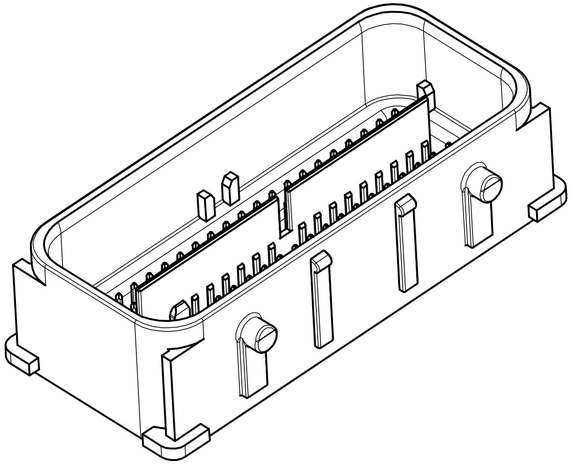


NOTES: UNLESS OTHERWISE SPECIFIED

1. MATERIAL FOR INTERFACE:

A. RESIN:
1. 30% G.F. PBT, 20% MAX. (BY WEIGHT) REGRIND.
2. MATING CONNECTOR INTERFACE PART COLOR MUST BE SAME AS MATCHING KEYED HARNESS CONNECTOR ASSEMBLY.
3. MUST BE VALIDATED FOR INDIVIDUAL DEVICE APPLICATION REQUIREMENTS.

B. 0.64MM PINS:
FOR INFORMATION NOT SHOWN SEE EWCAP-001

C. 2.8MM BLADE:
FOR INFORMATION NOT SHOWN SEE EWCAP-001

D. PLATING REQUIREMENTS:

1. GOLD PLATING
a. TYPE II GRADE C HARDENED ELECTRODEPOSITED GOLD PER MIL-C45204C.
b. MAXIMUM WEIGHT PERCENTAGE OF HARDENERS SHALL BE 0.5 MAX.
c. KNOOP HARDNESS SHALL BE 130-200 TYPE II, PER MIL-C45204C.

2. NICKEL PLATING
a. ELECTRODEPOSITED DUCTILE SULFAMATE NICKEL WITH A NON-BRIGHTENED FINISH. NO ORGANIC OR BRIGHTENING AGENTS SHALL BE ALLOWED.
b. SHALL ONLY BE USED AS AN UNDERLYING PLATING AND MAY NOT BE USED AS AN ELECTRICAL CONTACT SURFACE PLATING.
c. SHALL BE NODULE FREE WHEN VIEWED AT 10X MAGNIFICATION IN MEASURED IN CONTACT SURFACE AREA PLUS 0.5MM PERIMETER AROUND THE CONTACT SURFACE AREA.
d. ALL PLATINGS SHALL HAVE A 1.0% MAXIMUM BY WEIGHT IMPURITIES. IMPURITIES ARE DEFINED AS ALL ELEMENTS NOT THE PRIMARY PLATING OR HARDENING AGENT IF APPLICABLE, AS DETERMINED BY WET CHEMICAL ANALYSIS OR AUGER METHOD. NO SINGLE IMPURITY SHALL EXCEED 0.1% MAXIMUM BY WEIGHT.

3. TESTING
a. THICKNESS TO BE MEASURED IN CONTACT SURFACE AREA PLUS 0.5 PERIMETER AROUND THE CONTACT SURFACE AREA AS DESIGNATED IN THE DRAWING. THICKNESS SHALL BE DETERMINED BY METHOD OF X-RAY (XRF).
b. PLATING ADHESION SHALL BE TESTED BY A BEND TEST FOR ALL METALS. THE TEST SAMPLE SHALL BE BENT 90° TO DETERMINE DEPOSIT ADHESION. TESTING SHALL BE COMPLETED IN ACCORDANCE WITH ASTM SPEC B571.
c. RESIDUAL SALTS SHALL BE REMOVED FROM PLATED PRODUCT. THE DETECTION OF RESIDUAL SALTS SHALL BE IN ACCORDANCE WITH MS17000, SECTION 1236.
d. GOLD POROSITY SHALL BE IN ACCORDANCE WITH SULFUROUS ACID/SULFUR-DIOXIDE VAPOR METHOD FOR A PERIOD OF 90 MINUTES MINIMUM PER ASTM B799.

