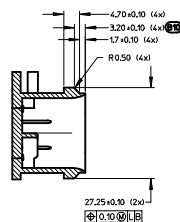
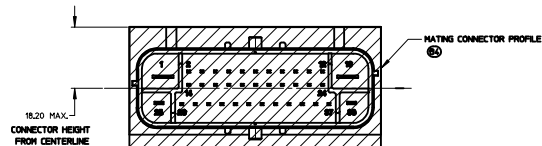
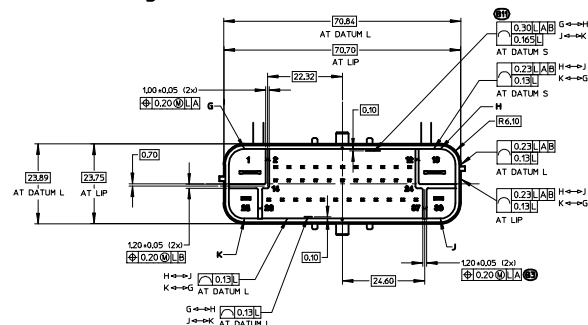
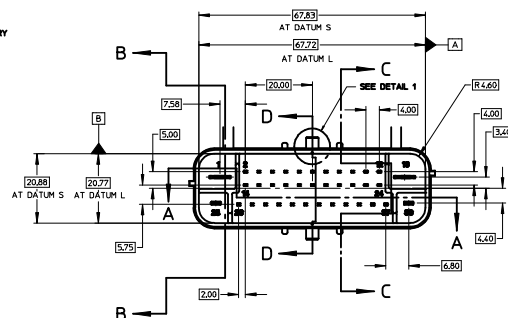
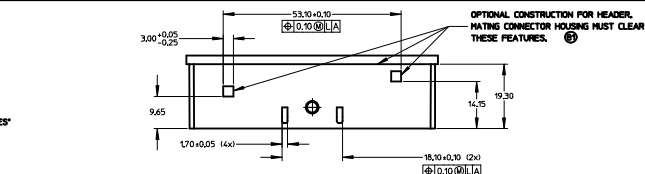


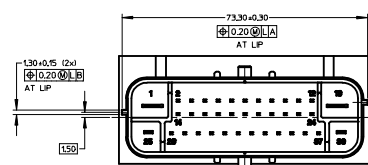
1. ALL DIMENSIONS SHOWN IN MILLIMETERS.
2. DIMENSIONING AND TOLERANCING PER ASME Y14.5-1994.
3. RADI ON ALL CORNERS SHOWN SHARP OR ALL UNSPECIFIED RADI 0.25 EXCEPT AS NOTED.
4. REFER TO "SAE/JE169-12 CONNECTOR DESIGN GUIDELINES" FOR ADDITIONAL INFORMATION.
5. 0.25 DEGREE DRAFT ON ALL INSIDE SURFACES, UNLESS OTHERWISE SPECIFIED.
6. STANDARD COLORS FOR POLARIZATION - DEVIATION REQUIRES APPROVAL OF AUTHORIZED PERSON.
7. REFER TO DRAWING ENCAP-001 FOR TERMINAL GEOMETRY AND PLATING DETAILS.



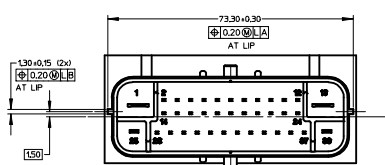
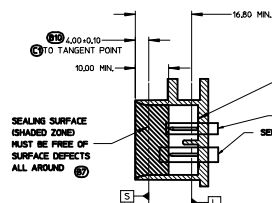
SECTION C-C



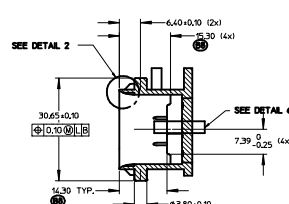
999-S-036-C01	C	BROWN
999-S-036-B01	B	GRAY
999-S-036-A01	A	BLACK
USCAR PART NO.	OPTION	COLOR



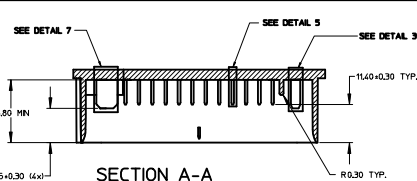
POLARIZATION 'A'

POLARIZATION 'B' 

