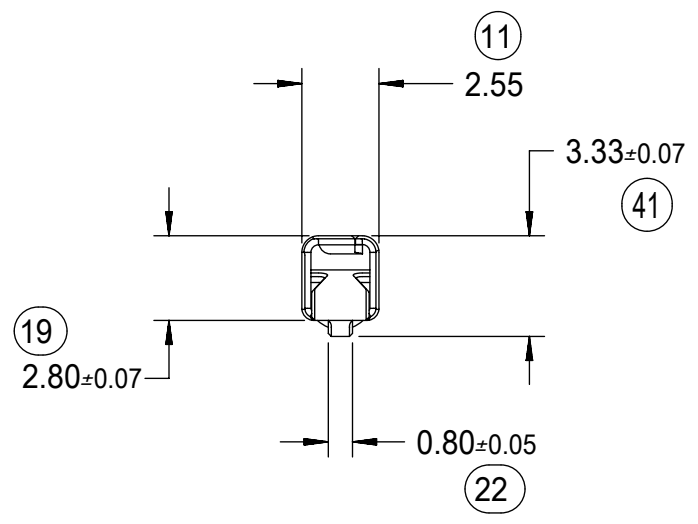


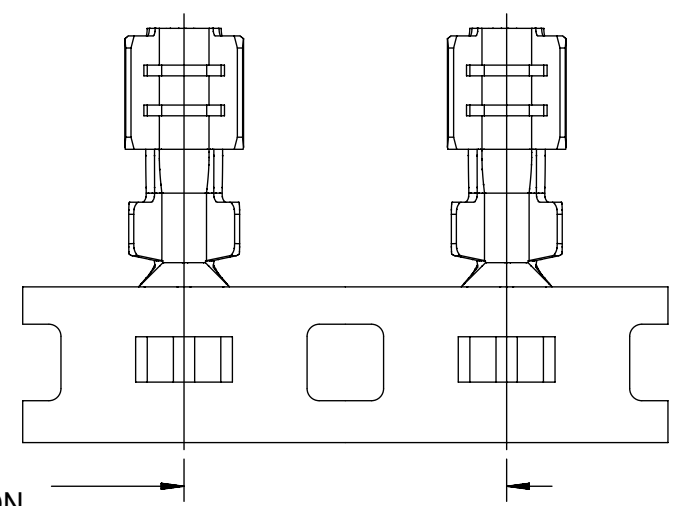
DIMENSIONS FOR LARGE POLARIZATION RIB TERMINAL ONLY

NOTES: (UNLESS OTHERWISE SPECIFIED)