2. DESIGN - GENERAL:

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. ALL DIMENSIONS SHOWN IN MM. DIMENSIONING AND TOLERANCING PER ASME-Y145M-1994
B. TOLERANCES:
1. LINEAR
   0.X ± 0.30
   0.XX ± 0.10
   0.XXX ± 0.10
2. ANGULAR X° ± 3°
3. | ⌓ | 1.0 | A | B | C |
C. MINIMUM WALL THICKNESS REQUIRED: 1.3MM.
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 MATERIAL CODE, RECYCLING CODE, CAVITY ID AND DATE CODE.
F-1. PARTS MUST BE FREE OF DISCOLORATION, SALT RESIDUE AND OTHER IMPERFECTIONS THAT AFFECT FIT OR FUNCTION.
F-2. SCRATCHES OR DENTS NOT TO EXCEED 0.13MM IN DEPTH.

3. DESIGN - MANUFACTURING:

A. DRAFT TO BE WITHIN TOLERANCE.
B. ALLOWABLE FLASH MAX 0.2 HIGH X MAX 0.13 THICK.
C. ALLOWABLE PARTING LINE MISMATCH 0.2 MAX.
D. EJECTOR PINS MARK TO BE FLUSH TO 0.25 MAX DEPRESSED.
E. ALLOWABLE GATE VESTIGE FLUSH TO 0.25 MAX PROTRUSION.
F. NO EXTERNAL MOLD RELEASE AGENT ALLOWED DURING MANUFACTURING.
G. STEEL THAT FORMS THE INDICATED SURFACE MUST BE POLISHED WITH A DIAMOND FINISH (SPI A-2) OVER THE FULL PERIPHERY OF THE TOOL. SURFACE MUST HAVE NO MISMATCH.
H. ANY PROCESS LUBRICANT REMAINING ON THE TERMINAL MUST NOT VARNISH OR DEGRADE IT'S ELECTRICAL PERFORMANCE UP TO A MAXIMUM CLASS AMBIENT TEMPERATURE PER SAE USCAR-2 FOR 1008 HOURS. PROCESS LUBRICANTS SHOULD BE APPROVED BY THE RESPONSIBLE ENGINEER.
J. OPTIONAL FEATURES PROVIDED FOR AUTOMATION.

4. GENERAL:

A. COMPLIANCY TO THIS DOCUMENT:
1. USCAR COMPLIANCE MAY BE CLAIMED BY MEETING THE REQUIREMENTS IN THIS SPECIFICATION WITH THE DEVIATION IDENTIFIED AND MAY BE REFERENCED IN OTHER DOCUMENTS (DRAWINGS, DVP&R, ETC.) AS "CONFORMS TO EWCAP-999-S-073-4-Z01 REV X.X".
2. PRODUCTS DESIGNED AFTER THE DATE OF RELEASE OF THIS DOCUMENTS SHALL BE COMPLIANT TO THE CURRENT REVISION OF THIS DOCUMENT.
3. PRODUCTS THAT HAVE MET PREVIOUS REVISION(S) OF THIS DOCUMENT SPECIFICATION SHALL STILL BE CONSIDERED "USCAR COMPLIANT" TO THOSE REVISIONS AND DO NOT NEED TO BE RE-VALIDATED.
B. DEVIATIONS TO THIS DOCUMENT ARE ALLOWABLE UNDER THE FOLLOWING CONDITIONS:
1. ALL DEVIATIONS SHOULD SHOW EQUAL OR BETTER PERFORMANCE (ELECTRICAL/MECHANICAL) AS REQUIRED BY VALIDATION SPECIFICATION.
2. EXCEPTIONS ARE CLEARLY IDENTIFIED ON THE COMPONENT DRAWING
3. ALL DEVIATIONS ARE APPROVED BY PERSON WHO HAS INTERFACE RESPONSIBILITY
4. ALL RECORDS OF DEVIATION APPROVALS BE INCLUDED WITH CHANGE NOTICE DOCUMENTATION

CHANGE SERIAL NUMBER	LET	REVISION RECORD	DATE	DWN	CHK
X	A	INITIAL RELEASE	08/09	X	X

TOLERANCES (UNLESS OTHERWISE SPECIFIED)
DIMENSIONS ARE IN MM
ANGLES: ±3°
±0.2 ±0.10

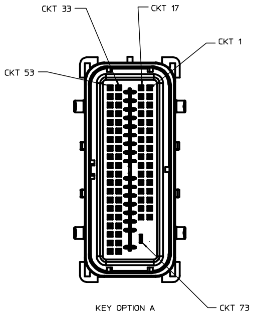
THIRD ANGLE PROJECTION

EWCAP

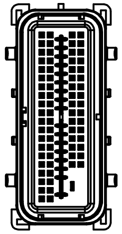
SCALE	DRAWN BY	CHECKED BY	DATE
1:1	K. KILLEN		5/26/09