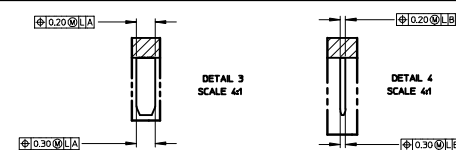
SECTION B-B



SECTION D-D

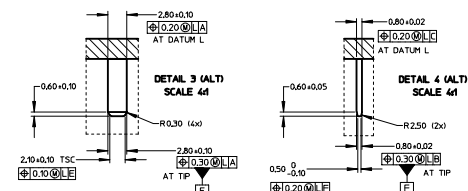


SECTION A-A



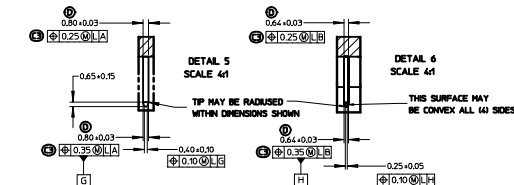
2.80MM BLADE DETAIL

SEE DRAWING EWCAP-001
FOR DETAILS



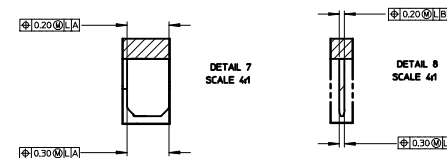
2.80MM BLADE DETAIL (ALTERNATE) 82

E) 82



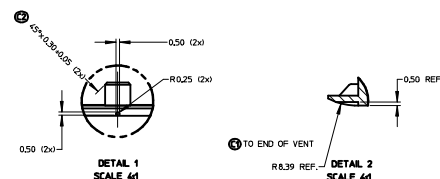
0.80X0.64MM BLADE DETAIL®

(ABS INTERFACE ONLY)



6.30MM BLADE DETAIL

SEE DRAWING EWCAP-001
FOR DETAILS



SCALE 4s1

SCALE 4:1

TO BE DETERMINED

POLARIZATION 'C'



0509	D	REVISED Q444m x 540mm PIN SIZE TOLERANCE +0.03	03292005	MCD	BBW
C3		QUANTITY CLAMMED POS. 0.25 BASE/0.35 TYP			
0511	C4	CHANGED DIMENSION 0.040/0.045 CLAMMED LOCATION OF TANGENT POINT	10052004	MCD	BBW
B11		INCREASED TOLERANCE ON LONG SIZES			
B10		DIMENSION FEATURES TO FRONT OF SHROUD			
B9		REVISED GDOT ON 0.000/0.04 BLADE			
B8		ADDED CRATER DIVER HEIGHT			
B7		ADDED SEALING AREA DESCRIPTION			
B6		REMOVED ENCAP FROM TITLE BLOCK			
B5		ADDED POLARIZATION "B"			
B4		ADDED MATING CONK, PROFILE			
B3		CHANGED DIVER WALL THICKNESS TO 0.20			
B2		ADDED OPTIONAL BLADE CONSTRUCTION			
0531	B1	ADDED STANDOFF MBS	12092003	MCD	BBW
A		RELEASED	06232003	MCD	BBW
CHANGE TO	LET	REVISION RECORD	DATE	DWN	CHK
TOLERANCES UNLESS OTHERWISE SPECIFIED			THERMAL ANALYSIS		
DIMENSIONS ARE IN INCHES					
ANGLES 4°					
X1 44.25			X2 44.15		
SCALE 2:1		DRAWN BY DANIELS	CHECKED BY NELSON	DATE 08/25/2003	
38 CRUCIAL ASS CONECTOR INTERFACE - OPTION 2					
REVISED	ISSUED NUMBER 999-5-038-3-201		DATE	BY	
1	E	0.0001	0.0001	0.0001	
REVISION LEVEL		REVISION LEVEL			

TABLE OF CONTENTS	
SHEET NO.	SHEET DESCRIPTION
1	NOTES AND BOM
2	CONFIGURATIONS
3	RECEPTACLE CONNECTOR ASSEMBLY
4	WIRE SHIELD

NOTES: VALID UNLESS OTHERWISE SPECIFIED

1. CONNECTOR TO BE SHIPPED WITH TPA IN PRE-LOAD POSITION AS SHOWN IN SECTION Z-Z.
- ② 2. ALL TEXT TO BE CLEARLY LEGIBLE AND 1.50MM MIN. HEIGHT.
MARKING ORIENTATION MAY BE PARALLEL TO THE LENGTH OF THE PART, AS SHOWN,
OR PERPENDICULAR TO THE LENGTH OF THE PART.