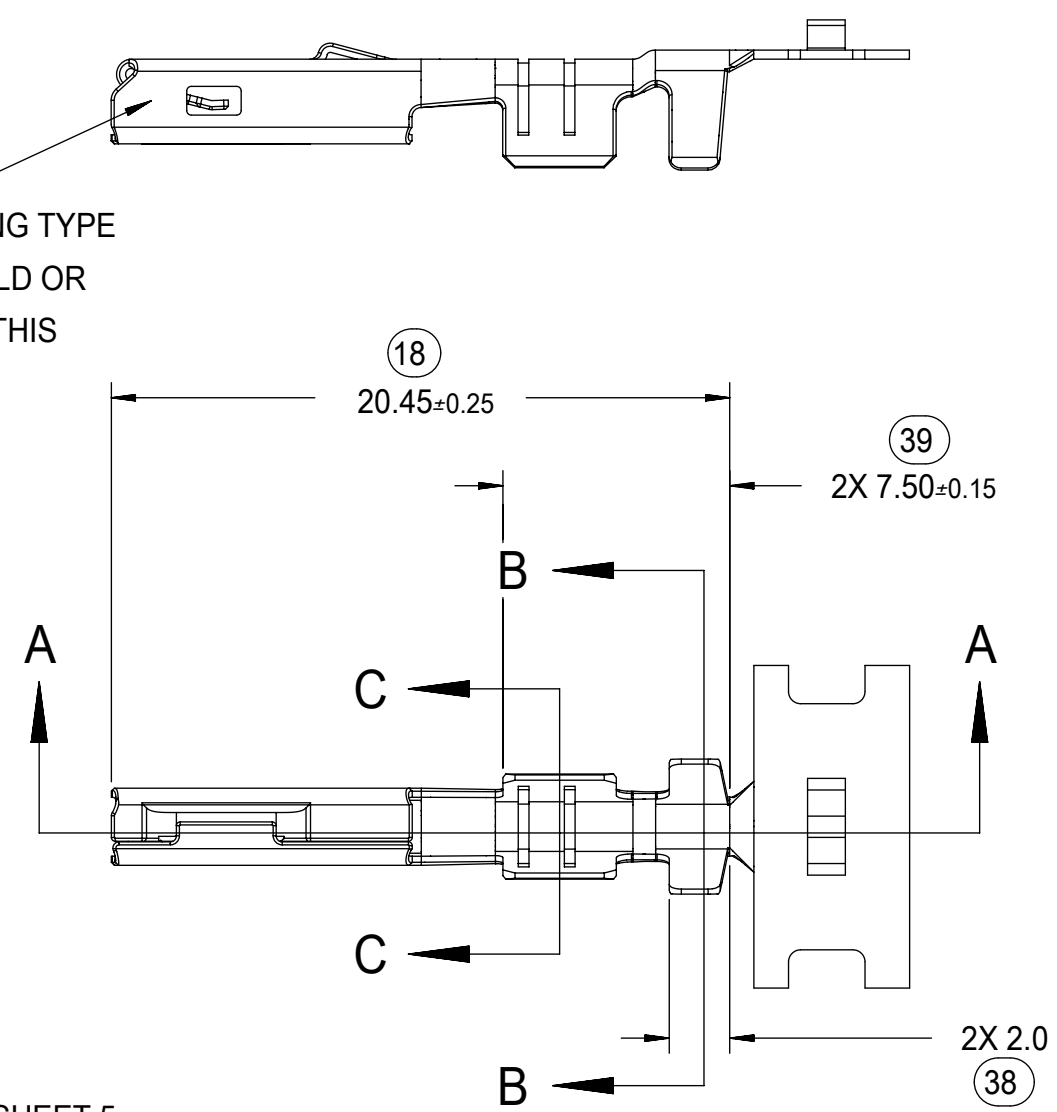
- MATING TERMINAL SHOWN ON SD-33000-001
- MATERIAL: ASTM B422, UNS C19025, HR04
THICKNESS: 0.30 mm ±0.01
TEMPER: FULL HARD (REF)
TENSILE: 496 MIN MPA
- TIN PLATED TERMINAL FINISH:
OVERALL UNDERPLATE ELECTRODEPOSITED NICKEL
OVERALL ELECTRODEPOSITED REFLOW TIN
- GOLD PLATED TERMINAL FINISH
OVERALL UNDERPLATE ELECTRODEPOSITED DUCTILE SULFAMATE NICKEL
CONTACT AREA - ELECTRODEPOSITED GOLD
GRIP AREA - ELECTRODEPOSITED 100% TIN MATTE FINISH
- SILVER PLATED TERMINAL FINISH
OVERALL UNDERPLATE ELECTRODEPOSITED DUCTILE SULFAMATE NICKEL
CONTACT AREA - ELECTRODEPOSITED PURE SILVER (0.5% MAX
IMPURITIES) SEMI-BRIGHT FINISH
- SILVER ANTI-TARNISH : EVABRITE
GRIP AREA - ELECTRODEPOSITED 100% TIN MATTE FINISH
- MEETS PERFORMANCE SPECIFICATION FOR CABLE TO TERMINAL
ELECTRICAL CRIMPS PER SAE/USCAR-21 (8/2001)
- MEETS PERFORMANCE STANDARD FOR AUTOMOTIVE ELECTRICAL
CONNECTOR SYSTEMS FOR SAE/USCAR-2, REV. 4 (TEMP CLASS 3)
(5/2004)
- MEETS ELECTRICAL CONNECTION SYSTEM DESIGN SPECIFICATION
(SDS) REV.11 (5/2002)
- MEETS FIELD CORRELATED LIFE TEST (FCLT) PER
SAE/USCAR-20 (6/2004)
- MEETS WIRING COMPONENT DESIGN GUIDELINES SAE/USCAR-12
REV 2 (12/2001)
- TSC ON A DIMENSION TO BE INTERPRETED AS DISTANCE TO
A THEORETICAL SHARP CORNER AS IF THE RADIUS WERE NOT
PRESENT
- REFERENCE 97BG-14474-AAB FOR LARGE POLARIZATION RIB
CAVITY SPECIFICATION
- INSERTION FORCE (TIN) AVG. FROM PV TESTING =
3.8N LARGE POLARIZATION RIB
3.5N SMALL POLARIZATION RIB
(REFERENCE)
- ALL DIMENSIONS EXCEPT (33), (34), (41) & (42) ARE COMMON TO
BOTH SMALL AND LARGE POLARIZATION RIB TERMINALS
- REFERENCE PK-31300-516 FOR REEL DIRECTION
- REFERENCE AS-33012-002 FOR CRIMP INFORMATION



