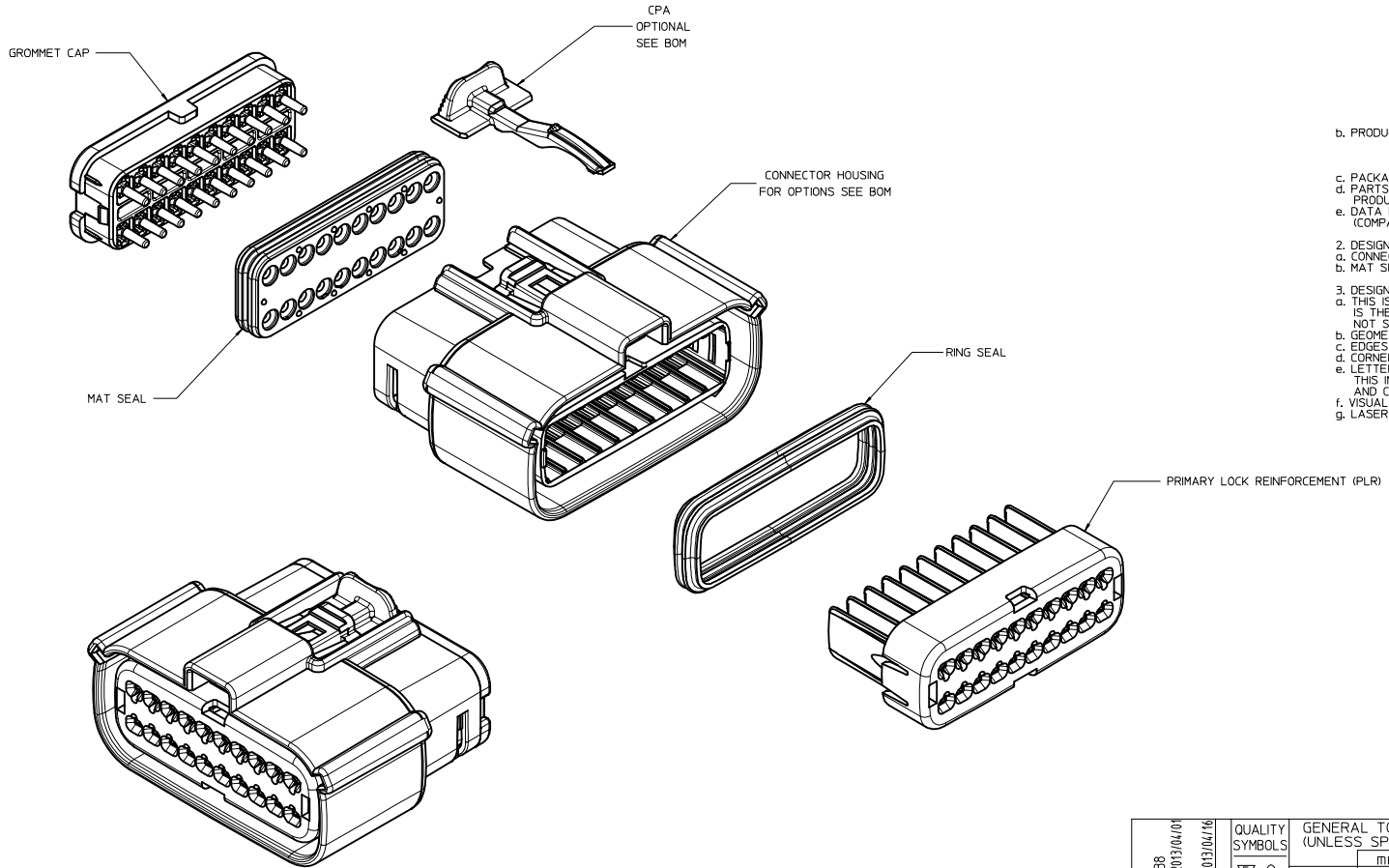


TABLE OF CONTENTS	
SHEET NO.	SHEET DESCRIPTION
1	NOTES
2	KEY CONFIGURATIONS
3	RECEPTACLE SEALED ASSEMBLY
4-5	BOM
6-7	MATING INTERFACE SHEET