TITLE MX123 SEALED HARNESS CONNECTION SYSTEM
73 CKT

SHEET 1 OF 8	DRAWING NUMBER	SIZE		REVISION LEVEL
	999-S-073-4-Z01		DO NOT SCALE DRAWING COMPUTER AIDED DRAWING	A



KEY OPTION A
WIRE DRESS 0 & 9
999-S-073-4-A01



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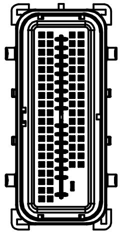
WIRE DRESS 0 & 9
999-S-073-4-B01



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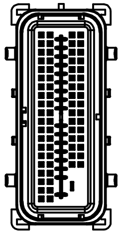
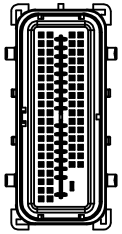
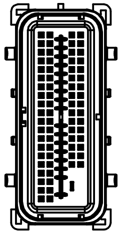


KEY OPTION D
WIRE DRESS 0 & 9
999-S-073-4-D01



KEY OPTION E
WIRE DRESS 0 & 9
999-S-073-4-E01



KEY OPTION F
WIRE DRESS 0 & 9
999-S-073-4-F01

CHANGE SERIAL NUMBER	LET	REVISION RECORD	DATE	DWN	CHK
X	A	INITIAL RELEASE	08/09	X	X

TOLERANCES (UNLESS OTHERWISE SPECIFIED)
DIMENSIONS ARE IN MM
ANGLES: ±3°
±0.2 ±0.10

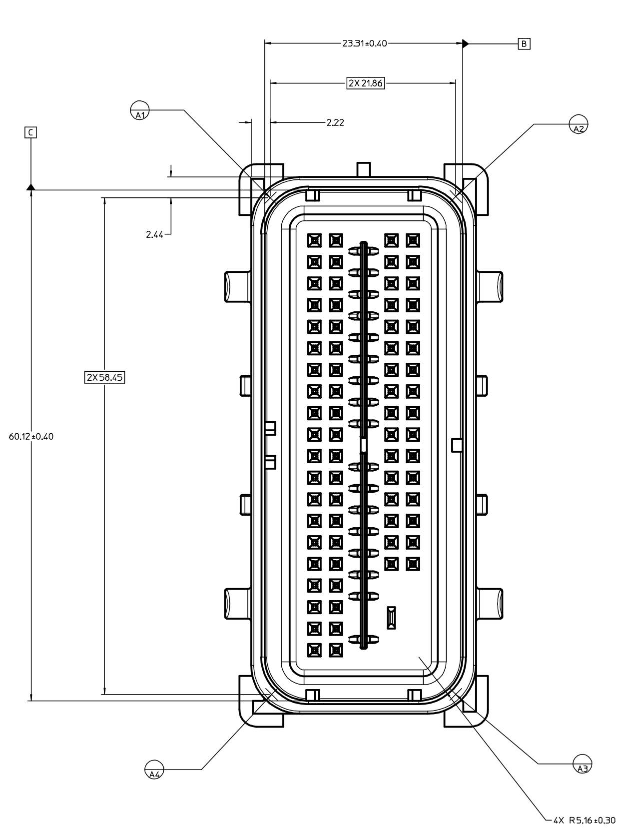
THIRD ANGLE PROJECTION

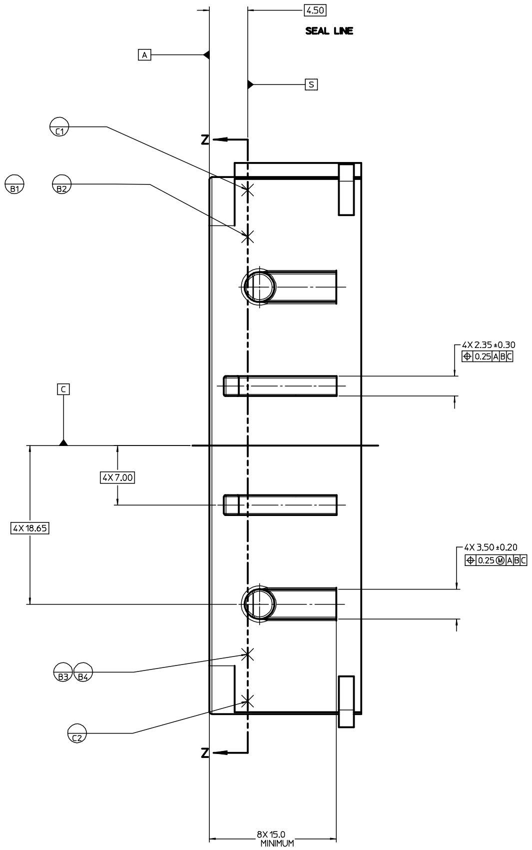
EWCAP

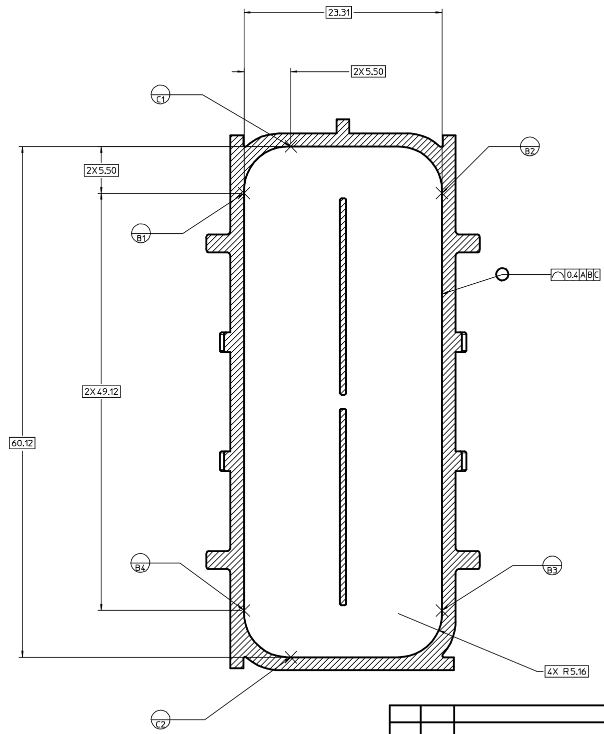
SCALE	DRAWN BY	CHECKED BY	DATE
1:1	K. KILLEN		5/29/09

TITLE
MX123 SEALED HARNESS CONNECTION SYSTEM
73 CKT

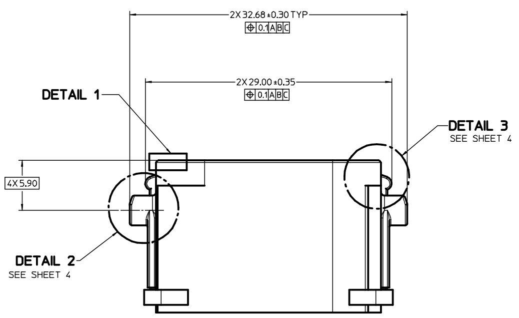
SHEET 2 OF 8	DRAWING NUMBER	SIZE		REVISION LEVEL
	999-S-073-4-Z01		DO NOT SCALE DRAWING COMPUTER AIDED DRAWING	A