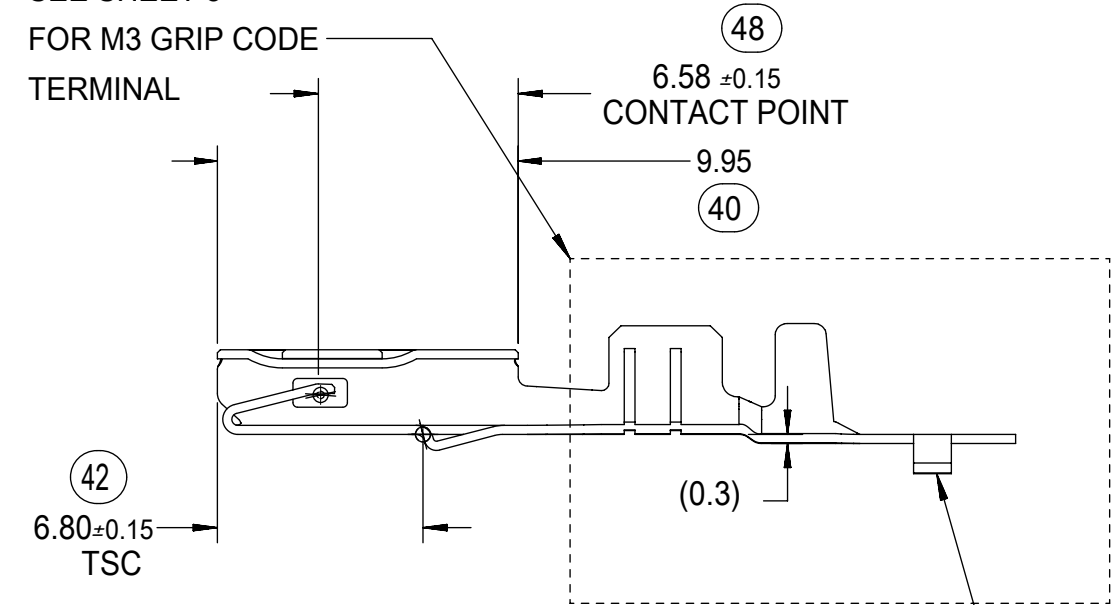
(10.67)
PROGRESSION



STAMP PLATING TYPE
Sn-TIN, Au-GOLD OR
Ag-SILVER IN THIS
AREA

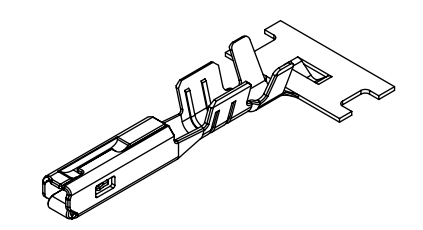


SEE SHEET 5
FOR M3 GRIP CODE
TERMINAL

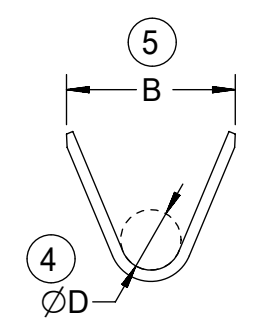


SECTION A-A

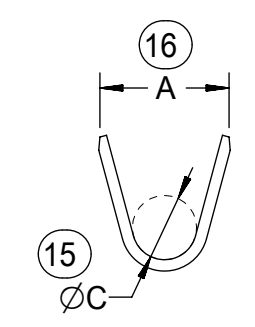
CARRIER BUMP DIRECTION
POINTS DOWN FOR TIN PLATED TERMINALS
POINTS UP FOR PRECIOUS PLATED TERMINALS



SCALE 2:1



SECTION B-B
SCALE 5:1



SECTION C-C
SCALE 5:1

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION											
SYMBOLS		DIMENSION UNITS		SCALE		CURRENT REV DESC:					
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▽ = 0		ANGULAR TOL ± 3.0°				CHK'D: JCUATACERVAN 2020/09/18					
▽ = 0		4 PLACES ±				APPR: JCUATACERVAN 2020/09/18					
▽ = 0		3 PLACES ±				INITIAL REVISION:					
▽ = 0		2 PLACES ± 0.10				DRWN: LPULLIAM 2005/06/21					
▽ = 0		1 PLACE ± 0.3				APPR: BMOSEY 2005/06/22					
▽ = 0		0 PLACES ±				THIRD ANGLE PROJECTION					
▽ = 0		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				DRAWING		SERIES		MATERIAL NUMBER	
▽ = 0		C-SIZE		33012		SEE TABLE		GENERAL MARKET		SHEET NUMBER	
▽ = 0		C-SIZE		33012		SD-33012-002		PSD 001 D		1 OF 5	