NOTES: VALID UNLESS OTHERWISE SPECIFIED

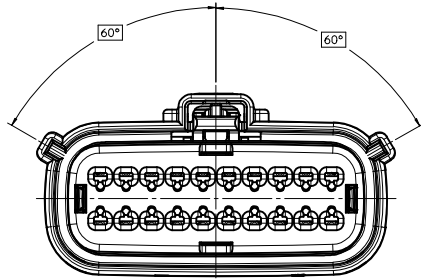
1. GENERAL:
  - a. APPLICATION SPECIFICATION SEE: AS-33472-100
    - CONTAINS: PRODUCT INTRODUCTION, PRODUCT SUMMARY, CONNECTOR ASSEMBLY, PACKAGING INFORMATION, CONNECTOR MATING, SERVICE INSTRUCTIONS, ELECTRICAL CONTINUITY CHECKING, CRIMPING, AND TROUBLESHOOTING.
    - DESIGNED TO MATE WITH DEVICE CONNECTION AS SPECIFIED ON SHEET 6 AND 7 OF DRAWING SD-33472-201
    - DESIGNED TO MATE WITH BLADE SEALED ASSEMBLY AS SPECIFIED IN DRAWING SD-33482-201
    - FOR 15mm RECEPTACLE TERMINALS TO BE USED WITH THIS ASSEMBLY. SEE MOLEX DRAWING SD-33012-002
    - SYSTEM TO BE USED WITH WIRE WITHIN DIAMETER RANGE OF 1.4 mm TO 2.69 mm.
    - ASSEMBLY SHIPPED WITH PLR AND CPA IN PRE-LOCK POSITION (SEE SECTION Z-Z PRE-LOCK).
    - IN THE EVENT THAT THE PLR IS FOUND IN THE SEATED (FINAL LOCK) POSITION, REFER TO MOLEX SPECIFICATION PS-34666-001, AVAILABLE AT [www.molex.com](http://www.molex.com) <<http://www.molex.com>>.
    - ASSEMBLY CONFORMS TO SAE/USCAR-2 REV.4 WITH THE FOLLOWING EXCEPTIONS:
      - ENGAGEMENT FORCE TO MOVE CPA FROM PRE-LOCK TO FINAL LOCK POSITION WHEN UNMATED: 40N MIN.
      - DISENGAGEMENT FORCE TO MOVE CPA FROM FINAL LOCK TO PRE-LOCK POSITION: 3N MIN, 40N MAX.
      - TERMINAL INSERTION FORCE FOR WIRE DIAMETER ABOVE 2.5mm NOT EXCEEDING 2.69mm SHALL NOT EXCEED 40 NEWTONS.
      - TPA REMOVAL FROM FINAL LOCK TO PRE-LOCK POSITION SHALL NOT EXCEED 130 NEWTONS.
  - b. PRODUCT SPECIFICATION SEE: PS-33472-000
    - CONTAINS: PRODUCT INTRODUCTION, PRODUCT SUMMARY, RATINGS (CURRENT, TEMPERATURE, SEALING, AND FLAMMABILITY), AND PRODUCT VALIDATION.
  - c. PACKAGING SPECIFICATION PER MOLEX DRAWING: PK-31900-903
  - 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)
2. DESIGN - MATERIALS:
  - a. CONNECTOR HOUSING, GROMMET CAP, PLR: SPS/NYLON 20% GLASS FILLED
  - b. MAT SEAL: INTERNALLY LUBRICATED SILICONE
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 - 1994
  - c. EDGES AND UNDIMENSIONED DETAILS PER ISO13715
  - d. CORNERS SHOWN AS SHARP TO BE R 0.2 MAX.
  - e. LETTERING SHALL BE 0.15 MAX RAISED IN 0.25 MAX RECESS PAD. THIS INCLUDES RECYCLING CODE, CAVITY ID, VENDOR IDENTIFICATION, AND CUSTOMER MATERIAL NUMBER
  - f. VISUAL DEFECTS SHALL MEET COSMETIC STANDARD PS-45499-002 (Class B)
  - g. LASER MARKING: TBD

INSPECTION NUMBER LOG  
 LAST NUMBER USED: 5  
 ADDED:  
 REMOVED:

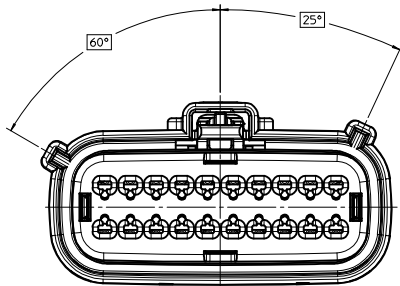
X10	MOVE SECTION S-S FROM 8.5mm TO 3.5mm FOR INTERFACE SEALING AREA CONTROL ON SHEET 7
X9	ADD NEW P/N 33472-2122
X8	ADD NEW P/N 33472-2115 33472-2116 33472-2117 33472-2118 33472-2119 33472-2120 33472-2121
X7	ADD NEW P/N 33472-2106 33472-2107 33472-2108 33472-2109 33472-2110 33472-2111 33472-2112 33472-2113 33472-2114
X6	ADD NEW P/N 33472-2105
X5	ADD NEW P/N 33472-2104
X4	ADD NEW P/N 33472-2103
X3	ADD NEW P/N 33472-2101 33472-2102
X2	CORRECTED NOMENCLATURE SHEET 3
X1	ADD NEW P/N 33472-2099 33472-2100
X	REDRAWN
REV	DESCRIPTION

REVISED REC NO: UAU2013-1538 DRAWN: DZHANG 2013/04/01 CHKD: APPR: IKOSHY 2013/04/16 DESCRIPTION X10	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
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	▽=0	4 PLACES ± --- ± ---	DRAWN BY DATE	TITLE		
	▽=0	3 PLACES ± --- ± ---	CHECKED BY DATE	MX150 2X10 RECEPTACLE SEALED ASSEMBLY MAT SEAL		
	2 PLACES ± 0.10 ± ---	DGR1FF1THS 06/17/2003	molex			
	1 PLACE ± 0.3 ± ---	DGR1FF1THS 06/17/2003	DOCUMENT NO.			SHEET NO.
	0 PLACE ± ± ---	DGR1FF1THS 06/17/2003	SD-33472-201			1 OF 7
	ANGULAR ± 3 °	MATERIAL NO.	SEE BOM			
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SIZE	D THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