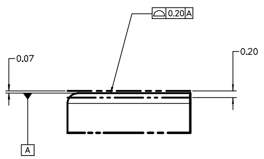






SECTION Z-Z
AT SEAL LINE





DETAIL 1
SCALE 20:1

CHANGE SERIAL NUMBER	LET	REVISION RECORD	DATE	DWN	CHK
X	A	INITIAL RELEASE	08/09	X	X

TOLERANCES (UNLESS OTHERWISE SPECIFIED)
DIMENSIONS ARE IN MM
ANGLES: ±3°
±0.2 ±0.10

THIRD ANGLE PROJECTION

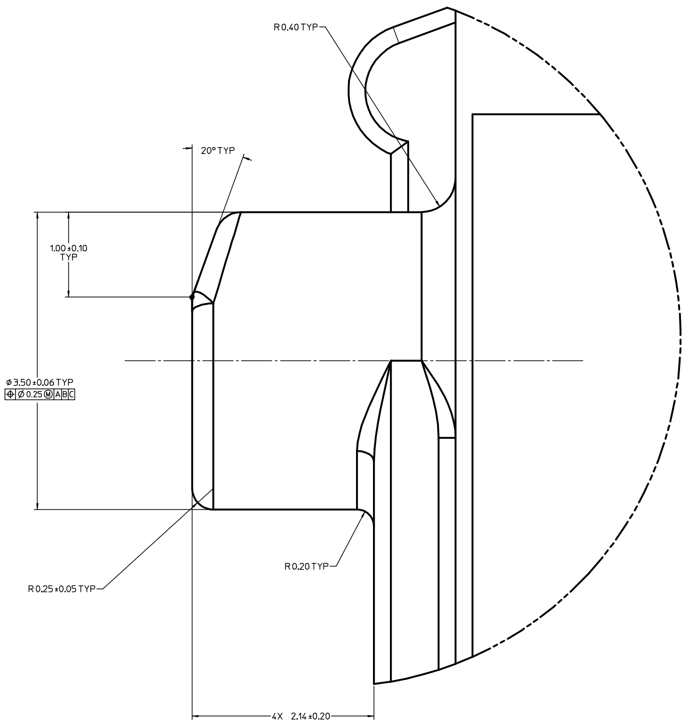
EWCAP

molex

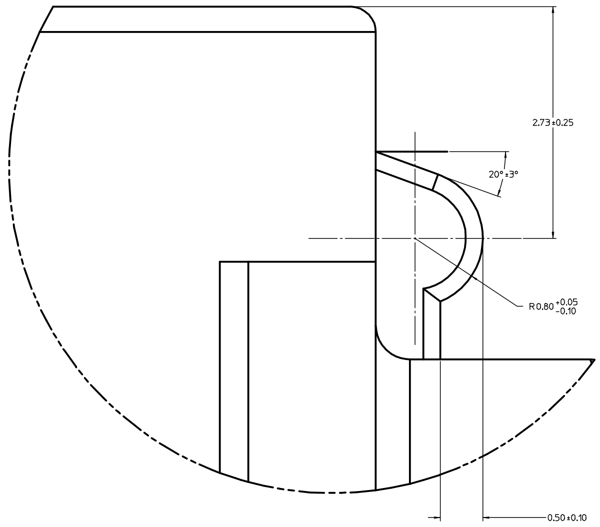
SCALE	DRAWN BY	CHECKED BY	DATE
1:1	K. KILLEN		5/26/09

TITLE
MX123 SEALED HARNESS CONNECTION SYSTEM
73 CKT

SHEET 3 OF 8	DRAWING NUMBER	SIZE	DO NOT SCALE DRAWING COMPUTER AIDED DRAWING	REVISION LEVEL
	999-S-073-4-Z01			A



DETAIL 2
SCALE 50:1
SEE SHEET 3
4X



DETAIL 3
SCALE 50:1
SEE SHEET 3
4X

X	A	INITIAL RELEASE	08/09	X	X
CHANGE SERIAL NUMBER	LET	REVISION RECORD	DATE	DWN	CHK

TOLERANCES (UNLESS OTHERWISE SPECIFIED)
DIMENSIONS ARE IN MM
ANGLES: ±3°
±0.2 ±0.10

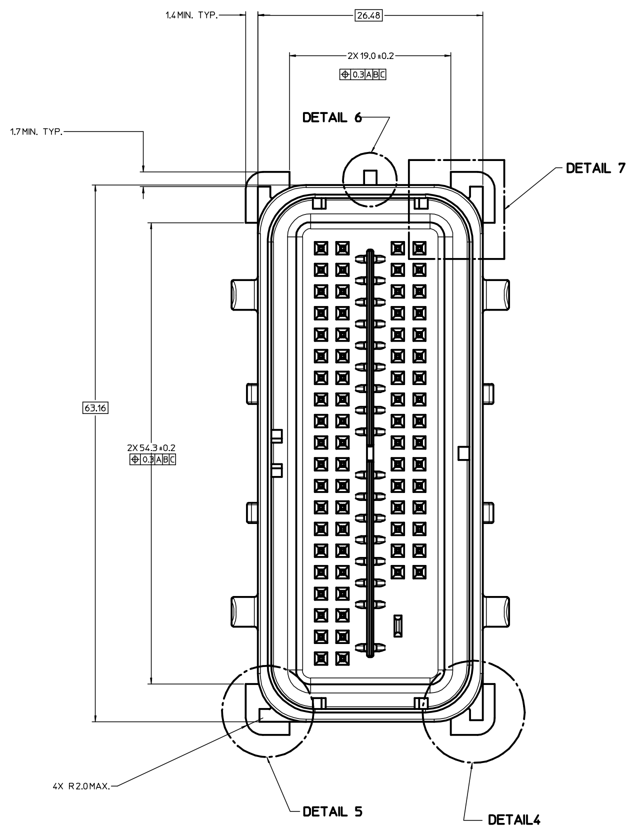
THIRD ANGLE PROJECTION

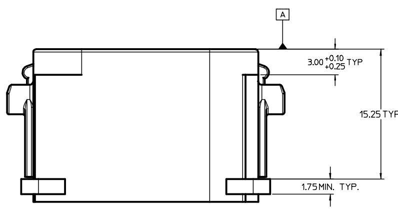
EWCAP

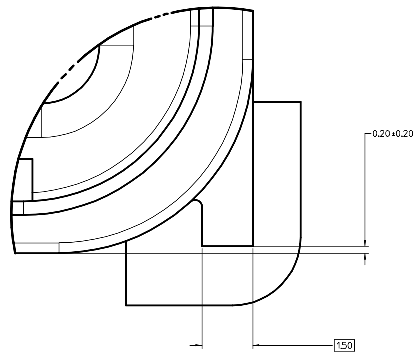
SCALE	DRAWN BY	CHECKED BY	DATE
1:1	K. KILLEN		5/26/09