DATE CODE DESCRIPTION:
-1st THROUGH 3rd DIGIT = "DAY#" OF THE CALENDAR YEAR. (EXAMPLE FEB, 3rd = '034')
-LAST DIGIT = LAST DIGIT OF CALENDAR YEAR. (EXAMPLE: 2000 = '0')
SERIAL NUMBER DESCRIPTION:
-FIRST CHARACTER "M." = ASSEMBLY MACHINE NUMBER
-FOLLOWING NUMBER STARTS AT "00001" AND IS RESET FOR EACH NEW "DAY#".
MOLEX PART NUMBER:
- SEE TABLE

3. DIMENSIONS NOT SHOWN CAN BE OBTAINED FROM THE ASSOCIATED MODEL.

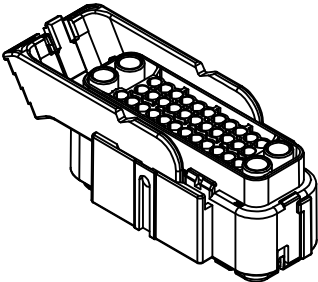
4. GENERAL:
- a. APPLICATION SPECIFICATION SEE: AS-31380-001
-CONTAINS: PRODUCT INTRODUCTION, PRODUCT SUMMARY,
HARNESS ASSEMBLY, CONNECTOR MATING,
AND SERVICE INSTRUCTIONS.
-DESIGNED TO MATE WITH DEVICE AS SPECIFIED
IN THE MATING INTERFACE DRAWINGS CHART.
*DENOTES DRAWINGS THAT CAN BE ACCESSED AT <<http://ewcap.uscarteams.org/>>.
- b. PRODUCT SPECIFICATION SEE: PS-31380-100
CONTAINS: PRODUCT INTRODUCTION, PRODUCT SUMMARY,
RATINGS (CURRENT AND TEMPERATURE),
TERMINALS, WIRE DIAMETER RANGE, PRODUCT VALIDATION, AND PRODUCT DEVIATIONS.
- c. PACKAGING SPECIFICATION PER MOLEX DRAWING: PK-31300-550
- d. PARTS MUST BE IN COMPLIANCE TO MOLEX CHEMICAL SUBSTANCES FOR
PRODUCTS AND PACKAGING SPECIFICATION: QEH5-699000-300
- e. DATA MUST BE SUBMITTED UNDER THE MOLEX PART NUMBER TO IMDS
(COMPANY ID#13255)

5. DESIGN - MATERIALS:
a. SEE BOM TABLE IN SD-31380-0002

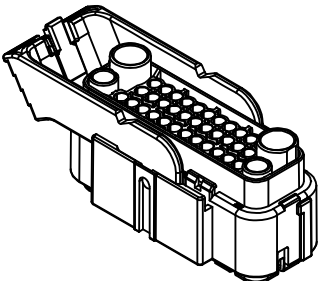
6. DESIGN - GEOMETRY:
- a. THE 3-D CAD DATA IS BASIC (WITHOUT TOLERANCE) AND MASTER FOR THIS PART
WITH THE EXCEPTION OF UNDERLINED DIMENSIONS. DIMENSIONAL INFORMATION NOT SHOWN
ON THIS DRAWING IS DEFINED BY THE DATA FILE AT ITS LATEST REVISION.
- b. GEOMETRIC DIMENSIONS AND TOLERANCES PER ASME Y14.5M-2009
- c. EDGES AND UNDIMENSIONED DETAILS PER ISO13715
- d. CORNERS SHOWN AS SHARP TO BE R 0.2 MAX.
- e. VISUAL DEFECTS SHALL MEET COSMETIC STANDARD PS-45499-002 (Class B).

7. MUST BE USED WITH WIRE SHIELD - MOLEX PART NUMBER 31382-1001. WIRE SHIELD SHIPPED
SEPARATELY.

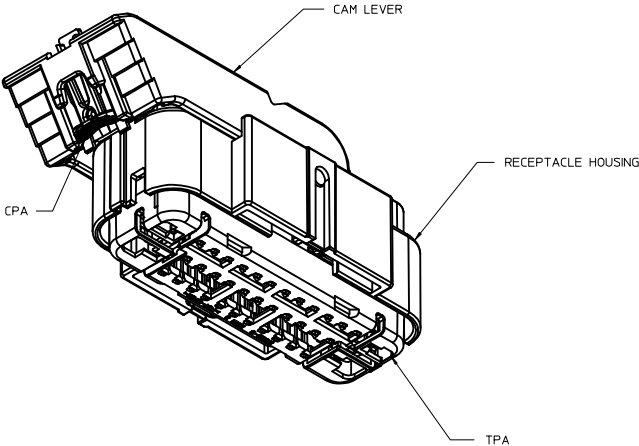
MATING INTERFACE DRAWINGS	
SERIES	INTERFACE DEFINITION
31380	*999-S-038-3-Z01
31381	*999-S-038-3-Z02



31381 SERIES



31380 SERIES

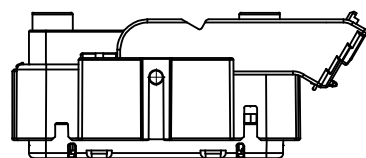
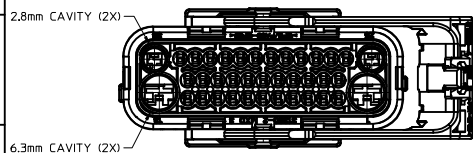