MX150
RECEPTACLE TERMINAL

PRODUCT CUSTOMER DRAWING

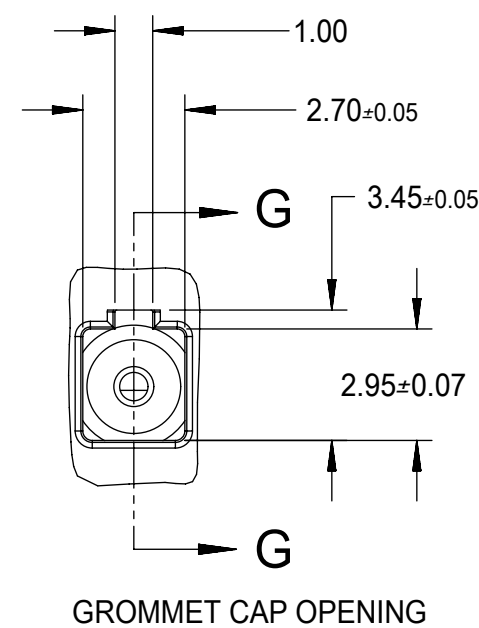
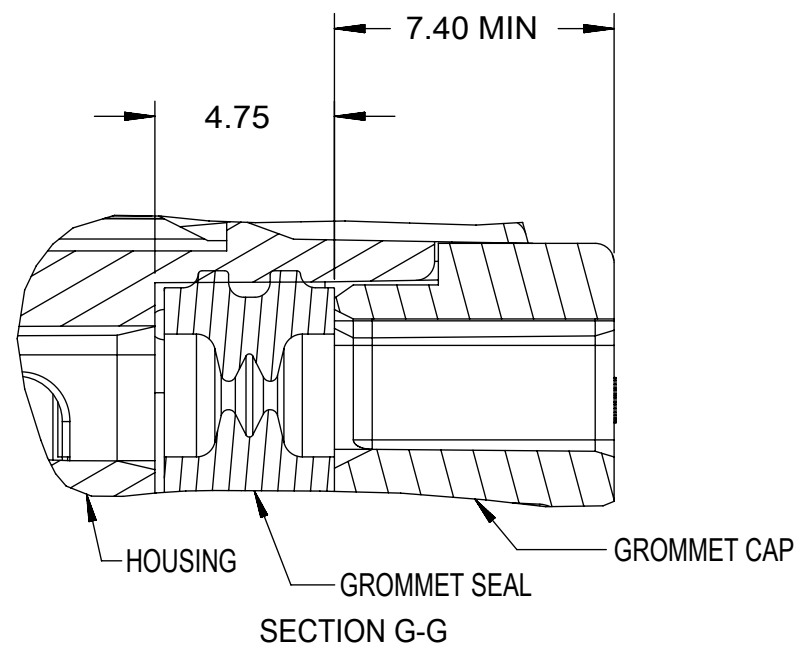
DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
SD-33012-002	PSD	001	D

FAMILY	GENDER	SEALING	PLATING	PART NUMBER	PAYOFF DIRECTION	GRIP CODE	WIRE SIZES *	A ±0.30	B ±0.30	C ±0.30	D ±0.30	SPECIAL CHARACTERISTICS
MX150	RECEPTACLE	MAT SEAL	Sn	33012-2001	RIGHT (B)	14	16/14AWG 1.25-2.00mm ²	3.9	4.4	1.7	1.6	HIGH PERFORMANCE Sn
				33012-3001	LEFT (D)							
				33012-2002	RIGHT (B)	18	20/18AWG 0.75-1.00mm ²	3.3	3.1	1.3	1.4	
				33012-3002	LEFT (D)							
				33012-2003	RIGHT (B)	22	22AWG	2.5	2.6	0.9	1.0	
				33012-3003	LEFT (D)							
			33012-2004	RIGHT (B)	M3	0.35-0.50mm ²	2.5	2.7	0.9	1.54 ±0.1		
			33012-3004	LEFT (D)								
			Au	33001-2003	RIGHT (B)	14	16/14AWG 1.25-2.00mm ²	3.9	4.4	1.7	1.6	HIGH PERFORMANCE Au
				33001-3003	LEFT (D)							
				33001-2004	RIGHT (B)	18	20/18AWG 0.75-1.00mm ²	3.3	3.1	1.3	1.4	
				33001-3004	LEFT (D)							
				33001-2005	RIGHT (B)	22	22AWG	2.5	2.6	0.9	1.0	
				33001-3005	LEFT (D)							
			33001-2006	RIGHT (B)	M3	0.35-0.50mm ²	2.5	2.7	0.9	1.54 ±0.1		
			33001-3006	LEFT (D)								
			Ag	33001-4001	RIGHT (B)	14	16/14AWG 1.25-2.00mm ²	3.9	4.4	1.7	1.6	HIGH PERFORMANCE Ag
				33001-5001	LEFT (D)							
33001-4002	RIGHT (B)	18		20/18AWG 0.75-1.00mm ²	3.3	3.1	1.3	1.4				
33001-5002	LEFT (D)											
33001-4003	RIGHT (B)	22		22AWG	2.5	2.6	0.9	1.0				
33001-5003	LEFT (D)											
33001-4005	RIGHT (B)	M3	0.35-0.50mm ²	2.5	2.7	0.9	1.54 ±0.1					
33001-5005	LEFT (D)											

LARGE POLARIZATION RIB - NOT TO BE USED IN MX150 SEALED CONNECTORS

MX150	RECEPTACLE	UNSEALED	Sn	33012-2021	RIGHT (B)	14	16/14AWG 1.25-2.00mm ²	3.9	4.4	1.7	1.6	HIGH PERFORMANCE Sn
				33012-3021	LEFT (D)							
				33012-2022	RIGHT (B)	18	20/18AWG 0.75-1.00mm ²	3.3	3.1	1.3	1.4	
				33012-3022	LEFT (D)							
				33012-2023	RIGHT (B)	22	22AWG 0.35-0.50mm ²	2.5	2.6	0.9	1.0	
				33012-3023	LEFT (D)							
			Au	33001-2021	RIGHT (B)	14	16/14AWG 1.25-2.00mm ²	3.9	4.4	1.7	1.6	HIGH PERFORMANCE Au
				33001-3021	LEFT (D)							
				33001-2022	RIGHT (B)	18	20/18AWG 0.75-1.00mm ²	3.3	3.1	1.3	1.4	
				33001-3022	LEFT (D)							
				33001-2023	RIGHT (B)	22	22AWG 0.35-0.50mm ²	2.5	2.6	0.9	1.0	
				33001-3023	LEFT (D)							
			Ag	33001-4021	RIGHT (B)	14	16/14AWG 1.25-2.00mm ²	3.9	4.4	1.7	1.6	HIGH PERFORMANCE Ag
				33001-5021	LEFT (D)							
				33001-4022	RIGHT (B)	18	20/18AWG 0.75-1.00mm ²	3.3	3.1	1.3	1.4	
				33001-5022	LEFT (D)							
				33001-4023	RIGHT (B)	22	22AWG 0.35-0.50mm ²	2.5	2.6	0.9	1.0	
				33001-5023	LEFT (D)							