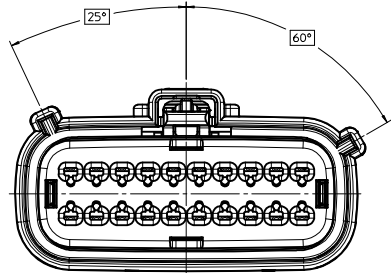
KEY CONFIGURATIONS



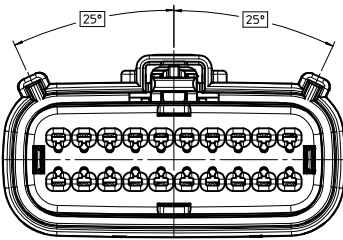
KEY A



KEY B



KEY C

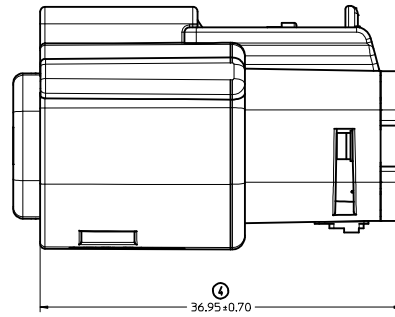
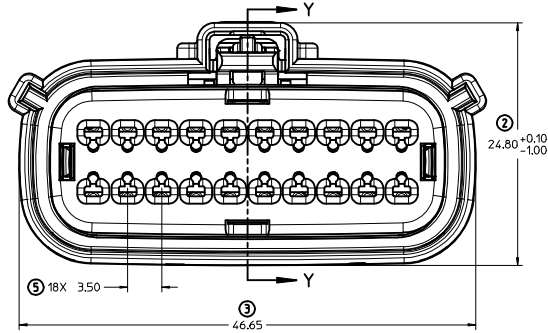
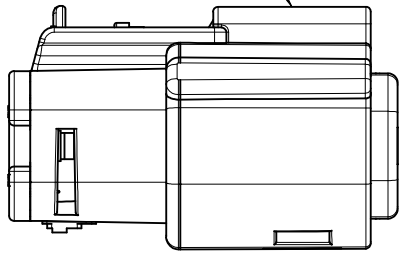


KEY D

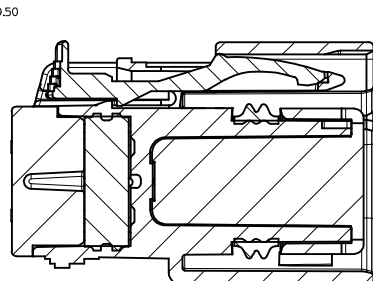
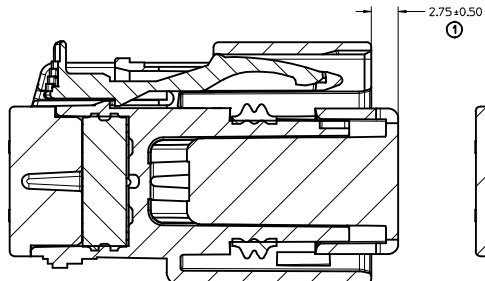
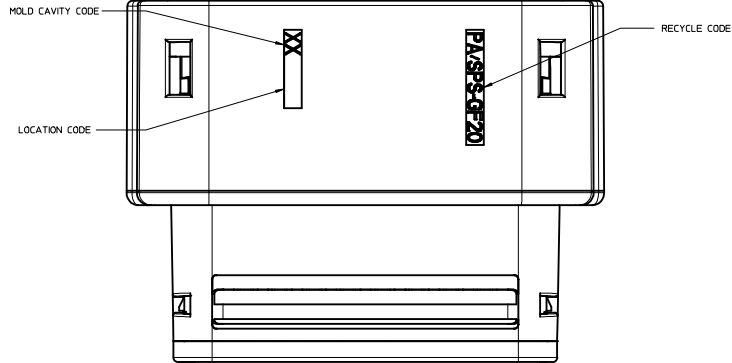
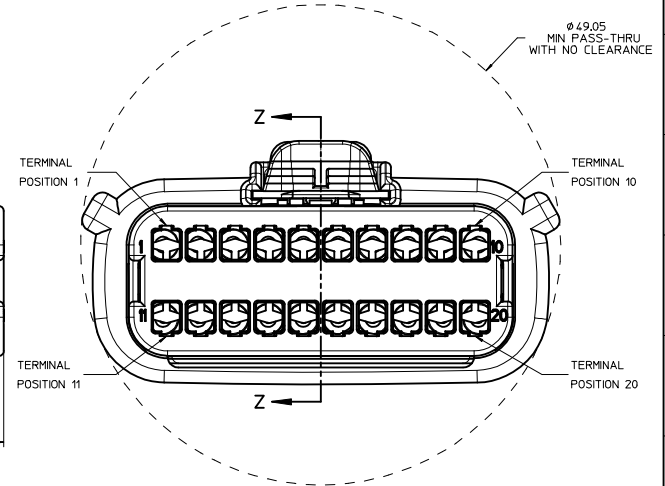
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	▽=0	4 PLACES ± --- ± ---	DRAWN BY DATE	TITLE		
	▽=0	3 PLACES ± --- ± ---	DGRIFFI THS 06/17/2003	MX150 2X10 RECEPTACLE SEALED ASSEMBLY MAT SEAL		
	2 PLACES ± 0.10 ± ---	CHECKED BY DATE	MATERIAL NO.			
	1 PLACE ± 0.3 ± ---	DGRIFFI THS 06/17/2003	SEE BOM			
	0 PLACE ± ±	APPROVED BY DATE	DOCUMENT NO.			
		DGRIFFI THS 06/17/2003	SD-33472-201			
		ANGULAR ± 3 °	SHEET NO.			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	2 OF 7			
			THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

