





NOTES:

- 1) VALIDATED TO SAE/USCAR-2 REV 3 WITH THE FOLLOWING EXCEPTION(S):
  - SECTION 5.4.5 (Misc. Comp. Engage/Disengage)
  - CPA LOCKED TO PRE-STAGE 8N-30N (FCI REQUIREMENT)
  - SECTION 5.4.1 (Terminal - Connector Insertion/Extraction Force)
  - INSERTION OF TERMINAL INTO CAVITY NOT TO EXCEED 2IN
  - SECTION 5.4.4 (Polarization Feature Effectiveness)
    - >160N FOR ALL COMBINATIONS
  - SECTION 5.4.2 (Connector-Connector Mating/Unmating Force)
    - >95N UNMATING FORCE.
- 2) VALIDATED TO THE FOLLOWING TEMP, VIBRATION, AND SEALING CLASSES:
  - GMW3191 SECTION 4.28 V4 T4 (155°C) WITH GOLD OR SILVER TERMINALS
  - SAE/USCAR-2 V3 T4 (150°C) WITH GOLD OR SILVER TERMINALS
  - SAE/USCAR-2 V3 T3 (125°C) WITH TIN/SILVER TERMINALS
  - SAE/USCAR-2 V2 T3 (125°C) WITH TIN TERMINALS
  - SAE/USCAR-2 SEALING S3 T4 (150°C) (ISO16750 9K EQUIVALENT)
- 3) CONNECTOR MAY BE USED WITH THE FOLLOWING TERMINALS:
  - FCI APEX 1.2 TERMINALS LISTED IN THE APPLICABLE COMPONENTS CHART ON THIS DRAWING WITH WIRE SIZES DEFINED IN NOTE 4.
  - SEE FCI DRAWING C18001-1-2-CUST FOR SPECIFIC TERMINAL DETAILS AND CRIMPING REQUIREMENTS
  - PLATING OF TERMINALS AND MATING DEVICE BLADES MUST BE COMPATIBLE
- 4) CONNECTOR SYSTEM HAS BEEN VALIDATED TO USCAR-2 REQUIREMENTS WITH THE FOLLOWING RANGE OF WIRE SIZES AND TYPES IN CONJUNCTION WITH APPROPRIATE COMPONENTS FOUND IN THE "APPLICABLE COMPONENTS" CHART:
  - WIRE SIZES: 0.50mm<sup>2</sup> - 1.25mm<sup>2</sup> AND 20AWG - 16AWG
  - OUTSIDE DIAMETER: 1.40mm MIN - 2.41mm MAX
  - TYPE/STANDARD: MIL123-A, MS-8288, MS-9502, ES-AU5T-1A348-AA, ISO 6722
  - WIRE AND INSULATION TYPE MUST BE APPROPRIATE FOR TEMPERATURE CLASS & APPLICATION ENVIRONMENT
- 5) CONNECTOR IS MATE COMPATIBLE WITH DEVICES WHICH CONFORM WITH THE FOLLOWING USCAR INTERFACE SPECIFICATIONS:
  - 120-S-003-1-Z01 (WITH EWCAP-001 TYPE 120-T BLADES)
  - 120-S-003-1-Z02 (WITH EWCAP-001 TYPE 120-T BLADES)
- 6) ANNUAL QUALITY REQUIREMENTS:
  - IT IS PERMISSIBLE TO PERFORM CONTINUOUS CONFORMANCE PER FCI SPECIFICATION #AQA-001 INSTEAD OF ANNUAL LAYOUT AND ANNUAL PV REQUIREMENTS OF ISO TS16949 AND SAE/USCAR-2 REV 5. FOR TERMINAL TO CONNECTOR AND TPA TO CONNECTOR ONLY.
- 7) SOURCE ID, MOLD & CAVITY ID SIGNIFIES TOOL OWNERSHIP, FOR REFERENCE
- 8)  INDICATES IN-PROCESS INSPECTION FOR MANUFACTURING DIMENSIONS OR SPECIFICATIONS.

12-00271	CHART	F752210 WAS 54200616 (NEW CPA) , PCL UPDATED TO "H" . 0.75-1.25mm <sup>2</sup> WAS 0.75-1.50mm <sup>2</sup>											
	NOTES	NOTE #4 WAS CORRECTED (0.50-1.25mm <sup>2</sup> WAS 0.50-1.50mm <sup>2</sup> )											
11970	N13	CORRECTED DIMENSION: 33.30±0.75 WAS 33.1±0.3											
11903	CHART	APPLICABLE COMPONENTS CHART REVISED											
	CHART	F519600 WAS F409000 (CORRECTION)											
11891	CHART	ADDED KEY OPTION D WITH CPA (F177010)											
11838	CHART	APPLICABLE COMPONENTS CHART REVISED											
	NOTES	REVISED NOTE #5											
	CHART	CORRECTED PCL CODES											
10700	ALL	REVISED AND REDRAWN IN FC1 - CUSTOMER FRAME.											
----	D16	ASSY P/N F5434300 FOR FLUOROSILICONE MATERIAL APPLICATION ADDED, CHART UPDATED WITH FLUOROSILICONE SEAL P/N'S (NOT AVAILABLE).											
ECN NO.	ZONE	CHANGE DESCRIPTION											
PRODUCT SPEC.													
PACKAGING SPEC.		APPLICATION SPEC.		THIS DRAWING AND ALL OTHER INFORMATION CONTAINED THEREIN IS PROPRIETARY AND THE PROPERTY OF FC1. This drawing may not be copied, reproduced or disclosed to any third party without the expressed written permission of FC1. FC1 April 1999									
USCAR-2 REV 5		NONE		SOURCE IDENTIFICATION									
TOLERANCES		PLACE DIMS ± 0.10 2 PLACE DIMS ± 0.10		MATERIAL : (SEE TABLE)		DIMENSIONS IN MILLIMETERS							
CONTRACT# W:		SEE NOTE 5		COLOUR :		-				CAD SYSTEM pro / eng.			
				COLOUR :		-				DIMENSIONS IN MILLIMETERS			
DO NOT MEASURE DRAWING				TOL. NO. A-126		ECO Lst. Code AN						DRAWING NUMBER K29002 H	
DATE NAME				TITLE		ECO LST. CODE		STATE		APPROVAL LEVEL			
CREATED BY 2003-07-25 J. LAURSEN				K29002		A-126		STATE		SHEET 1			
MODIFIED 20031020 Frank Holub				PROJECT		ECO LST. CODE		PART NUMBER		SCALE 1:100			
CHECKED 20031020 MAN MOJIB				3 WAY SENSOMATE 12		ECO LST. CODE		PART NUMBER		SCALE 1:100			
APPROVED BY 20031020 JOEL CAMPBELL				SER. NO. AMO30093 CAT. NO. -		ECO LST. CODE		PART NUMBER		SCALE 1:100			
FILE NAME K29002				DOCUMENT UNDER PDS CONTROL NO MODIFICATION ALLOWED OUTSIDE								See Table	

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