INSPECTION NUMBER LOG			
LAST NUMBER: 2		A	
ADDED:		INITIAL RELEASE	
REMOVED:		REV	
DIMENSION STYLE MM ONLY		SCALE 1.5:1	
DRAWN BY APPROFFITT		DATE 2014/06/26	
CHECKED BY		DATE	
APPROVED BY VKOSHY		DATE 2014/06/30	
MATERIAL NO.		DOCUMENT NO.	
SEE NOTE 5a.		SD-31380-0001	
SIZE 1		SHEET NO. 1 OF 4	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

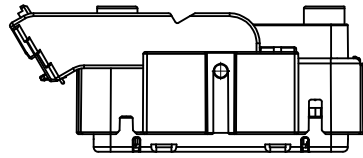
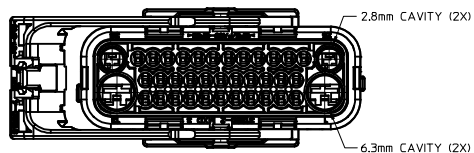
ENTER DESCRIPTION EC NO: UAU2014-1972 DRAWNAPROFFITT 2014/06/26 CHKOKRIZZI 2014/06/27 APPROVKOSHY 2014/06/30	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	
	▽=0	mm	INCH
	▽=0	4 PLACES ±---	±---
	▽=0	3 PLACES ±---	±---
	▽=0	2 PLACES ±0.13	±---
		1 PLACE ±0.25	±---
		0 PLACE ±---	±---
		ANGULAR ± 1 °	
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

SHEET DESCRIPTION

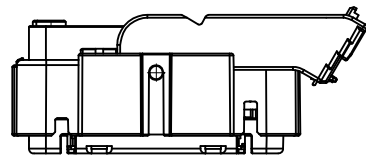
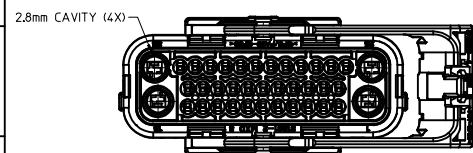
CONFIGURATIONS



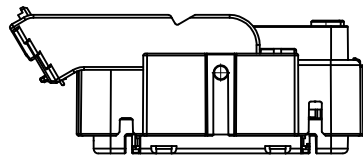
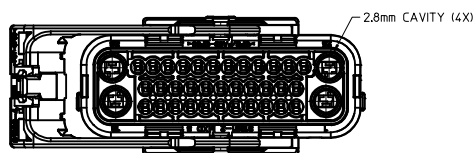
31380-10XX
TYPE II HARNESS ASSEMBLY
COUNTERCLOCKWISE LEVER THROW



31380-11XX
TYPE II HARNESS ASSEMBLY
CLOCKWISE LEVER THROW



31381-10XX
TYPE I HARNESS ASSEMBLY
COUNTERCLOCKWISE LEVER THROW



31381-11XX
TYPE I HARNESS ASSEMBLY
CLOCKWISE LEVER THROW

ENTER DESCRIPTION
EC NO: UAU2014-1972
DRAWN BY: APROFFITT
CHKD BY: CRIZZ
APPR: WKSHY

2014/06/26
2014/06/27
2014/06/30

QUALITY
SYMBOLS
▽=0
▽=0
▽=0

GENERAL TOLERANCES
(UNLESS SPECIFIED)