LASER MARKING ON THIS SURFACE  
SEE NOTE 3g.



RECEPTACLE SEALED ASSEMBLY



PRIMARY LOCK REINFORCEMENT (PLR) SHOWN  
IN PRE-STAGED POSITION

PRIMARY LOCK REINFORCEMENT (PLR) SHOWN  
IN FINAL-LOCK POSITION

SECTION Z-Z

SECTION Y-Y

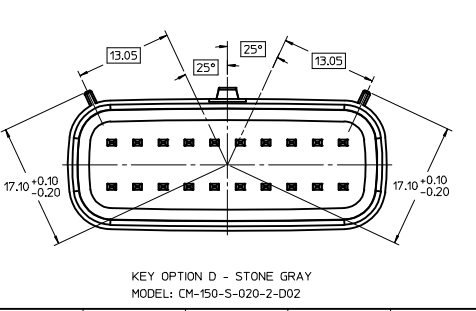
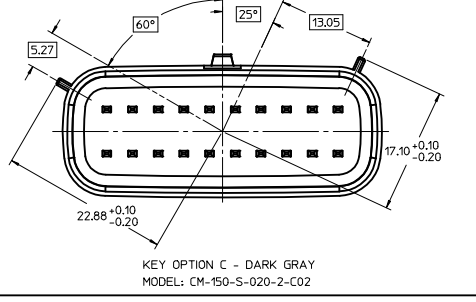
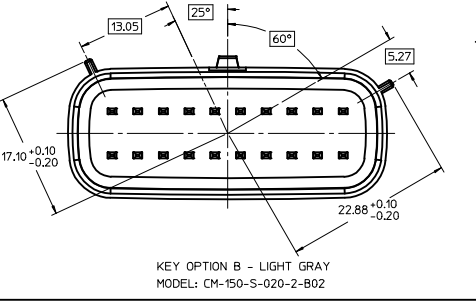
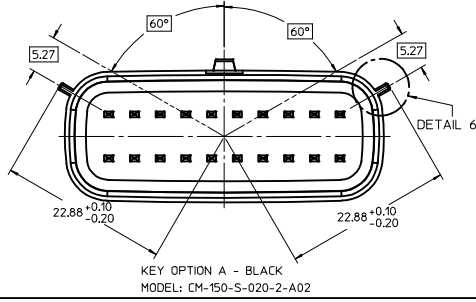
<b>REVISED</b> REC NO. UAU2013-1538 DRAWN: DZHANG 2013/04/01 CHKD: APPR: WJOSHY 2013/04/16 SIZE X10	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	∇=0 ∇=0 ∇=0	mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.10 ± --- 1 PLACE ± 0.3 ± --- 0 PLACE ± ±	MM ONLY	4:1	METRIC	DRAWN BY DATE DGRIFFI THS 06/17/2003 CHECKED BY DATE DGRIFFI THS 06/17/2003 APPROVED BY DATE DGRIFFI THS 06/17/2003
	ANGULAR ± 3 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO. SEE BOM	TITLE MX150 2X10 RECEPTACLE SEALED ASSEMBLY MAT SEAL <b>molex</b>	DOCUMENT NO. SD-33472-201	SHEET NO. 3 OF 7	
	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

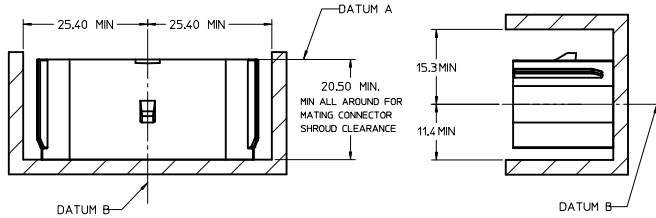




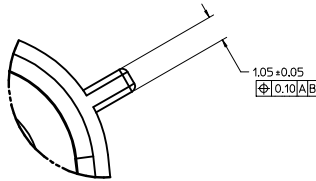
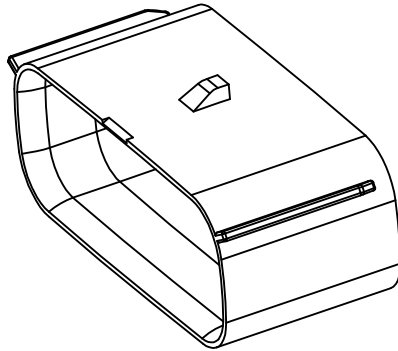
KEYING OPTIONS TABLE



IF HEADER IS RECESSED INTO A POCKET, THESE DIMENSIONS REPRESENT THE MINIMUM CLEARANCE REQUIRED FOR THE MATING CONNECTOR SHROUD.



