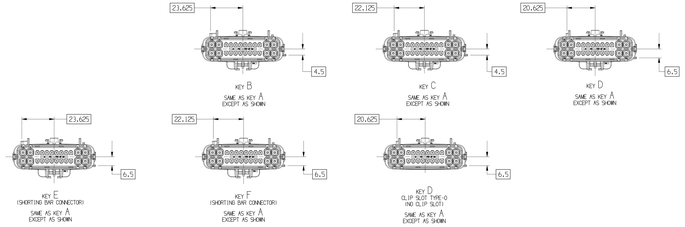
MVL PART NUMBER	REV	APTIV PART NUMBER	REV	N/P	KEY OPTIONS (HOUSING)	COLOR	CLIP SLOT TYPE	COMPONENTS HOUSING MVL	COMPONENTS HOUSING APTIV	COMPONENTS RETAINER	SHORTING BAR	PLUGGED (X) SEAL POSITIONS 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	NO. OF PLUGS	TEST METHOD SEE NOTE #4	MATING FEM. CONNECTOR PART NO. REFERENCE MVL	MATING FEM. CONNECTOR PART NO. REFERENCE APTIV
												2.8		SB			SB		SB		SB	2.8	2.8	2.8	2.8		SB		SB		SB		2.8	2.8					
PP10000679 P2594500	A	13670210	01	AF	A	BLACK	1	PP10000716	33503691																											0			
PP10000679	A	13511772	01	AB	B	GRAY	1	PP10000717	33503692																											0	USCAR-2 Rev 5 Class 3 (125 C)		
PP10000680	A	13511774	01	AB	C	BROWN	1	PP10000718	33503693																											0			
PP10000681	A	13511776	01	AB	D	GREEN	1	PP10000719	33503694																											0			
PP10000682	A	13511778	01	AB	E	YELLOW	1	PP10000720	33503695							SB																				0	USCAR-2 Rev 5 Class 3 (125 C)	PP10000655 PP10000656 PP10000657 PP10000658 PP10000659 PP10000660 PP10000661 PP10000662 PP10000663 PP10000664	13762809 13785018 13511791 13511795 13511796 13511797 13511798 13511799
F252500	A	13511779	01	AB	F	YELLOW	1	PP10000774	33503696							SB		SB																		0		F322000	33511801
F552500	A	13511780	01	AA	A	BLACK	2	PP10000778	33503698																											0			
F652500	A	13511781	01	AA	B	GRAY	2	PP10000779	33503699																											0			
F752500	A	13511782	01	AA	C	BROWN	2	PP10000780	33503700																											0	USCAR-2 Rev 5 Class 3 (125 C)		
F852500	A	13511783	01	AA	D	GREEN	2	PP10000781	33503701																											0			
F952500	A	13511784	01	AA	E	YELLOW	2	PP10000782	33503702							SB																				0	USCAR-2 Rev 5 Class 3 (125 C)	PP10000655 PP10000656 PP10000657 PP10000658 PP10000659 PP10000660 PP10000661 PP10000662 PP10000663 PP10000664	13762809 13785018 13511791 13511795 13511796 13511797 13511798 13511799
F062500	A	13511785	01	AA	F	YELLOW	2	PP10000783	33503703							SB		SB																		0		F322000	33511801
F462000	A	13511786	01	AA	D	BLACK	0	PP10001777	33503697																											0	USCAR-2 Rev 5 Class 3 (125 C)	F622000 F722000	33510808 33510809
F568000	B	13780225	02	AA															X		X					X		X	X		X		X			7		F668000	13780226
F485300	E	13511787	02	AA	A	BLACK	1	PP10000716	33503691		N/A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	24	USCAR-2 Rev 5 Class 3 (125 C)		