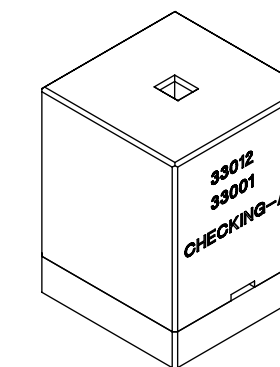
* REFERENCE AS-33012-002 FOR SPECIFIC WIRE TYPES



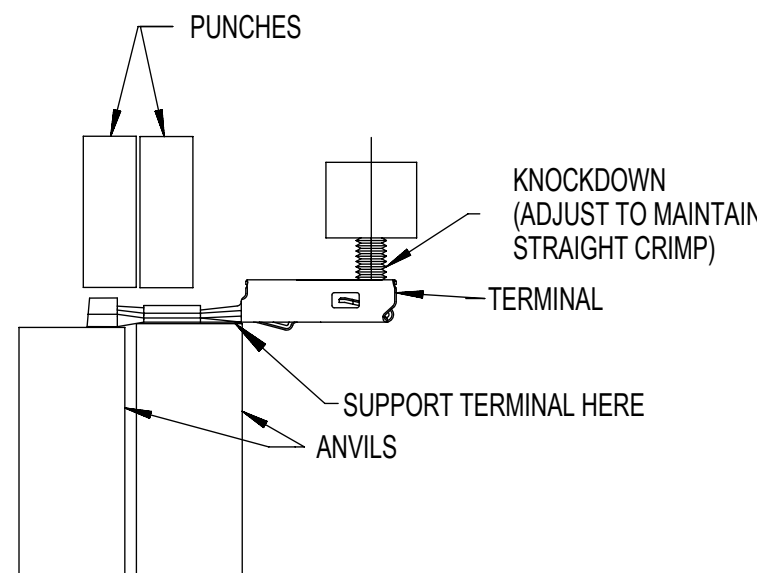
