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

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 FROM THE 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). 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.

REV	DESCRIPTION
B12	Added Updated PN# for Female Connectors
B11	UPATED PCN 505530 FOR MINOR DRAFT AND RADII
B10	NX REMASTERING
B9	CORRECTED KEY H 'DIM B' VALUE
B8	CORRECTED KEY H 'DIM A' VALUE; CHANGE STATUS TO SALEABLE
B7	UPDATED NOTE 1c SAP# 10595870
B6	ADDED NOTE 4d, e & SEALING ZONE ON PG 2 SAP# 10586362
B5	ADDED BALLOON NUMBERS 1,2,10,11,19,20, 24-44,46,47; DELETED BALLOON NUMBERS 3-7,9,12-15,17, 18, 21-23, 45 EDITED ALL NOTES, STATUS & MATING HARNESS PART NUMBER SAP# 10580347

INSPECTION BALLOON NUMBER LOG

PER DRAWING REVISION: B6
LAST BALLOON NUMBER: 47
ADDED BALLOON NUMBER: 1 2 8 10 11 19 20 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 46 47
DELETED INSPECTION BALLOON NUMBER: 3 4 5 6 7 9 12 13 14 15 16 17 18 21 22 23 45

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

FUNCTIONAL SYMBOLS
FA = 0
FC = 0
FD = 0
DIVISIONAL SYMBOLS

DIMENSION UNITS	SCALE
MM	2:1

GENERAL TOLERANCES (UNLESS SPECIFIED)

ANGULAR TOL	± 3'
4 PLACES	±
3 PLACES	±
2 PLACES	± 0.130
1 PLACE	± 0.25
0 PLACES	±

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC: Added Updated PN# for Female Connectors

STATUS: Production
DRWN: Jayasuriyaa R 2025-11-13
CHK'D: Jayasuriyaa R 2025-11-19
APPR: M Prashanth Nagaraj 2025-11-19