TITLE **MX123 SEALED HARNESS CONNECTION SYSTEM**
73 CKT

SHEET 4 OF 8	DRAWING NUMBER	SIZE		REVISION LEVEL
	999-S-073-4-Z01		DO NOT SCALE DRAWING COMPUTER AIDED DRAWING	A

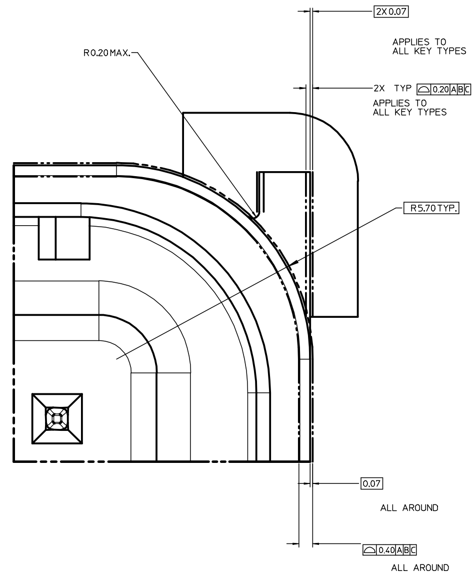




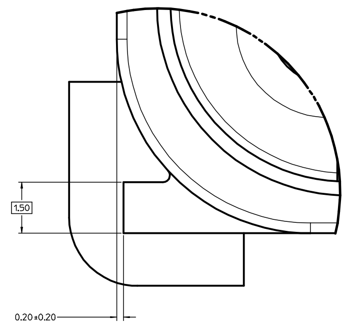


DETAIL4
SCALE 20:1

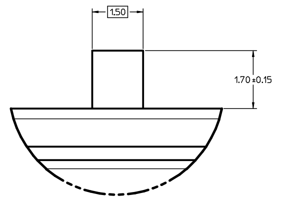
KEY TYPE 1



DETAIL 7
SCALE 20:1



DETAIL 5
SCALE 20:1
KEY TYPE 2



DETAIL 6
SCALE 20:1
KEY TYPE 3

molex

CHANGE SERIAL NUMBER	LET	REVISION RECORD	DATE	DWN	CHK
X	A	INITIAL RELEASE	08/09	X	X

TOLERANCES (UNLESS OTHERWISE SPECIFIED)
DIMENSIONS ARE IN MM
ANGLES: ±3°
±0.2 ±0.10

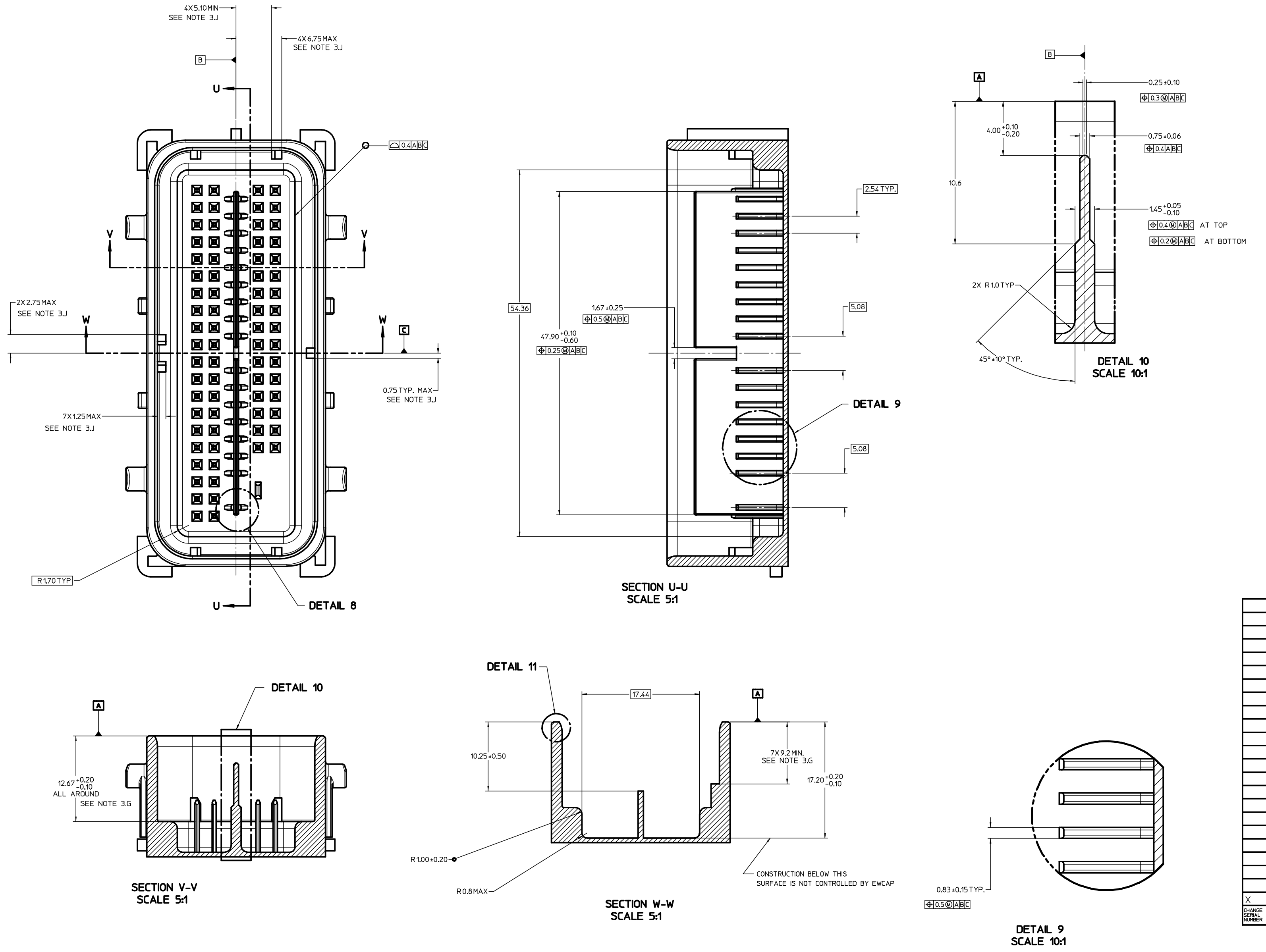
THIRD ANGLE PROJECTION

EWCAP

SCALE	DRAWN BY	CHECKED BY	DATE
1:1	K. KILLEN		5/26/09

TITLE
MX123 SEALED HARNESS CONNECTION SYSTEM
73 CKT

SHEET 5 OF 8	DRAWING NUMBER	SIZE		REVISION LEVEL
	999-S-073-4-Z01		DO NOT SCALE DRAWING COMPUTER AIDED DRAWING	A



X	A	INITIAL RELEASE	08/09	X	X