PACKAGING FRAME

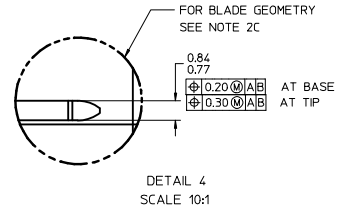
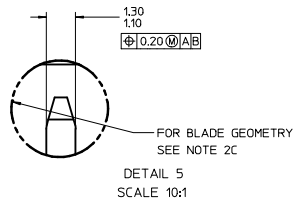
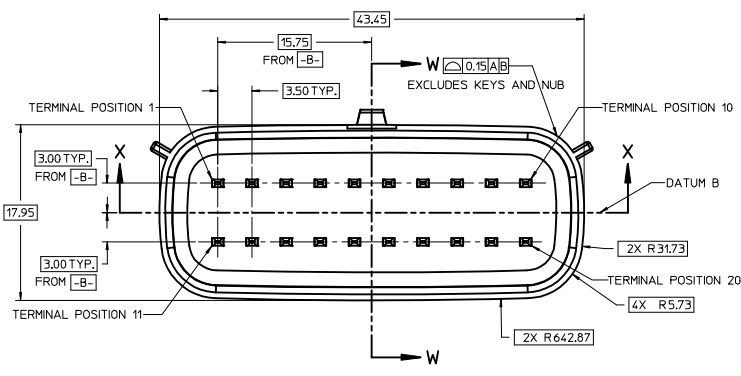
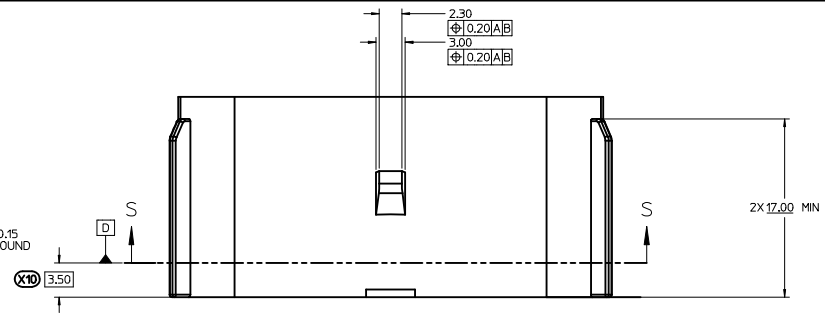
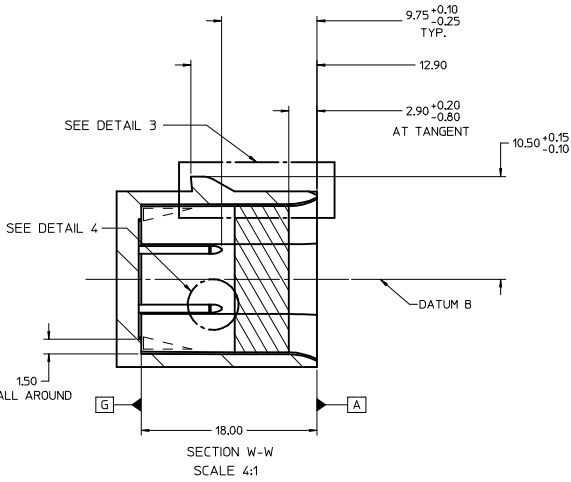
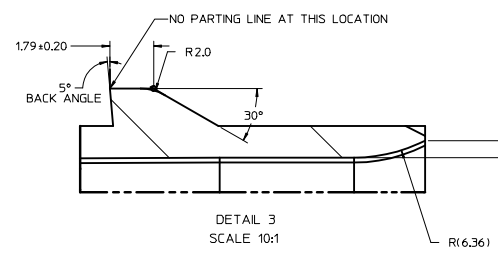