THIRD ANGLE PROJECTION | DRAWING: D-SIZE | SERIES: 31387

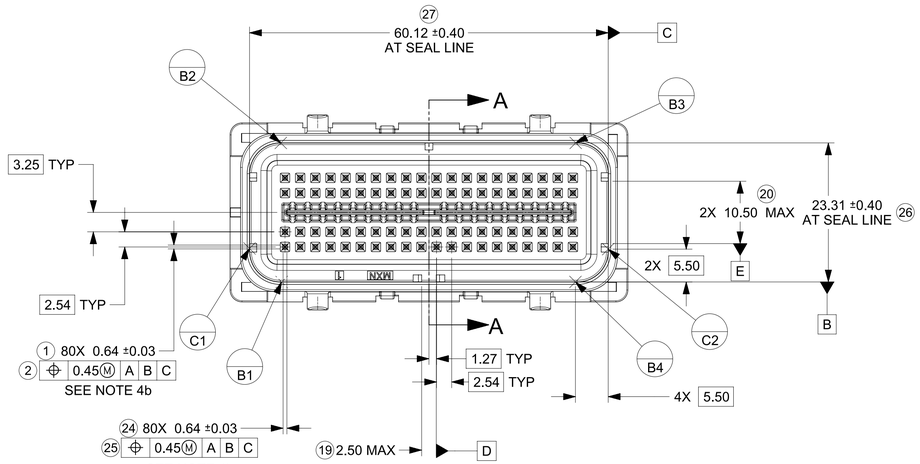
molex

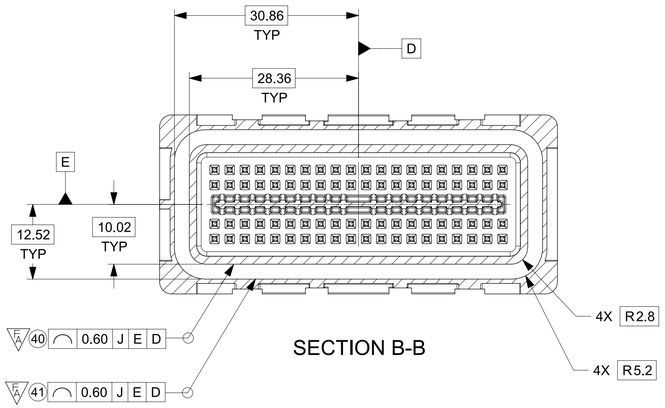
80 CKT SHROUD ASSEMBLY
0.64 SQ. PINS

PRODUCT CUSTOMER DRAWING

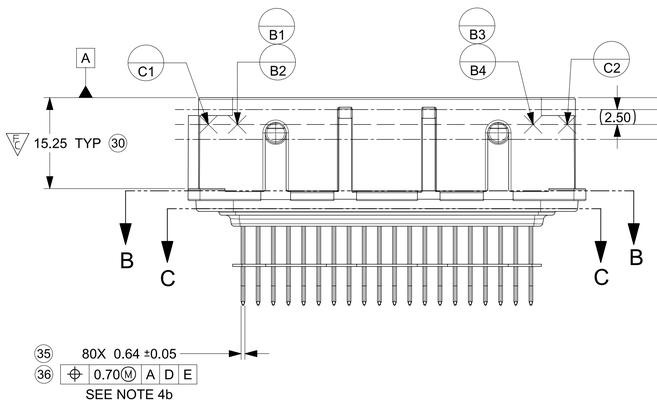
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SD-31387-080	PSD	000	B12

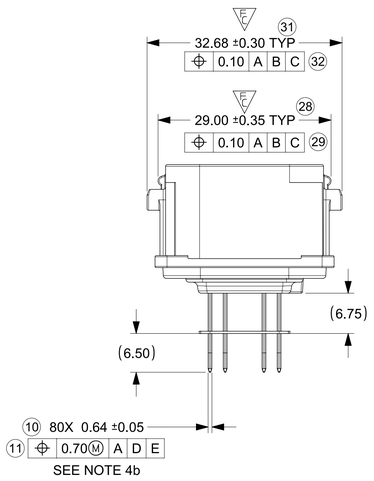
MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
SEE CHART	GENERAL MARKET	1 OF 3

