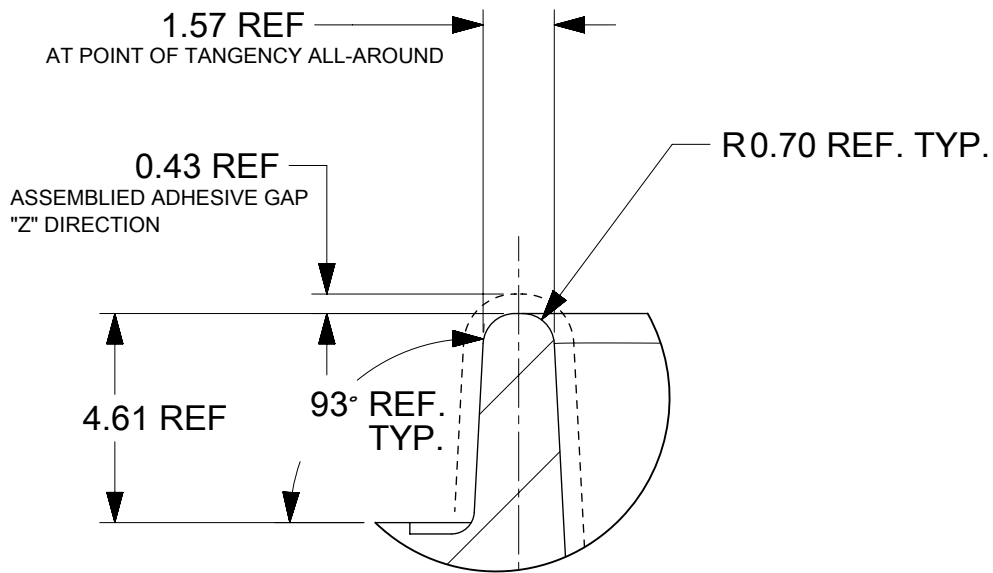
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION											
FUNCTIONAL SYMBOLS		DIMENSION UNITS		SCALE		CURRENT REV DESC: Added Updated PN# for Female Connectors					
F A = 0		MM		2:1		molex 66 CKT SHROUD ASSY GENERAL MAKRET					
F C = 0		GENERAL TOLERANCES (UNLESS SPECIFIED)									
F P = 0		ANGULAR TOL ± 3°									
DIVISIONAL SYMBOLS		4 PLACES		±							
		3 PLACES		±							
		2 PLACES		± 0.130							
		1 PLACE		± 0.25							
		0 PLACES		±							
		STATUS: Production				DOCUMENT NUMBER SD-31387-066 MATERIAL NUMBER SEE CHART					
		DRWN: Jayasuriyaa R 2025-11-19									
		CHK'D: Jayasuriyaa R 2025-11-19									
		APPR: M Prashanth Nagaraj 2025-11-19				DOC TYPE PSD					
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		DRAWING		SERIES		DOC PART 000	
						D-SIZE		31387		REVISION A12	
										SHEET NUMBER 3 OF 3	



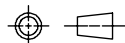
SECTION B-B



SECTION A-A



SCALE 6:1

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																		
QUALITY SYMBOLS		EC NO: 121890 DRWN: BSKANTHARAJU CHK'D: APPR: DKRAWCZYK	2017/03/28 2017/10/12	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION UNITS		SCALE		molex® LARGE FOOTPRINT ADHESIVE TONGUE GEOMETRY									
F A = 0 F E = 0 F P = 0 ▽ = 0 C = 0 ⊠ = 0 ■ = 0 ▽ = 0					MM		1:1											
					DRWN BY FJAKLIC DATE 11/21/2008													
					ANGULAR TOL ± °		CHK'D BY GPRATT DATE 11/21/2008				PRODUCT CUSTOMER DRAWING							
					4 PLACES ±		APPR BY DKRAWCZYK DATE 2013/02/19											
					3 PLACES ±		SERIES 31387 MATERIAL NUMBER CUSTOMER GENERAL MARKET											
					2 PLACES ±								DRAWING SIZE B THIRD ANGLE PROJECTION 					
					1 PLACE ±													
					0 PLACES ±													
					DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS													
B1		REV																

RELEASE STATUS		RELEASE DATE	
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