	mm	INCH
4 PLACES	±.---	±.---
3 PLACES	±.---	±.---
2 PLACES	±0.13	±.---
1 PLACE	±0.25	±.---
0 PLACE	±.---	±.---

ANGULAR ± 1 °
DRAFT WHERE APPLICABLE
MUST REMAIN
WITHIN DIMENSIONS

DIMENSION STYLE
MM ONLY

DRAWN BY	DATE
APROFFITT	2014/06/26
CHECKED BY	DATE
APPROVED BY	DATE
VKOSHY	2014/06/30

MATERIAL NO.
SIZE
A 1

SCALE
1.5:1

DESIGN UNITS
METRIC

THIRD ANGLE
PROJECTION

TITLE
USCAR 38 WAY HYBRID
RCPT SEALED ASSEMBLY

molex

DOCUMENT NO.
SD-31380-0001

SHEET NO.
2 OF 4

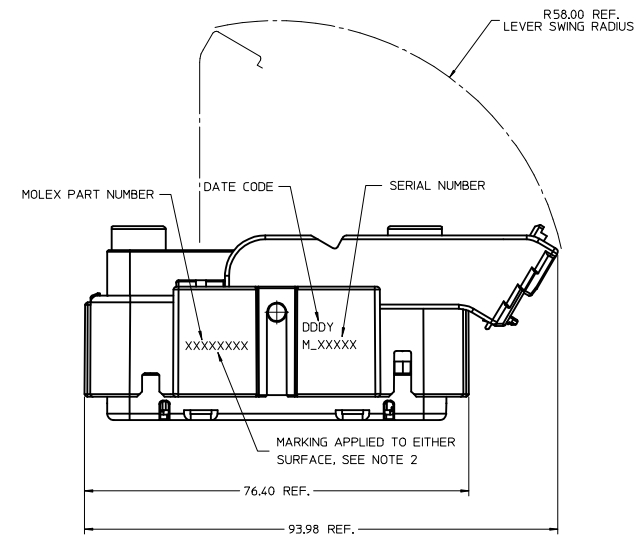
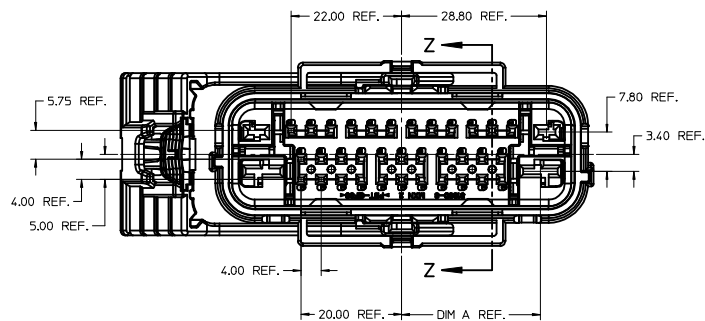
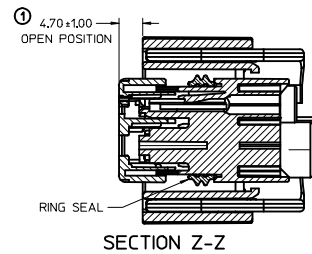
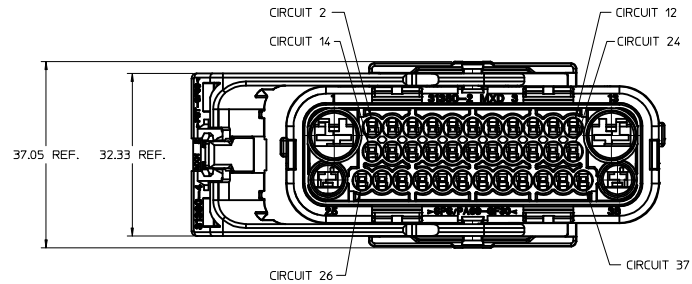
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX
INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

SHEET DESCRIPTION

RECEPTACLE CONNECTOR ASSEMBLY

CHARTED DIMENSIONS

SERIES	DIMENSION
	A
31380	27.58
31381	27.90



ENTER DESCRIPTION EC NO: UAU2014-1972 DRAWN BY: APROFFITT CHKD BY: CRIZZI APPR: VKOSHY DATE: 2014/06/26 2014/06/27 2014/06/30	QUALITY SYMBOLS ▽=0 ▽=0 ▽=0	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)				DIMENSION STYLE MM ONLY		SCALE 2:1	DESIGN UNITS METRIC	 THIRD ANGLE PROJECTION			
			mm		INCH		DRAWN BY	DATE	TITLE USCAR 38 WAY HYBRID RCPT SEALED ASSEMBLY					
			4 PLACES ± ---		± ---		APPROFIT	2014/06/26						
			3 PLACES ± ---		± ---		CHECKED BY	DATE	molex SD-31380-0001					
			2 PLACES ± 0.13		± ---		APPROVED BY	DATE						
			1 PLACE ± 0.25		± ---		VKOSHY	2014/06/30				DOCUMENT NO.		
			0 PLACE ± ---		± ---		MATERIAL NO.							
			ANGULAR ± 1 °				SEE NOTE 5a.				SD-31380-0001			
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				SIZE 1 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				SHEET NO. 3 OF 4			