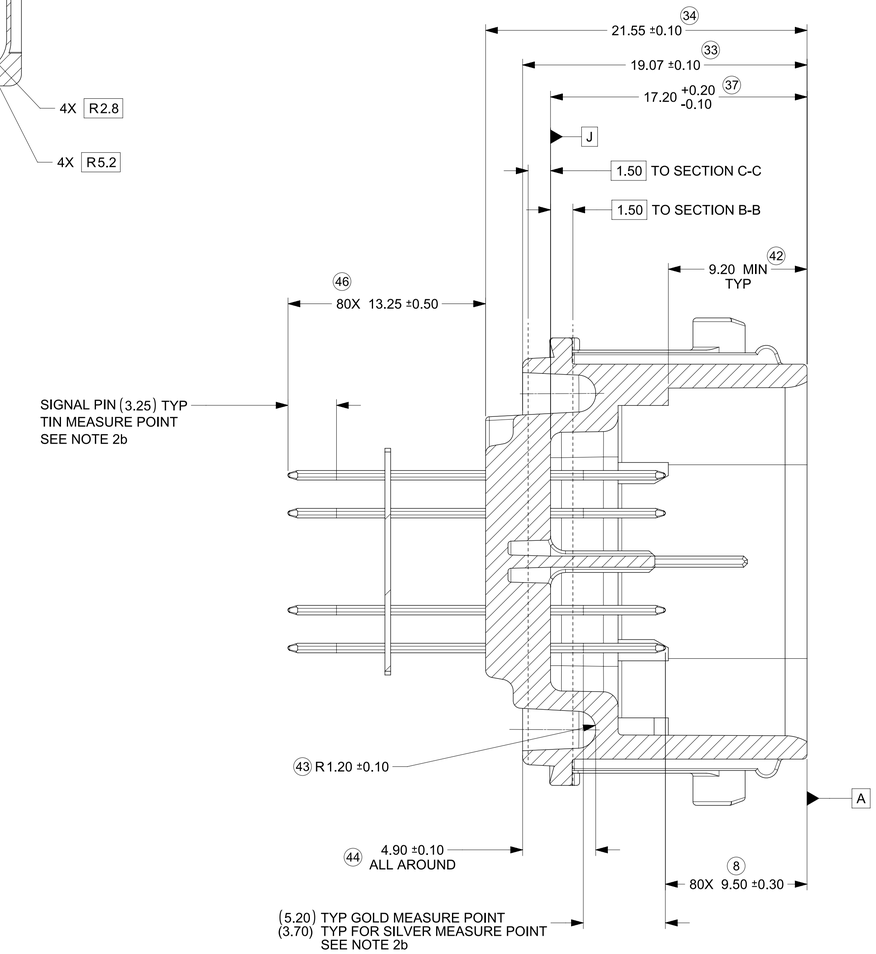




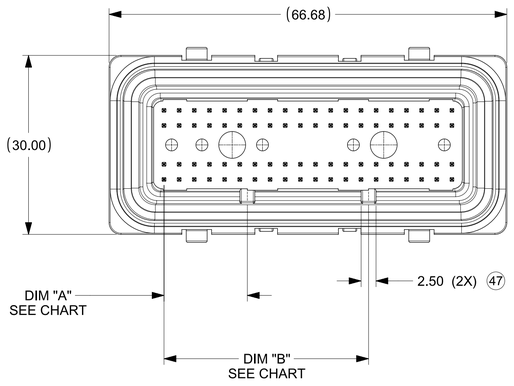
SECTION B-B

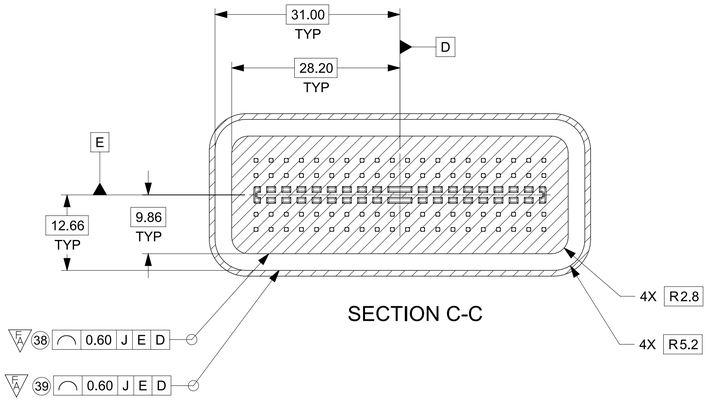






SECTION A-A
SCALE 5:1

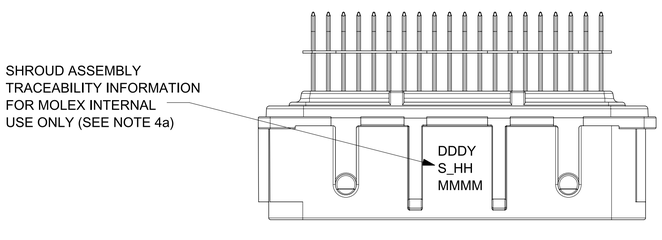


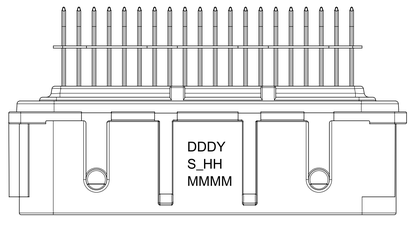


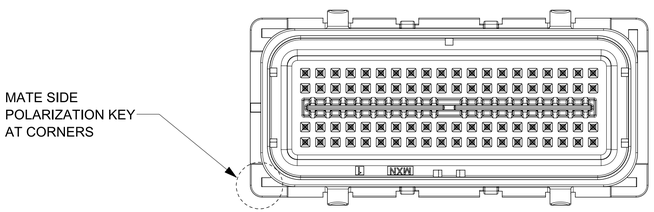
SECTION C-C

FUNCTIONAL SYMBOLS: FA = 4; FC = 3; FP = 0	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
DIVISIONAL SYMBOLS	DIMENSION UNITS: MM	SCALE: 2:1	CURRENT REV DESC: Added Updated PN# for Female Connectors	molex	
	GENERAL TOLERANCES (UNLESS SPECIFIED)			80 CKT SHROUD ASSEMBLY 0.64 SQ. PINS	
	ANGULAR TOL ± 3°			PRODUCT CUSTOMER DRAWING	
	4 PLACES ±		STATUS: Production	DOCUMENT NUMBER: SD-31387-080	DOC TYPE: PSD; DOC PART: 000; REVISION: B12
	3 PLACES ±		DRWN: Jayasuriyaa R 2025-11-13		
	2 PLACES ± 0.130		CHK'D: Jayasuriyaa R 2025-11-19		
	1 PLACE ± 0.25		APPR: M Prashanth Nagaraj 2025-11-19		
	0 PLACES ±		THIRD ANGLE PROJECTION	DRAWING: D-SIZE; SERIES: 31387	MATERIAL NUMBER: SEE CHART; CUSTOMER: GENERAL MARKET; SHEET NUMBER: 2 OF 3
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				