F151800	A	13511789	02	AA	A	BLACK	2	PP10001778	33503698		N/A	X	X								X	X	X												X	6		F641800	33510810
F251800	A	13511789	02	AA	B	BLACK	2	PP10001778	33503698		N/A	X	X								X	X														4		F741800	33510811
F670210	G	13511790	01	AB	E		1	PP10000720	33503695																											0			
F770210	G	13511791	01	AB	F	YELLOW		PP10000778	33503698																											0	USCAR-2 Rev 5 Class 3 (125 C)		
F870210	G	13511792	01	AA	E		2	PP10001782	33503702																											0			
F970210	G	13511793	01	AA	F			PP10001783	33503703																											0			
		33400887	02	AA																			X	X											X	4			
		33400888	02	AA								X	X			X		X	X	X	X		X		X	X	X	X	X	X	X	X	X		X	18			
		33400889	02	AA								X	X			X			X		X	X	X		X	X	X	X	X	X	X	X	X		X	16			
		33400890	02	AA								X	X			X					X	X									X	X	X		X	8			
		33400891	02	AA								X	X			X				X		X	X								X	X	X		X	9			
		33400892	02	AA																X		X	X												X	5			
		33400893	02	AA															X		X	X	X		X		X	X	X	X	X	X	X		X	12			
		33757200	02	AA								X	X			X		X	X	X	X					X	X	X	X	X	X	X	X			16	USCAR-2Rev5 Class3(125 C)		
		33757201	02	AA								X	X			X		X	X		X					X	X	X	X	X	X	X	X			14			
		33757202	02	AA												X			X														X			2			
		33757203	02	AA								X	X			X		X															X			6			
		33784288	02	AA														X	X		X	X				X	X	X	X	X	X	X	X			13			
		33784295	02	AA														X		X		X							X	X	X	X	X			9			
		33784296	02	AA														X	X		X	X				X	X	X	X	X	X	X	X			12			
		33784297	02	AA														X				X							X	X	X	X	X			8			
		33784298	02	AA								X	X			X						X							X	X	X	X	X			10			
		33784299	02	AA								X	X			X		X	X		X	X				X	X	X	X	X	X	X	X			16			
		33784402	02	AA														X		X																4			
		33784403	02	AA														X	X		X	X				X	X	X	X	X	X	X	X			12			
		33784320	01	AA														X				X											X			3			
		3506.3676	01	AB									X	X					X	X	X		X	X	X	X	X					X		X	X	13			
		3506.3677	01	AB									X						X		X	X	X	X	X	X	X					X		X	X	9	USCAR-2 Rev 5 Class 3 (125 C)	PP10000655 PP10000656	13762809 13785018
		35784689	01	AA									X	X			X		X	X	X	X				X	X	X	X	X	X	X	X			16			
		35348107	01	AA									X									X	X	X										X		5			
		35347510	01	AA									X							X	X	X	X		X	X	X							X	X	11			
PART NO.	REV	N/P	KEY OPTIONS	COLOR	CLIP SLOT TYPE	MVL	APTIV	RETAINER	CAVITY NO. FOR REF.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	NO. OF PLUGS	TEST METHOD	MVL	APTIV
										2.8				1.5							2.8							1.5						2.8				