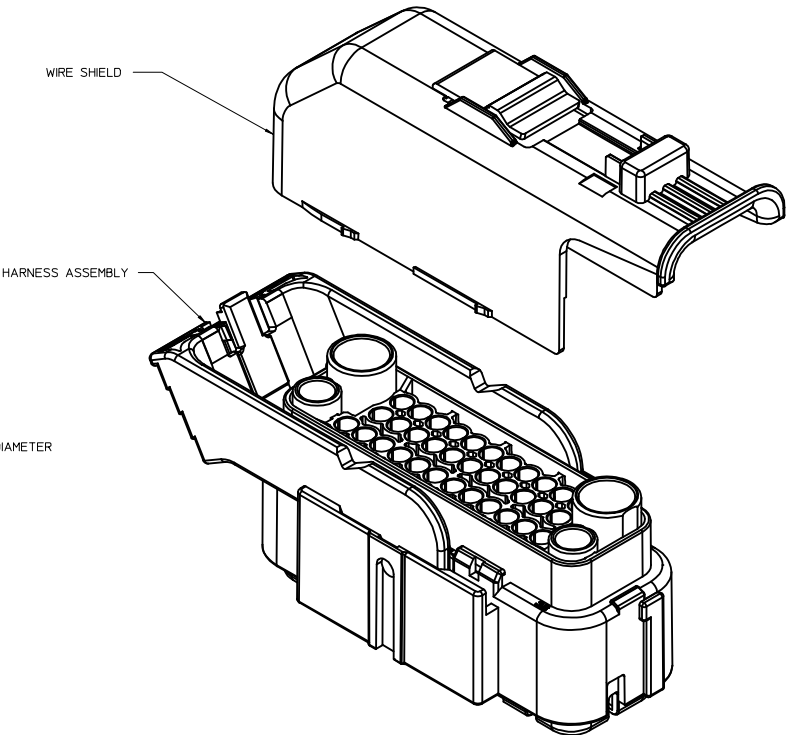
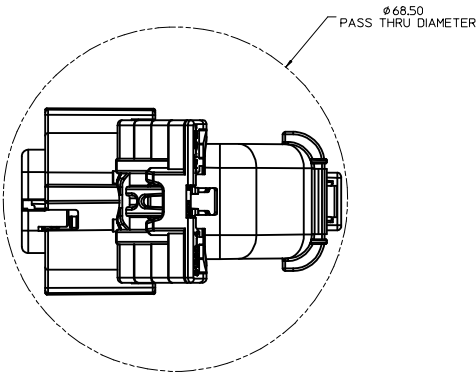
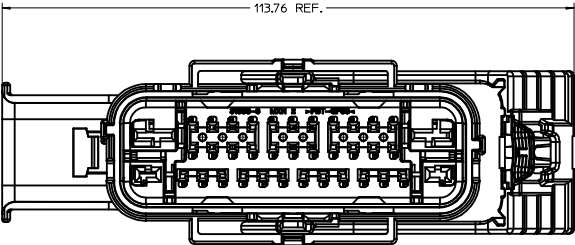
SHEET DESCRIPTION
WIRE SHIELD

WIRESHIELD NOTES: VALID UNLESS OTHERWISE SPECIFIED

1. GENERAL:

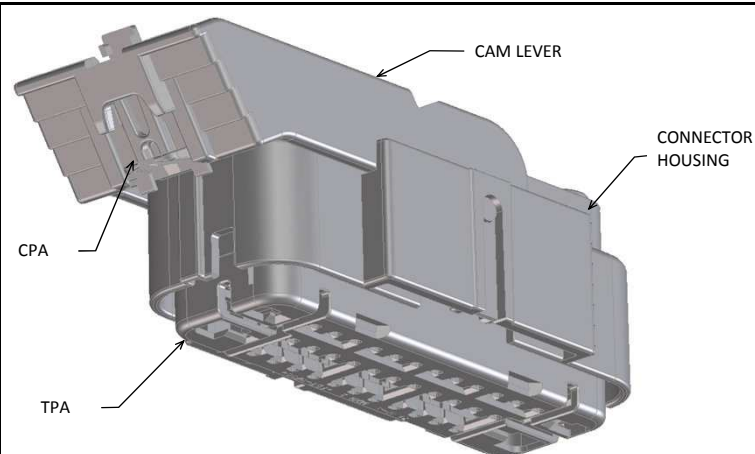
a. APPLICATION SPECIFICATION SEE: AS-31380-001

- WIRE SHIELD (MOLEX PART NUMBER 31382-1001) MUST BE USED WITH HARNESS ASSEMBLY
- WIRE SHIELD SHIPPED SEPARATELY
- FOR ADDITIONAL INFORMATION SEE THE WIRE SHIELD COMPONENT DRAWING SD-31382-100.



ENTER DESCRIPTION EC NO: UAU2014-1972 DRAWN BY: PROFFITT CHKD BY: IZZI APPR: VKOSHY		DESCRIPTION REV	QUALITY SYMBOLS ▽=0 ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 2.5:1	DESIGN UNITS METRIC	 THIRD ANGLE PROJECTION	TITLE USCAR 38 WAY HYBRID RCPT SEALED ASSEMBLY
				mm INCH		DRAWN BY DATE		CHECKED BY DATE			
				4 PLACES ± --- ± ---		APPROVED BY DATE		VKOSHY 2014/06/30			
				3 PLACES ± --- ± ---		MATERIAL NO.		DOCUMENT NO.			
				1 PLACE ± 0.25 ± ---		ANGULAR ± 1 °		SD-31380-0001			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				SEE NOTE 5a.		SIZE A1		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			SHEET NO. 4 OF 4