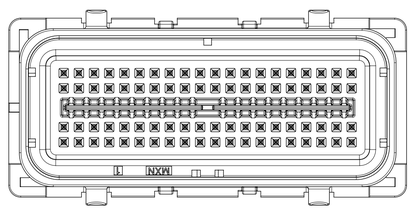
SHROUD ASSEMBLY NUMBER	MATE SIDE PIN FINISH	COLOR	HARNESS SIDE KEY CODE	PCB SIDE KEY LOCATION		MATING HARNESS PART NUMBER	STATUS
				DIM. "A" ±0.30	DIM. "B" ±0.30		
31387-4001	GOLD	BLUE	G	13.97	34.29	345660703 / 2167380001 345661903 / 2167380007	SALEABLE
31387-4009	GOLD	GRAY	H	19.05	34.29	345660803 / 2167380002 345662003 / 2167380008	SALEABLE
31387-4017	SILVER	BLUE	G	13.97	34.29	345660703 / 2167380001 345661903 / 2167380007	SALEABLE
31387-4018	SILVER	GRAY	H	19.05	34.29	345660803 / 2167380002 345662003 / 2167380008	SALEABLE



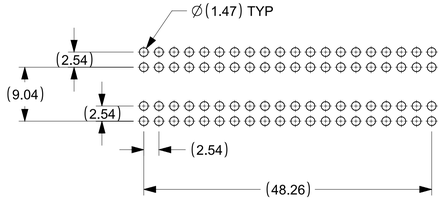




KEY OPTION "G"



KEY OPTION "H"



PCB LAYOUT FOR REFERENCE ONLY

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FUNCTIONAL SYMBOLS
FA = 0
FC = 0
FP = 0

DIVISIONAL SYMBOLS

DIMENSION UNITS	SCALE
MM	2:1

GENERAL TOLERANCES (UNLESS SPECIFIED)

ANGULAR TOL	± 3°
4 PLACES	±
3 PLACES	±
2 PLACES	± 0.130
1 PLACE	± 0.25
0 PLACES	±

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC: Added Updated PN# for Female Connectors

STATUS: Production
DRWN: Jayasuriyaa R 2025-11-13
CHK'D: Jayasuriyaa R 2025-11-19
APPR: M Prashanth Nagaraj 2025-11-19

molex

80 CKT SHROUD ASSEMBLY
0.64 SQ. PINS

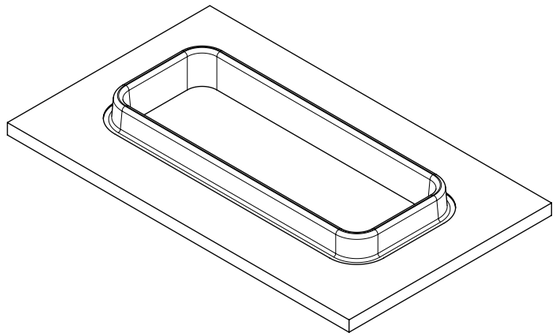
PRODUCT CUSTOMER DRAWING

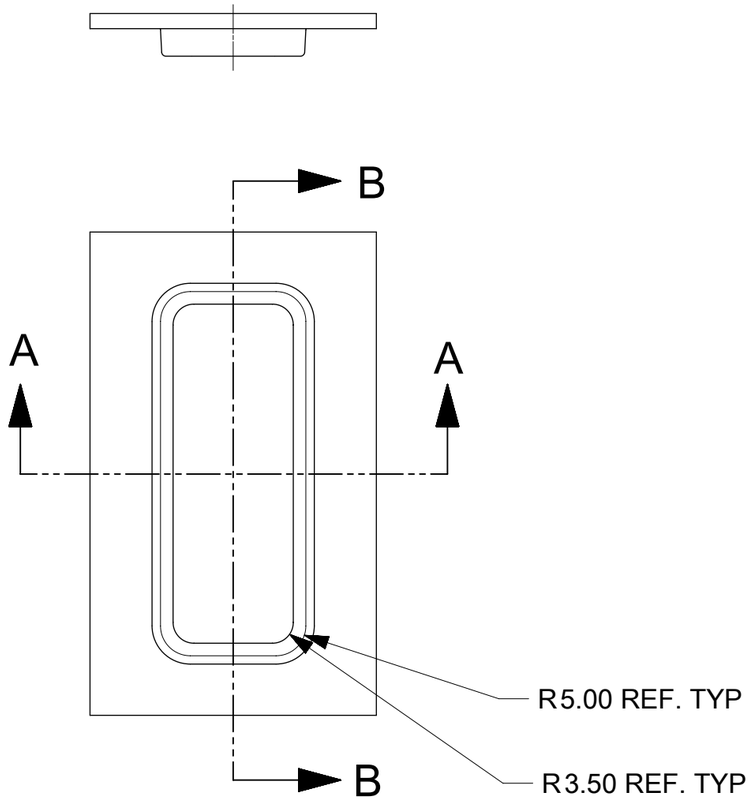
DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
SD-31387-080	PSD	000	B12