CHANGE SERIAL NUMBER	LET	REVISION RECORD	DATE	DWN	CHK

TOLERANCES (UNLESS OTHERWISE SPECIFIED)
DIMENSIONS ARE IN MM
ANGLES: ±3°
±0.2 ±0.10

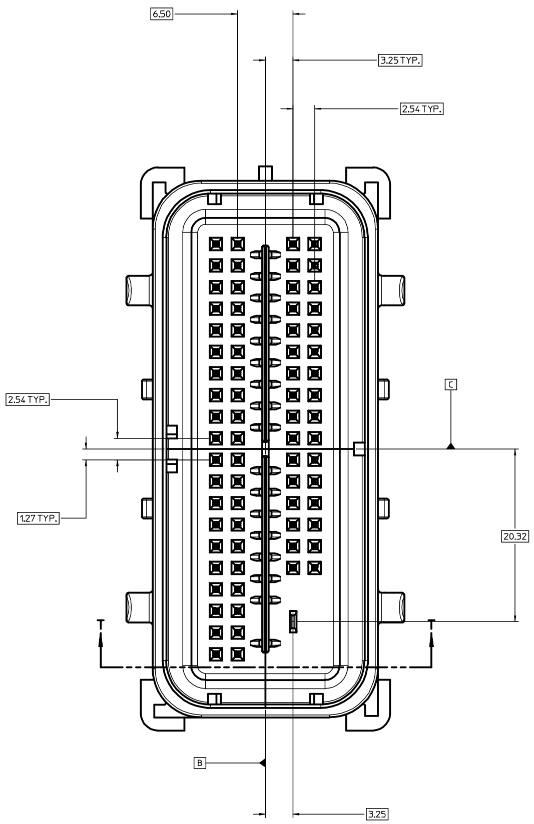
THIRD ANGLE PROJECTION

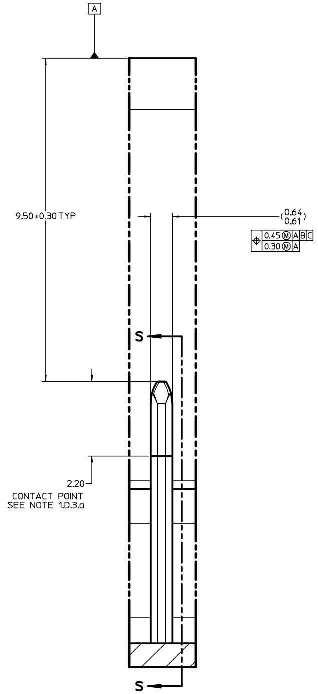
EWCAP

SCALE	DRAWN BY	CHECKED BY	DATE
1:1	K. KILLEN		5/26/09

TITLE MX123 SEALED HARNESS CONNECTION SYSTEM
73 CKT

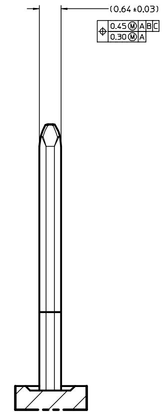
SHEET 6 OF 8	DRAWING NUMBER	SIZE	DO NOT SCALE DRAWING COMPUTER AIDED DRAWING	REVISION LEVEL
	999-S-073-4-Z01			A



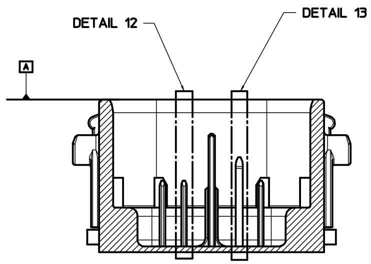


TYPICAL
DETAIL 12
SCALE 20:1
0.64 TERMINAL

FOR INFORMATION NOT SHOWN
SEE EWCAP-001
(USE TERMINAL 064-T002)



TYPICAL
SECTION S-S
SCALE 20:1
0.64 TERMINAL



SECTION T-T
SCALE 5:1

CHANGE SERIAL NUMBER	LET	REVISION RECORD	DATE	DWN	CHK
X	A	INITIAL RELEASE	08/09	X	X

TOLERANCES (UNLESS OTHERWISE SPECIFIED)
DIMENSIONS ARE IN MM
ANGLES: ±3°
±0.2 ±0.10

THIRD ANGLE PROJECTION