MATING INTERFACE SHEET 1/2

MATING INTERFACE NOTES: VALID UNLESS OTHERWISE SPECIFIED

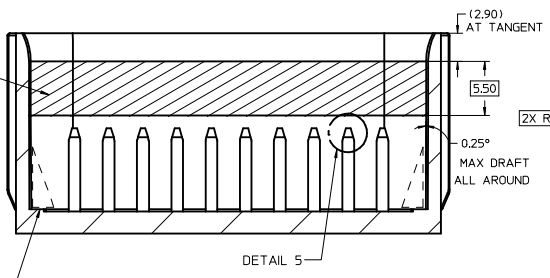
1. GENERAL:
  - a. DESIGNED TO MATE WITH MOLEX CONNECTOR 33472-20XX  
A FULL SHROUD ON THE MATING CONNECTOR IS REQUIRED TO INSURE THAT THE CONNECTOR-HEADER POLARIZATION FEATURES (OPTIONS A THRU D) WILL FUNCTION. THE FULL SHROUD ALSO PREVENTS SCOOP DAMAGE TO THE HEADER PINS. REFER TO SAE/JEDEC-12 CONNECTOR DESIGN GUIDE LINES FOR ADDITIONAL INFORMATION
  - b. PARTS MUST BE IN COMPLIANCE TO MOLEX CHEMICAL SUBSTANCES FOR PRODUCTS AND PACKAGING SPECIFICATION: ES-40000-5016
  - c. FLAMMABILITY REQUIREMENT: PER ISO3795 OR GM3191
    1. BURN RATE: 100MM/MIN MAXIMUM
    2. MATERIAL MUST BE SELF EXTINGUISHING
2. MATERIALS:
  - a. MATERIAL: SPS/NYLON GF20, REGRIND 20% MAX BY WEIGHT
  - b. STANDARD COLORS FOR POLARIZATION (SEE KEYING OPTIONS TABLE). DEVIATION REQUIRES APPROVAL OF AUTHORIZED PERSON
  - c. FOR BLADE BASE MATERIAL, PLATING AND PROCESS LUBRICANT:
    1. TIN - BASE MATERIAL: COPPER ALLOY, CONDUCTIVITY >=60% IACS AT 20°C; TENSILE STRENGTH >= 410 N/mm<sup>2</sup>  
- BARRIER MATERIAL: NICKEL DEPOSIT FROM NICKEL SULFAMATE PLATING SOLUTION W/O ANY ADDITIVES  
THICKNESS: 2.5 - 4.0 MICROMETERS
    2. SILVER - BARRIER MATERIAL: ELECTRO-DEPOSITED DUCTILE SULPHAMATE NICKEL  
THICKNESS: 1.25 - 2.25 MICROMETERS
    3. TOP LAYER: 100% ELECTRO-DEPOSITED TIN, MATTE FINISH  
THICKNESS: 2.5 - 4.0 MICROMETERS
    4. ANY PROCESS LUBRICANT REMAINING ON THE TERMINAL MUST NOT VARNISH OR DEGRADE ITS ELECTRICAL PERFORMANCE UP TO A MAXIMUM CLASS AMBIENT TEMPERATURE PER SAE USCAR-2 FOR 1000 HOURS. PROCESS LUBRICANTS SHOULD BE APPROVED BY THE RESPONSIBLE ENGINEER.
    5. INFORMATION FOR BLADE DESIGN WAS DEVELOPED FROM EWCAP DWG: EWCAP-001
3. 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 - 1994
  - c. GENERAL TOLERANCES: SEE TITLE BLOCK
  - d. EDGES AND UNDIMENSIONED DETAILS PER ISO13715
4. MANUFACTURING:
  - a. DRAFT TO BE WITHIN TOLERANCE.  
PLUS DRAFT - INDICATES A DIMENSION REPRESENTS THE SMALLEST SIZE OF A FEATURE. DRAFT WILL ADD MATERIAL.  
MINUS DRAFT - INDICATES A DIMENSION REPRESENTS THE LARGEST SIZE OF A FEATURE. DRAFT WILL REMOVE MATERIAL.
  - b. ALLOWABLE FLASH MAX 0.20 HIGH BY MAX 0.19 THICK.
  - c. ALLOWABLE SPLIT/PARTING LINE MISMATCH 0.2 MAX.
  - d. VISUAL DEFECTS SHALL MEET COSMETIC STANDARD PS-45499-002 (Class B)
  - e. NO EXTERNAL MOLD RELEASE AGENT ALLOWED DURING MANUFACTURING
  - f. NO PARTING LINES, NO DRAFT, MISMATCHES OR EJECTOR MARKS PERMISSIBLE WITHIN SEALING SURFACE. SEALING SURFACE TOOLING TO BE PROCESSED TO A SURFACE FINISH OF NTMA #70 (400 PAPER) MINIMUM

REVISED EEC NO: UAU2013-1538 DRAWN: DZHUANG CHKD: APPR: IKOSHY DATE: 2013/04/16 SIZE: X10	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0	mm INCH	MM ONLY	2:1	METRIC	☉
	▽=0	4 PLACES ± ---	DGR1FF1THS 06/17/2003	DRAWN BY DATE	MX150 2X10 RECEPTACLE SEALED ASSEMBLY MAT SEAL	
	▽=0	3 PLACES ± ---	DGR1FF1THS 06/17/2003	CHECKED BY DATE	molex	
	1 PLACE ± 0.3	DGR1FF1THS 06/17/2003	APPROVED BY DATE	DOCUMENT NO. SD-33472-201		SHEET NO. 6 OF 7
	0 PLACE ±	DGR1FF1THS 06/17/2003	MATERIAL NO.	SEE BOM		
	ANGULAR ± 3 °		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS					