USCAR 38 WAY HYBRID RECEPTACLE SEALED ASSEMBLY (TYPE II)
BOM AND PIN OUT SHEET

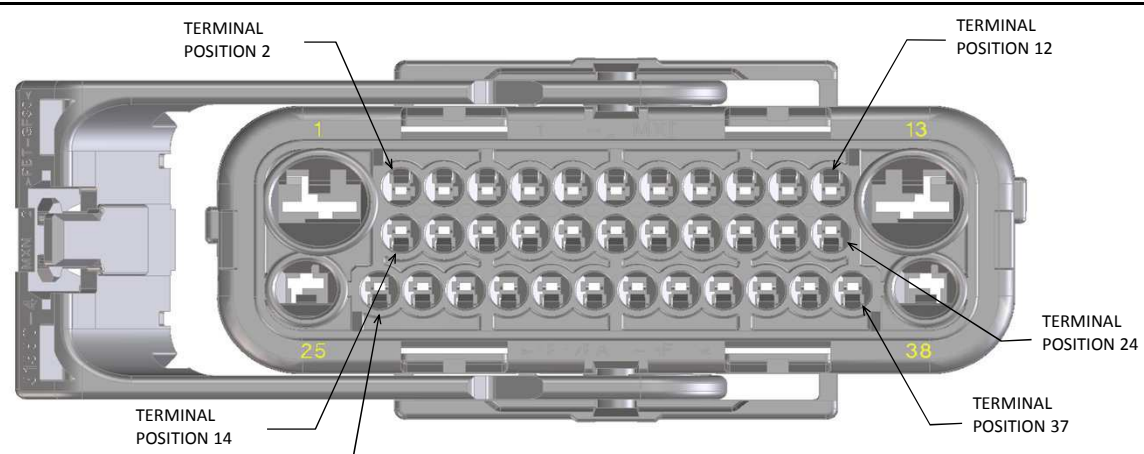


CPA

TPA

CAM LEVER

CONNECTOR HOUSING



TERMINAL POSITION 2

TERMINAL POSITION 12

TERMINAL POSITION 14

TERMINAL POSITION 24

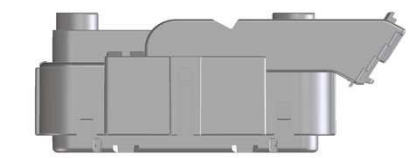
TERMINAL POSITION 25

TERMINAL POSITION 26

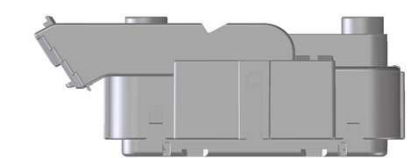
TERMINAL POSITION 37

TERMINAL POSITION 38

ABBREVIATION	DESCRIPTION	COLOR	MATERIAL
A2-BLK	HOUSING, KEYING OPTION A, TYPE II	BLACK	SP5/NYLON GF30
TPA-2	TPA, TYPE II	GRAY	PBT GF30
CL	CAM LEVER	BLACK	PBT GF30
CPA	CPA	RED	PPE/PA GF10
R	RING SEAL	RUST RED	INHERENTLY LUBRICATED SILICONE
CCW	COUNTERCLOCKWISE LEVER THROW		
CW	CLOCKWISE LEVER THROW		



COUNTERCLOCKWISE
LEVER THROW

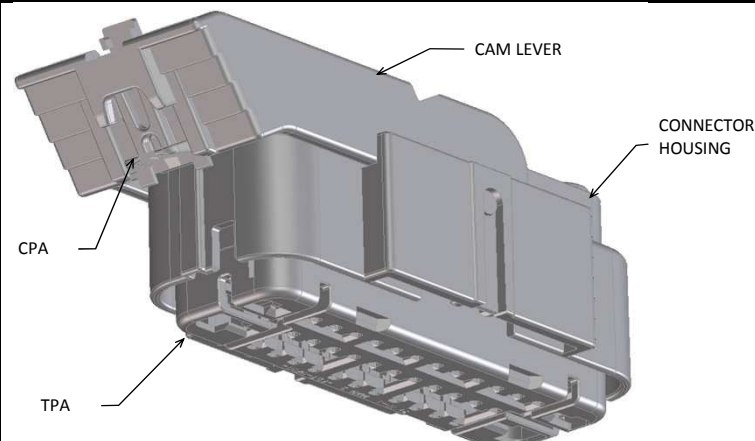


CLOCKWISE
LEVER THROW

FOR ADDITIONAL INFORMATION SEE SD-31380-0001

ASSEMBLY DESCRIPTION	ASSEMBLY PART NUMBER	COMPONENT						BLOCKED TERMINALS																														STATUS	COMMENTS	WIRE SHIELD SHIPPED SEPERATELY																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
		THE PRESENCE OF AN ABBREVIATION INDICATES THE PRESENCE OF THAT COMPONENT.						CAVITY WITH A NUMBER INDICATES BLOCKED TERMINAL POSITION CAVITY WITHOUT A NUMBER INDICATES OPEN TERMINAL POSITION																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
		HOUSING KEY/COLOR	TPA	CAM LEVER	CPA	RING SEAL	LEVER THROW	2	3	4	5	6	7	8	9	10	11	12	14	15	16	17	18	19	20	21	22	23	24	26	27	28	29	30	31	32	33				34	35	36	37																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
KEY A, BLACK, CCW THROW	31380-1000	A2-BLK	TPA-2	CL	CPA	R	CCW																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						