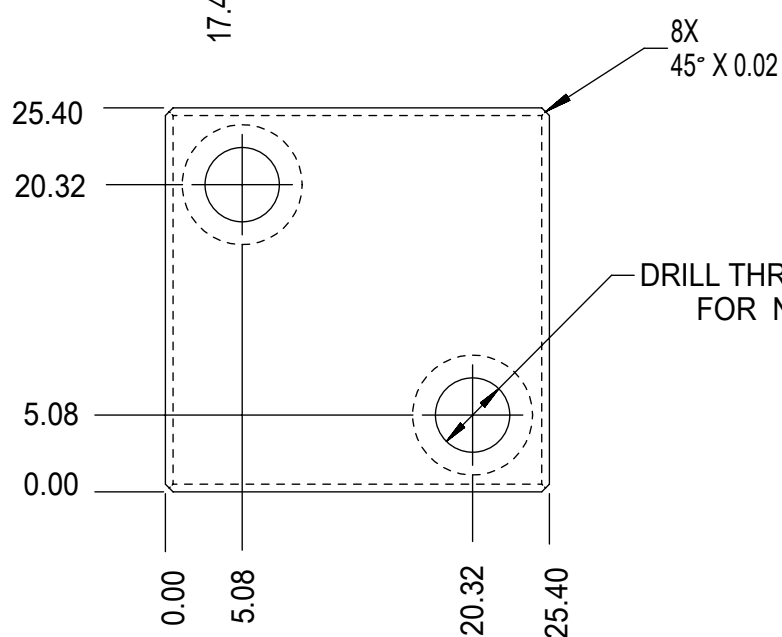
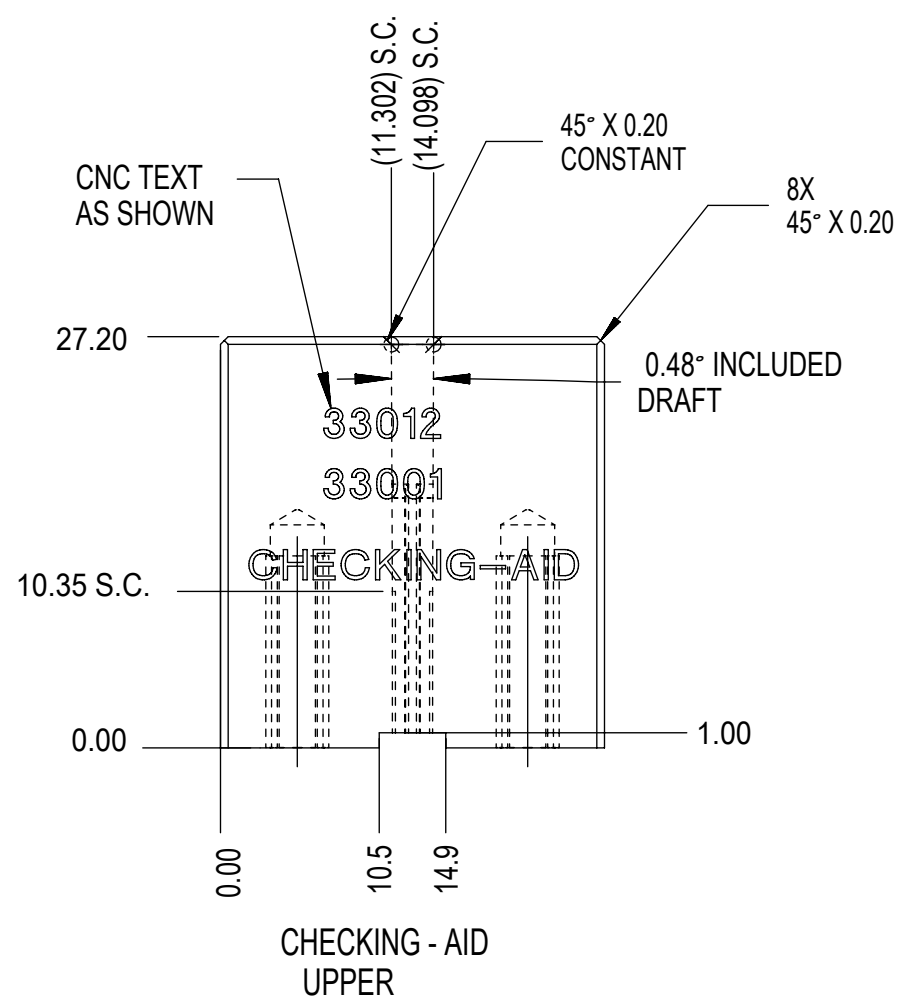
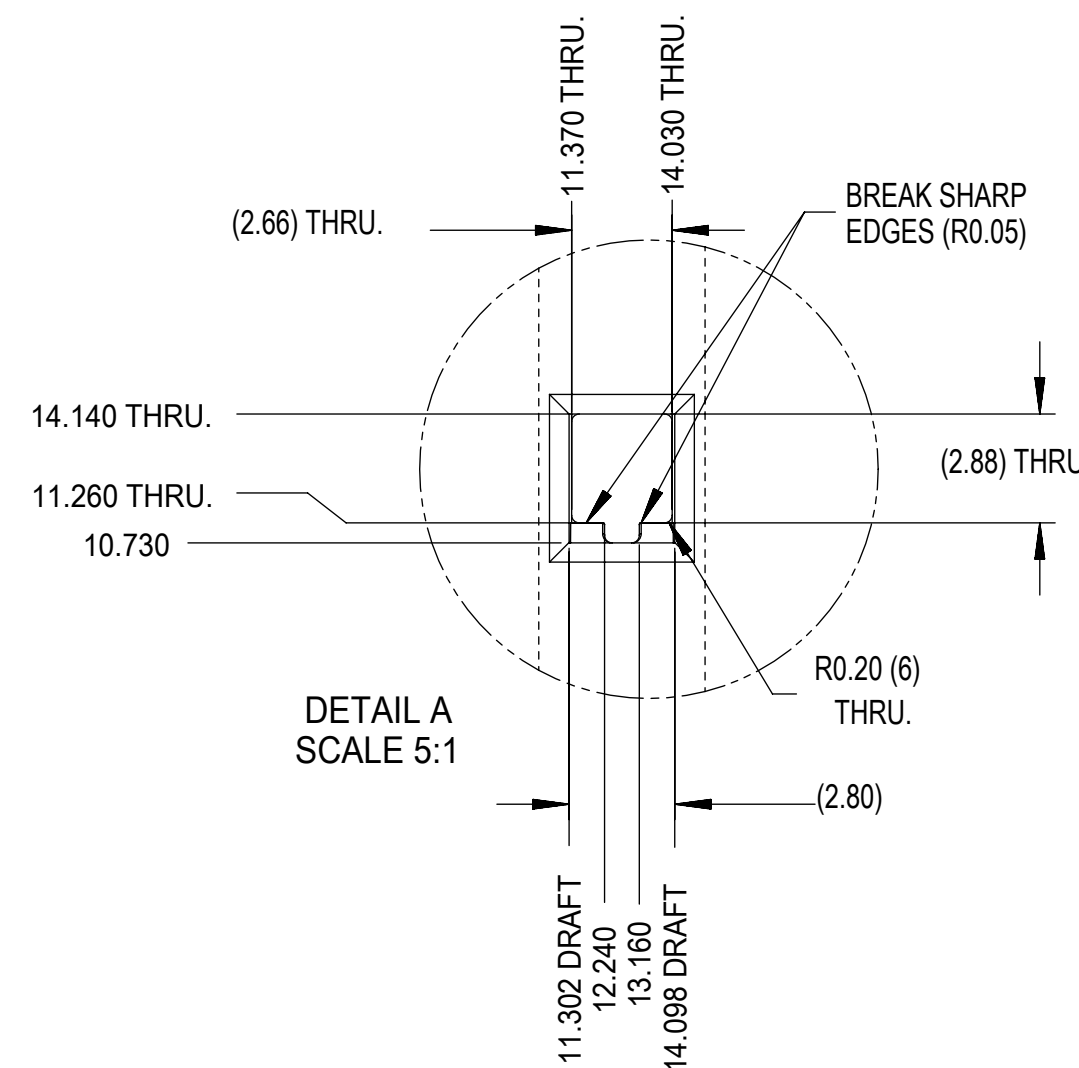
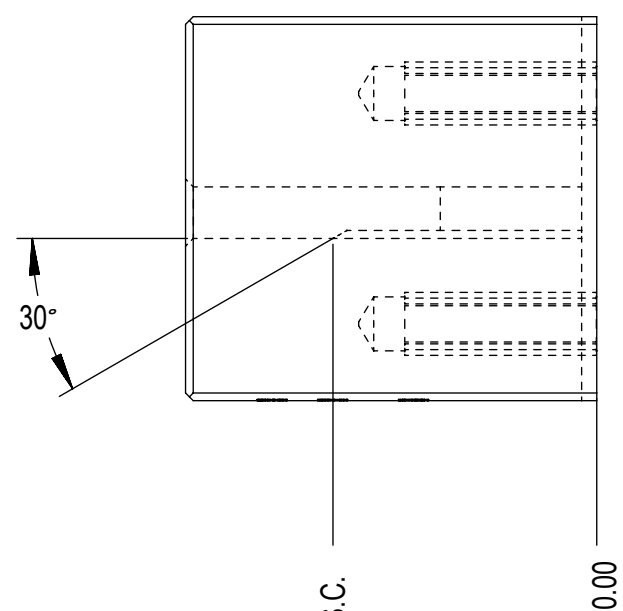