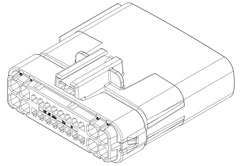
POLARIZATION OPTIONS
ACTUAL SIZE VIEWS

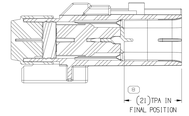
CLIP SLOT TYPE - 1
(USED FOR CHRYSLER)

CLIP SLOT TYPE - 2
(USED FOR FORD)

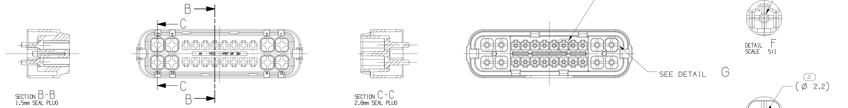
CLIP SLOT TYPE - 0
(WITHOUT CLIP SLOT)

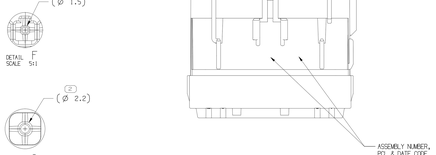
ACTUAL SIZE VIEWS
SCALE 1:1



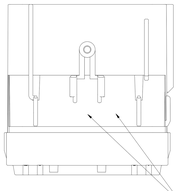


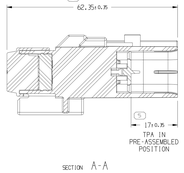
SECTION D-D



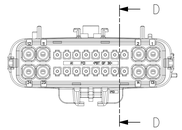


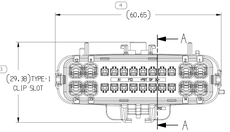
EXEMPLARY VIEWS: RETAINER WITH PLUGGED 1.5MM & 2.8MM CAVITIES



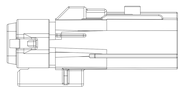


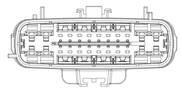
SECTION A-A



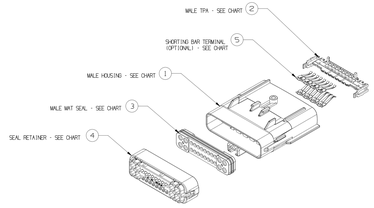


KEY A





PASS-THROUGH
SCALE 1:1



EXPLODED VIEW
SCALE 1:1

APLICABLE COMPONENTS						
SUPPLIER PART NO.	NAME	APTIV PART NO.	DESCRIPTION	PLATING/ MATERIAL	GRIP SIZE
54001626	MVL	13630404	APEX 150 TERMINAL	TIN	16,18
54002003	MVL	13624759	APEX 150 TERMINAL	TIN	20,22
54001628	MVL	13795935	APEX 150 TERMINAL	GOLD	16,18
54002003	MVL	13851003	APEX 150 TERMINAL	GOLD	20,22
54001629	MVL	13755243	APEX 150 TERMINAL-FOR SHORTING BAR	GOLD	16,18
54002004	MVL	33500641	APEX 150 TERMINAL-FOR SHORTING BAR	GOLD	20,22
54001001	MVL	10762774	APEX 2.8 TERMINAL	TIN	12
54001401	MVL	10757692	APEX 2.8 TERMINAL	TIN	14,16
54001801	MVL	10762775	APEX 2.8 TERMINAL	TIN	18
54240003	MVL	13765188	APEX 150 2.8mm SEAL PLUG - MALE	PA66 GF35	
54241629	MVL	13613164	APEX 150 UNIVERSAL PLUG	PA66 GF35	
54200010	MVL	13768145	DOUBLE X-MAS TREE CLIP WITH FORWARD STOP	PA66	FOR CLIP TYPE-1
15-002775	ITW	15451401	SINGLE X-MAS TREE CLIP	PA66	
1437939-1	TYCO	10763674	DOUBLE X-MAS TREE CLIP (UNIVERSAL)	PA66	

COMMON COMPONENTS PART NUMBER CHART ONE EACH INCLUDED IN ASSEMBLY					
ITEM	MVL P/N	APTIV P/N	DESCRIPTION	MATERIAL	COLOR
2	PP10001329	33503753	TPA	PBT GF30	NATURAL
3	PP10001600	33504676	MATT SEAL	SIL.CONE	BRNT ORG

DRAWING NUMBER
13780792
SIZE A1x3 | SCALE 2:1 | PAGE NO 1 OF 2 | SHEET NO 1 OF 1 | REV R | 12 | N/P -

SYMBOL DEFINITION		
A DIMENSION WITHOUT AN INSPECTION REPORT SYMBOL DOES NOT REQUIRE INSPECTION. IT MAY BE CONTROLLED ON THE INDIVIDUAL COMPONENT DRAWING.	TOTAL NO OF INSPECTIONS REQUIRED	8
	LAST NO. USED	8

KEY PRODUCT CHARISTICS			
SAFETY/COMPLIANCE	FIT/FUNCTION	TOTAL ON DRAWING	1
S/C CHECKPOINTS	F/F CHECKPOINTS	LAST NO. USED	0