USCAR 38 WAY HYBRID RECEPTACLE SEALED ASSEMBLY (TYPE I)
BOM AND PIN OUT SHEET

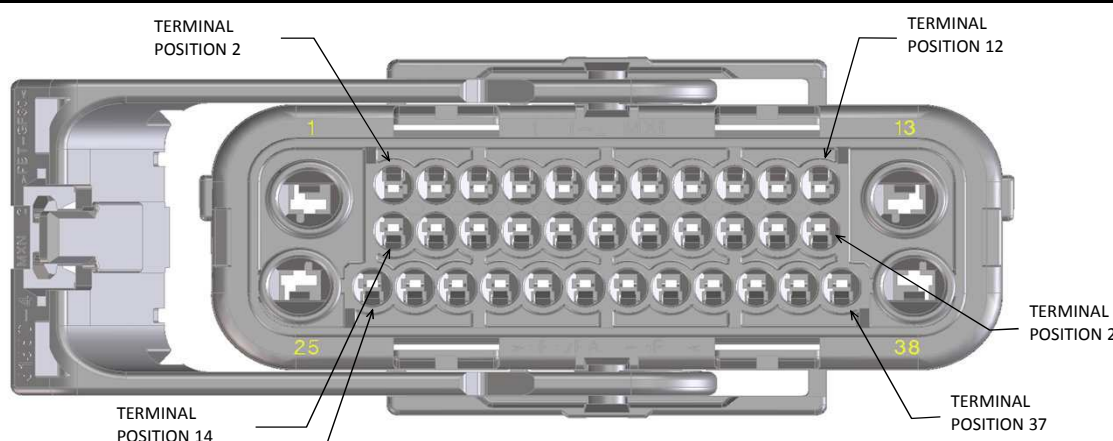


CPA

TPA

CAM LEVER

CONNECTOR HOUSING



TERMINAL POSITION 2

TERMINAL POSITION 12

TERMINAL POSITION 14

TERMINAL POSITION 26

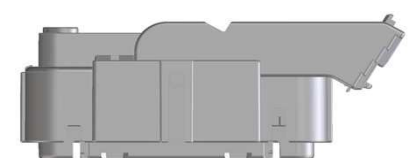
TERMINAL POSITION 25

TERMINAL POSITION 13

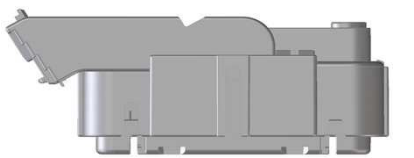
TERMINAL POSITION 38

TERMINAL POSITION 37

ABBREVIATION	DESCRIPTION	COLOR	MATERIAL
A1-BLK	HOUSING, KEYING OPTION A, TYPE I	BLACK	SP5/NYLON GF30
TPA-1	TPA, TYPE I	NATURAL	PBT GF30
CL	CAM LEVER	BLACK	PBT GF30
CPA	CPA	RED	PPE/PA GF10
R	RING SEAL	RUST RED	INHERENTLY LUBRICATED SILICONE
CCW	COUNTERCLOCKWISE LEVER THROW		
CW	CLOCKWISE LEVER THROW		



COUNTERCLOCKWISE
LEVER THROW



CLOCKWISE
LEVER THROW

FOR ADDITIONAL INFORMATION SEE SD-31380-0001

ASSEMBLY DESCRIPTION	ASSEMBLY PART NUMBER	COMPONENT							BLOCKED TERMINALS																														STATUS	COMMENTS	WIRE SHIELD SHIPPED SEPERATELY																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
		THE PRESENCE OF AN ABBREVIATION INDICATES THE PRESENCE OF THAT COMPONENT.							CAVITY WITH A NUMBER INDICATES BLOCKED TERMINAL POSITION CAVITY WITHOUT A NUMBER INDICATES OPEN TERMINAL POSITION																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
		HOUSING KEY/COLOR	TPA	CAM LEVER	CPA	RING SEAL	LEVER THROW	2	3	4	5	6	7	8	9	10	11	12	14	15	16	17	18	19	20	21	22	23	24	26	27	28	29	30	31	32	33	34				35	36	37																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
KEY A, BLACK, CCW THROW	31381-1000	A1-BLK	TPA-1	CL	CPA	R	CCW																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							

Mouser Electronics

Authorized Distributor

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