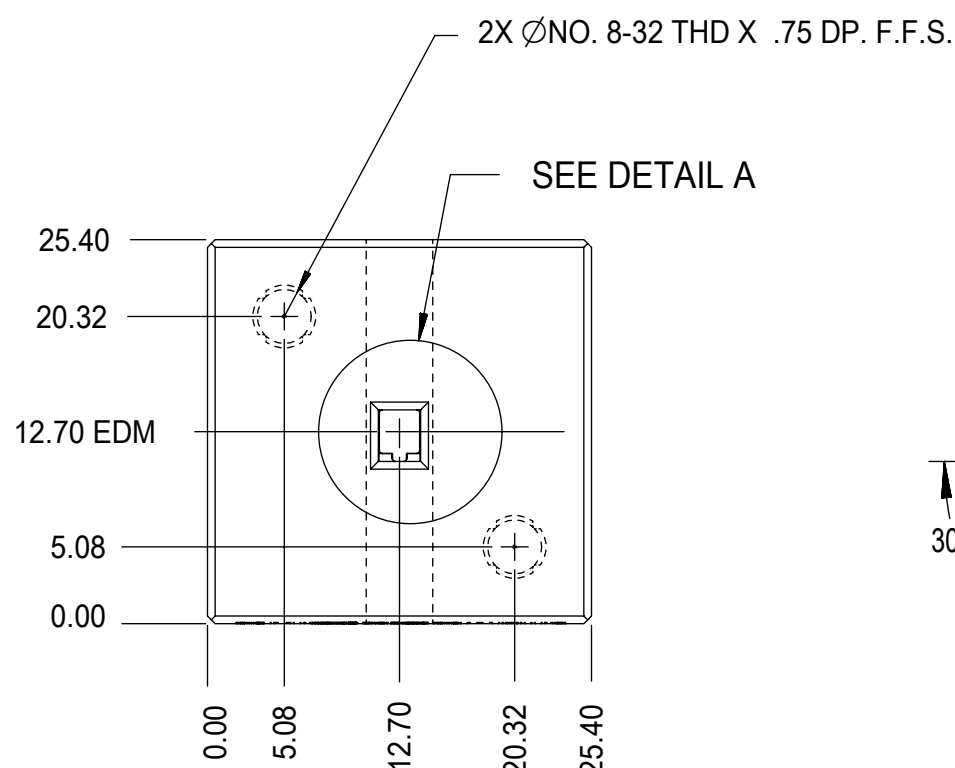
GROMMET SEAL / CAP CONFIGURATION TO MODIFY LARGE POLARIZATION RIB CAVITY TO ACCEPT SMALL POLARIZATION RIB APPLICATIONS