NO & TYPE	DESCRIPTION	RATIONALE	PTS	ZONE
1 FF	TOTAL LENGTH			F12

MISSING SYMBOLS
NO MISSING SYMBOL NUMBER

DWG STATUS DATE	STS	REV	N/P	CHG	ZONE	REVISION HISTORY	AUTH	DR	APVD	APVD
100C14	R	02	-	-	-	FILE TRANSLATED FROM MVL SYSTEM		DGL	DGL	DGL
120E14	R	03	-	-	-	33199881-22 - RELEASED	427928	KA	KA	SS M
02JN15	R	04	-	-	-	13672210,13511772,13511774,13511776, 13511778-79,13780225,13511787,33178388, 13511790-91,33400887-93,13757700-03, 33178395-99 & 33199821-22 - ADDED CLIP SLOT VIEW	429744	ORA	JVM	JOR
30OC15	R	05	-	-	-	13780225,13511787-89,33400887-93, 13757700-03,33178388,33178395-99, 33199821-22 - REVISED GRAPHICS	431152	AHG	JAA	JFF
17JN16	R	06	-	-	-	3336320 - RELEASED	433373	GLG	GLG	JMV
21MR17	R	07	-	-	-	3506.3676 & 77 - RELEASED	436105	NRN	RNM	LMV
28ND17	R	08	-	-	-	35076688 - RELEASED	436252	AHY	MYJ	MJ L
14FE18	R	09	-	-	-	ALL PARTS - ADDED KPC CHART & REMOVED "SPC DATA" NOTE AND UPDATED WIRE SIZE IN ALTERNATIVE APEX 2.8@ TERMINAL. 3.40 MAX OD INSTEAD OF 3.20 MAX OD	439012	LXA	JVM	DRG
06JL18	R	10	-	-	-	3506.3676-77 - UPDATED PART AVAILABILITY	440344	CDD	CDD	LMV
19MD19	R	11	-	-	-	35348107 & 35347510 - RELEASED	550537	AHY	AHY	DG
08JA20	R	12	-	-	-	35348107 & 35347510 - UPDATED PART AVAILABILITY	550776	LCD	CDD	DSP

NOTES

1. UNLESS OTHERWISE SPECIFIED AND/OR INDICATED:

   DIMENSIONS ARE TO FACE OF VIEW SHOWN AND AUTOMATICALLY ROUNDED BY COMPUTER FOR INSPECTION (SEE MATH MODEL FOR PRECISE DIMENSIONS). FOR ALL OTHER DIMENSIONS NOT SHOWN BUT REQUIRED FOR TOOL BUILD, SEE MATH MODEL FOR PRECISE TOOL PATH DATA.

2. THIS PRODUCT IS NOT CATEGORIZED AS AN APPEARANCE ITEM. MINOR IMPERFECTIONS (INCLUDING, BUT NOT LIMITED TO, FLOW MARKS, COLOR BLEMISHES, GATE VESTIGE, AND SOFT FLASH THAT DO NOT AFFECT THE FIT, FORM, OR FUNCTION OF THE PART ARE PERMISSIBLE PER EAMP.4.3.CS.01.EN.

3. MAXIMUM TEMPERATURE CLASS:
   SEE CHART

4. CONFORMS TO TEST METHOD AS SHOWN IN CHART.

5. CONNECTOR MAY BE USED WITH THE FOLLOWING RANGE OF WIRE SIZES AND/TYPES:
   -APEX 150 TERMINALS:
   -SIZE: 22 GAGE- 16 GAGE- 1.50mm MIN O.D. TO 2.41mm MAX O.D.
   -TYPE: TXL (WILI123-A / MS-82881
   ALTERNATIVELY:
   -SIZE: 0.5mm² TO 1.5mm² / 1.40mm MIN O.D. TO 2.40mm MAX O.D.
   -TYPE: FLR2X (125° C PE-X) or FLRYW (125° C PVC)
   -STRUCTURE & PROPERTIES ACC. 15067221
   -APEX 2.8 TERMINALS:
   -SIZE: 18 GAGE- 12 GAGE- 1.90mm MIN O.D. TO 3.35mm MAX O.D.
   -TYPE: TXL (WILI123-A / MS-82881
   ALTERNATIVELY:
   -SIZE: 0.75mm² TO 3.0mm² / 1.70mm MIN O.D. TO 3.40mm MAX O.D.
   -TYPE: FLR2X (125° C PE-X) or FLRYW (125° C PVC)
   -STRUCTURE & PROPERTIES ACC. 15067221
   -CONTACT MVL ENGINEERING REGARDING USE OF OTHER WIRE SIZES AND/OR TYPES.