molex

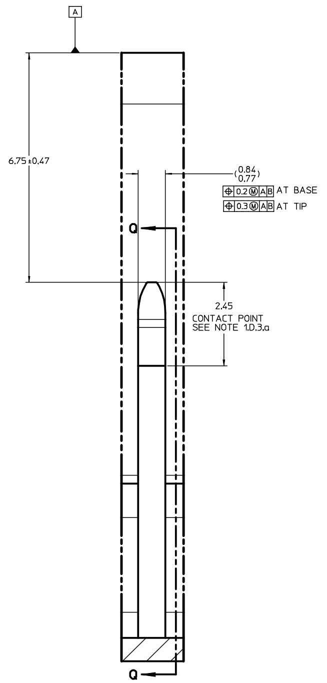
EWCAP

SCALE	DRAWN BY	CHECKED BY	DATE
1:1	K. KILLEN		5/26/09

TITLE MX123 SEALED HARNESS CONNECTION SYSTEM
73 CKT

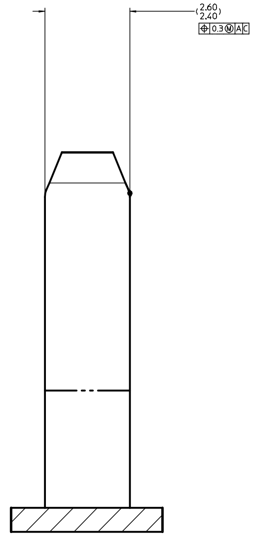
SHEET 7 OF 8	DRAWING NUMBER	SIZE	DO NOT SCALE DRAWING COMPUTER AIDED DRAWING	REVISION LEVEL
	999-S-073-4-Z01			A

D C B A
4 3 2 1



DETAIL 13
SEE SHT. 7
SCALE 20:1
2.80 TERMINAL

FOR INFORMATION NOT SHOWN
SEE EWCAP-001
(USE TERMINAL 280-T001)



SEE SHEET 7
SECTION Q-Q
SCALE 20:1
2.80 TERMINAL

CHANGE SERIAL NUMBER	LET	REVISION RECORD	DATE	DWN	CHK
X	A	INITIAL RELEASE	08/09	X	X

TOLERANCES (UNLESS OTHERWISE SPECIFIED)
DIMENSIONS ARE IN MM
ANGLES: ±3°
±0.2 ±0.10

THIRD ANGLE PROJECTION

EWCAP

SCALE	DRAWN BY	CHECKED BY	DATE
1:1	K. KILLEN		5/26/09

TITLE MX123 SEALED HARNESS CONNECTION SYSTEM
73 CKT

SHEET 8 OF 8	DRAWING NUMBER	SIZE	DO NOT SCALE DRAWING COMPUTER AIDED DRAWING	REVISION LEVEL
	999-S-073-4-Z01			A