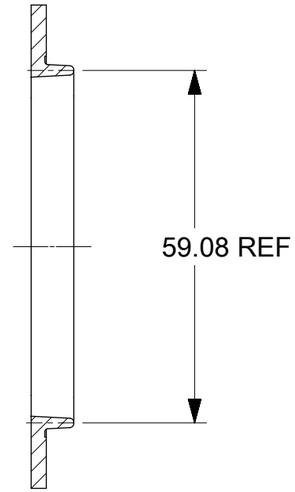
THIRD ANGLE PROJECTION | DRAWING: D-SIZE | SERIES: 31387

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

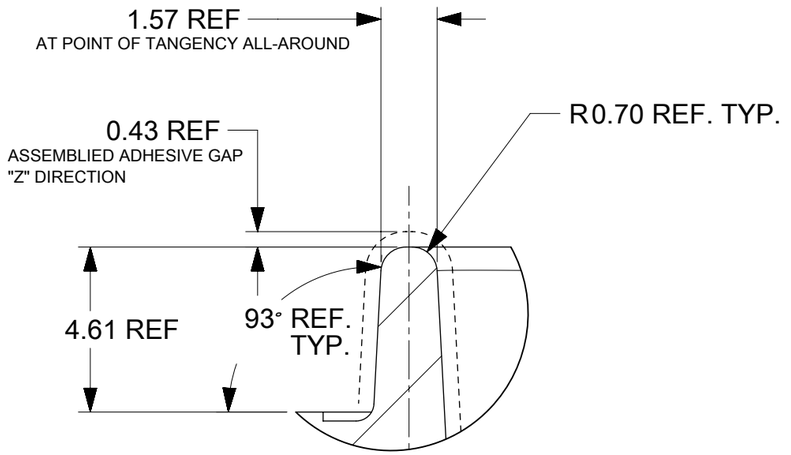
FORMAT TV-Autoinch2
REVISION: B
DATE: 2025/09/23



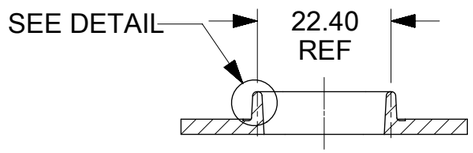




SECTION B-B



SCALE 6:1



SECTION A-A

QUALITY SYMBOLS	
FA	= 0
FC	= 0
FP	= 0
▼	= 0
C	= 0
☒	= 0
■	= 0
▽	= 0

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EC NO: 121890 2017/03/28
DRWN: BSKANTHARAJU
CHK'D: DKRAWCZYK 2017/10/12
APPR:

REV: B1

GENERAL TOLERANCES (UNLESS SPECIFIED)

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

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION UNITS	MM
SCALE	1:1
DRWN BY	FJAKLIC
DATE	11/21/2008
CHK'D BY	GPRATT
DATE	11/21/2008
APPR BY	DKRAWCZYK
DATE	2013/02/19
DRAWING SIZE	B
THIRD ANGLE PROJECTION	

molex®

LARGE FOOTPRINT
ADHESIVE TONGUE GEOMETRY

PRODUCT CUSTOMER DRAWING

SERIES	MATERIAL NUMBER	CUSTOMER
31387		GENERAL MARKET

DOCUMENT NUMBER	DOC TYPE	DOC PART	SHEET NUMBER
SD-31387-173	PSD	000	1 OF 1

RELEASE STATUS		RELEASE DATE	

FORMAT: master-tb-prod-B
REVISION: G
DATE: 2017/02/06