6. CONNECTOR MAY BE USED WITH THE FOLLOWING TERMINALS:
   -MVL APEX 150 AND APEX 2.8 WITH WIRE SIZES DEFINED IN NOTE 5. SEE MVL DRAWINGS J5401 AND C15005 FOR SPECIFIC PART NUMBERS AND CRIMPING REQUIREMENTS.
   -CONTACT MVL ENGINEERING REGARDING USE OF COMPATIBLE NON MVL TERMINALS.

7. ANNUAL QUALITY REQUIREMENTS:
   IT IS PERMISSIBLE TO PERFORM CONTINUOUS CONFORMANCE PER MVL SPECIFICATION #AQA-001 INSTEAD OF ANNUAL LAYOUT AND ANNUAL PV REQUIREMENTS OF QS-9000 SECTION 2 AND SAE/USCAR-2 REV 4. FOR TERMINAL TO CONNECTOR AND TPA TO CONNECTOR ONLY.

8. FEMALE CONNECTORS EQUIPPED WITH OPTIONAL CLIP SLOT CAN ONLY BE MATED TO MALE CONNECTORS WITHOUT CLIP SLOT FEATURE. KEY OPTION J IS RESERVED FOR FEMALE CONNECTORS WITH CLIP SLOT FEATURES AND THEIR MALE COUNTERPARTS.
   -CONTACT MVL ENGINEERING FOR SPECIFIC PACKAGING REQUIREMENTS WHEN USING THESE CONFIGURATIONS.

9. FOR APPLICATION DATA SEE THE INDIVIDUAL APPLICATION DRAWINGS.

(N/A) PROCESS SENSITIVE DIMENSION

DIMENSIONS ENCLOSED IN ( ) INDICATE REFERENCE DIMENSIONS AND NO TOLERANCE IS ASSIGNED TO THEM.

DIMENSIONAL RANGE (MM)								
FROM	0	6	30	120	315	1000	2000	4000
TO	6	30	120	315	1000	2000	4000	8000
TOLERANCE (UNLESS OTHERWISE SPECIFIED)								
±0.15	±0.2	±0.3	±0.5	±0.8	±1.2	±1.6	±2	±3
ANGULAR TOLERANCE ±0°								

ALL DIMENSIONS ARE IN MILLIMETERS

REFERENCE
PCC0377514

THIRD ANGLE PROJECTION

DO NOT SCALE
USE MATH DATA

NX

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		DATE
DR	FRANK HOLUB	25OC06
APVD	SUDHA SIAN	01JL14
APVD	OLAF HOERNLEIN	02JL14
APVD	JEFF CAMPBELL	02JL14
APVD		
	SUBSTANCES OF CONCERN AND RECYCLED CONTENT PER APTIV (DRAWING)	

SEE CHART

DRAWING NAME
TAXI ASM CONN 24 M 1.5 2.8 APEX SLD

DRAWING NUMBER
13780792
SIZE A1x3 | SCALE 2:1 | PAGE NO 1 OF 2 | SHEET NO 1 OF 1 | REV R | 12 | N/P -

•APTIV•
CONNECTION SYSTEMS
WARREN, OH

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(*) THE DRAWING TURNKEY & PART NUMBER INDICATES THAT PHYSICAL PARTS ARE NOT AVAILABLE FOR ORDERING.

PART NUMBERS THAT DO NOT HAVE A (.NN) PRESENT INDICATE THAT PHYSICAL PARTS ARE NOT AVAILABLE FOR ORDERING.

CONTACT APTIV SALES TO ASSURE AVAILABILITY OF PARTS.

DWG TYPE
PART DRAWING

STYLE

VOLUME (CM³) | SYSTEM UNIT

UNLESS OTHERWISE SPECIFIED
THIS DOCUMENT IS IN ACCORDANCE WITH ASME Y14.5M-1994 UNLESS OTHERWISE SPECIFIED. GENERAL DIMENSIONAL TOLERANCES MAXIMUM DEFLECTIONS, SEPARATE FITTING OF FEATURES MAY BE GRADE SEPARATELY REGARDLESS OF DATUM REFERENCES.

ALL DIMENSIONS ARE IN MILLIMETERS

13780792