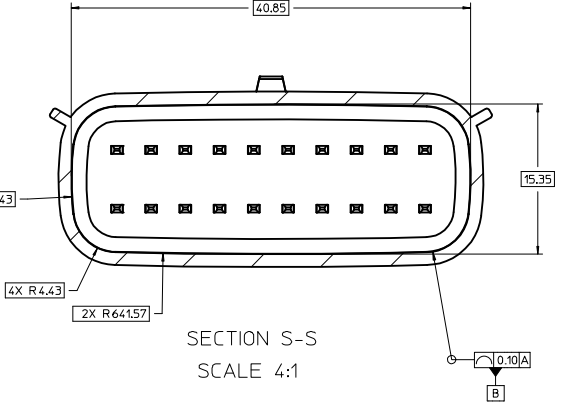


SURFACE MUST BE FREE OF SURFACE DEFECTS AND PARTING LINES FOR SEALING ALL AROUND AND NO DRAFT

CONSTRUCTION BELOW THIS SURFACE IS NOT CONTROLLED. NO PLASTIC FEATURES MAY EXTEND ABOVE THIS SURFACE.



SECTION X-X  
SCALE 4:1



REVISED REC NO: UAU2013-1538 DRAWN: QZHANG CHKD: APPR: WOSHY REV 2013/04/16	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION											
	<p>▽=0 4 PLACES ± ---</p> <p>▽=0 3 PLACES ± ---</p> <p>▽=0 2 PLACES ± 0.10</p> <p>▽=0 1 PLACE ± 0.3</p> <p>▽=0 0 PLACE ±</p>	<table border="1"> <thead> <tr> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>± 0.10</td> <td>± ---</td> </tr> <tr> <td>± 0.3</td> <td>± ---</td> </tr> <tr> <td>±</td> <td>±</td> </tr> </tbody> </table> <p>ANGULAR ± 3 °</p> <p>DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS</p>	mm	INCH	± ---	± ---	± ---	± ---	± 0.10	± ---	± 0.3	± ---	±	±	<p>MM ONLY</p> <p>DRAWN BY: DGRIF1THS DATE: 06/17/2003</p> <p>CHECKED BY: DATE:</p> <p>DGRIF1THS DATE: 06/17/2003</p> <p>APPROVED BY: DATE:</p> <p>DGRIF1THS DATE: 06/17/2003</p>	2:1	METRIC
mm	INCH																
± ---	± ---																
± ---	± ---																
± 0.10	± ---																
± 0.3	± ---																
±	±																
			MATERIAL NO. SEE BOM	DOCUMENT NO. SD-33472-201	<p>TITLE: MX150 2X10 RECEPTACLE SEALED ASSEMBLY MAT SEAL</p> <p><b>molex</b></p>												
			SIZE D		<p>SHEET NO. 7 OF 7</p> <p>THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION</p>												



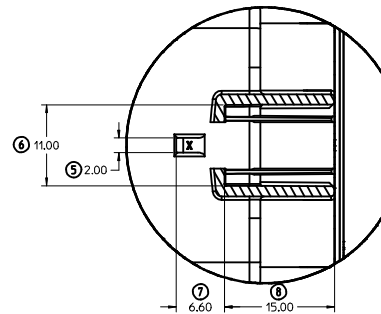
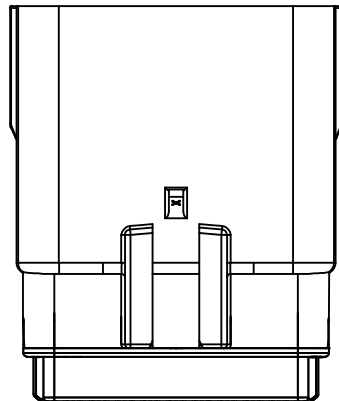
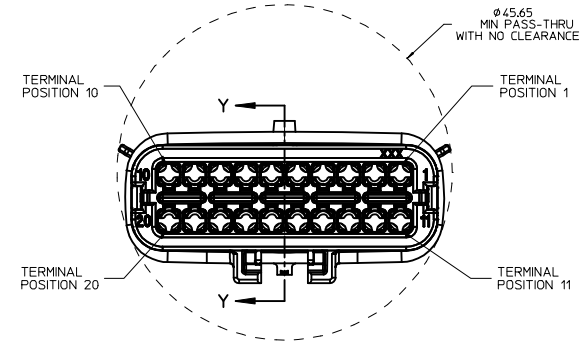
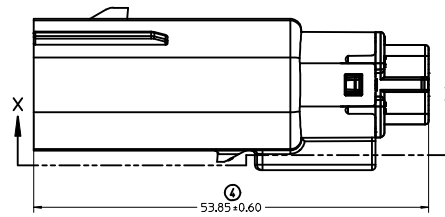
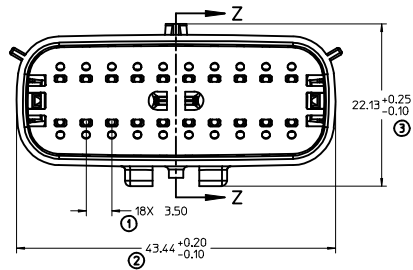
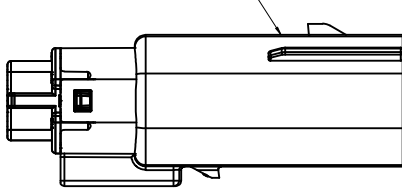




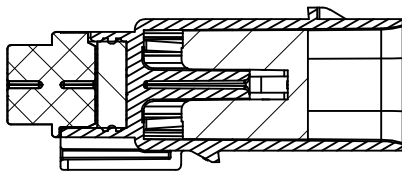
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BLADE SEALED ASSEMBLY

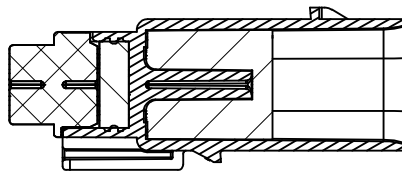
LASER MARKING ON THIS SURFACE  
SEE NOTE 3g.



Partial X-X  
SCALE 3:1



PRIMARY LOCK REINFORCEMENT (PLR) SHOWN  
IN PRE-STAGED POSITION  
SECTION Z-Z



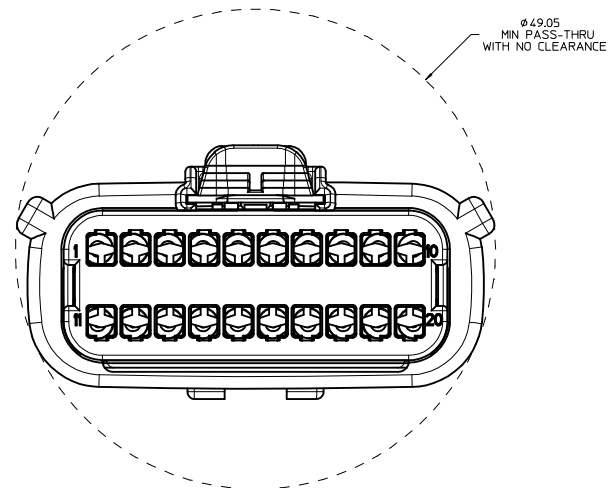
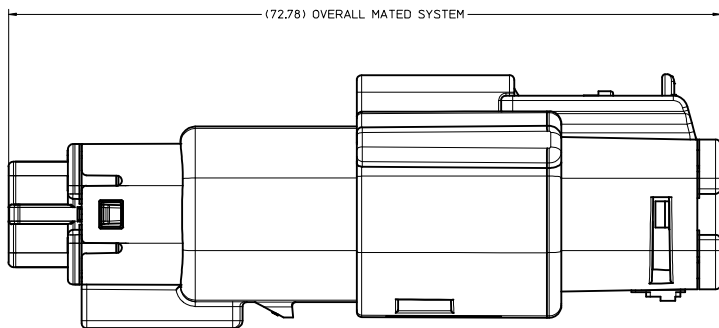
PRIMARY LOCK REINFORCEMENT (PLR) SHOWN  
IN FINAL-LOCK POSITION  
SECTION Y-Y

REVISED DEC NO. UAU2013-1461 DRAWN/PROFIT 2013/03/15 CHKD/MLCK 2013/03/15 APPR./KOSHY 2013/03/19 U13	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	∇=0 ∇=0 ∇=0	mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.10 ± --- 1 PLACE ± 0.3 ± --- 0 PLACE ± ±	MM ONLY	3:1	METRIC	MX150 2X10 BLADE SEALED ASSEMBLY MAT SEAL molex SD-33482-201
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	ANGULAR ± 3 ° MATERIAL NO. SEE BOM	DRAWN BY DGRIFITHS CHECKED BY DATE APPROVED BY DGRIFITHS DATE 06-17-03	DATE 06-17-03 DATE 06-17-03	TITLE DOCUMENT NO. SD-33482-201	SHEET NO. 3 OF 5
	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

SYSTEM PACKAGING



REVISED DEC NO. UAU2013-1461 DRAWN: PROFFITT CHKD: HODICK APPR: WOSHY U13	2013/03/15 2013/03/15 2013/03/19	DESCRIPTION QUALITY SYMBOLS ▽=0 ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE <b>MM ONLY</b>	SCALE <b>4:1</b>	DESIGN UNITS <b>METRIC</b>	THIRD ANGLE PROJECTION
			4 PLACES ± mm ± INCH 3 PLACES ± --- ± --- 2 PLACES ± 0.10 ± --- 1 PLACE ± 0.3 ± --- 0 PLACE ± ±	DRAWN BY DGRIFFI THS DATE 06-17-03	CHECKED BY DGRIFFI THS DATE 06-17-03	APPROVED BY DGRIFFI THS DATE 06-17-03	TITLE <b>MX150 2X10 BLADE                  SEALED ASSEMBLY                  MAT SEAL</b>	MATERIAL NO. <b>SEE BOM</b>

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 INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