SYMBOLS = 0 = 0 = 0 = 0 = 0 = 0 = 0 = 0 = 0	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
	DIMENSION UNITS	SCALE	CURRENT REV DESC:
	mm		EC NO: 645050 DRWN: BSKANTHARAJU 2020/09/03 CHK'D: JCUATACERVAN 2020/09/18 APPR: JCUATACERVAN 2020/09/18
	molex MX150 RECEPTACLE TERMINAL PRODUCT CUSTOMER DRAWING		
GENERAL TOLERANCES (UNLESS SPECIFIED)		INITIAL REVISION:	
ANGULAR TOL ± 3.0°		DRWN: LPULLIAM 2005/06/21 APPR: BMOSEY 2005/06/22	
4 PLACES ±		DOCUMENT NUMBER	
3 PLACES ±		SD-33012-002	
2 PLACES ± 0.10		DOC TYPE DOC PART REVISION	
1 PLACE ± 0.3		PSD 001 D	
0 PLACES ±		MATERIAL NUMBER CUSTOMER SHEET NUMBER	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE GENERAL MARKET 2 OF 5	

THIS CHECKING - AID IS FOR SMALL POLARIZATION RIB TERMINALS ONLY

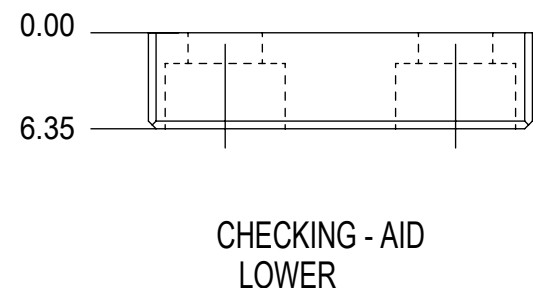


CHECKING - AID ASSEMBLY
SCALE 1:1



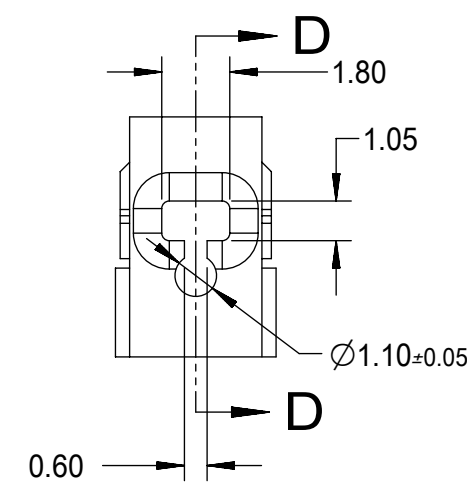
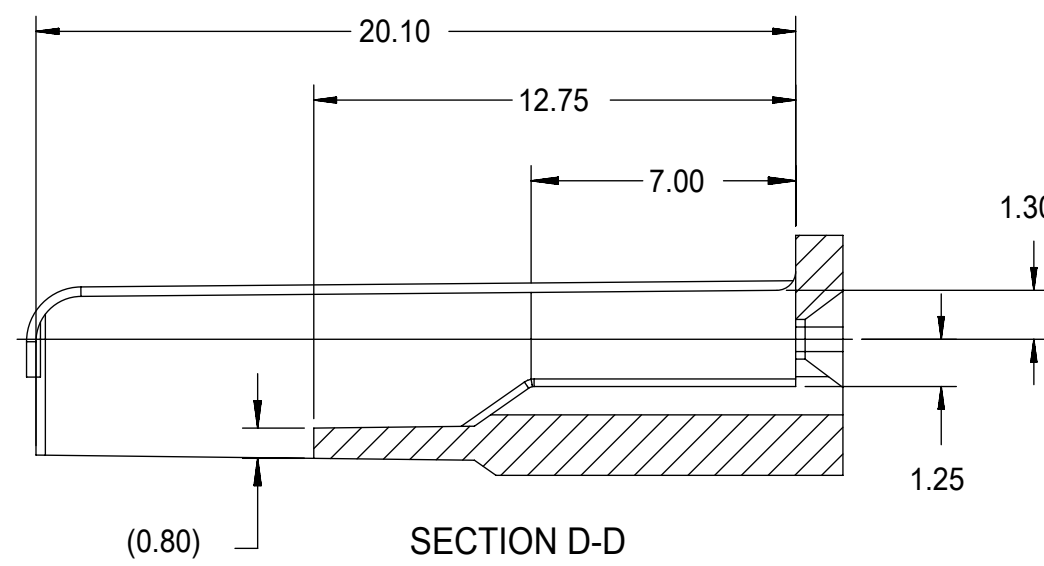
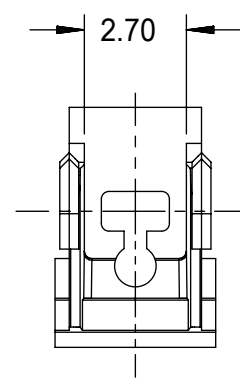
CRIMP REQUIREMENTS:

1. CRIMP STRAIGHTNESS MUST BE MAINTAINED USE A KNOCKDOWN TOOL LOCATED AS SHOWN TERMINAL BOX MUST NOT BE DEFORMED
2. AFTER CRIMPING, THE CRIMPED TERMINAL (AND UP TO 5 mm OF WIRE PAST THE INSULATOR CUTOFF TAB) MUST FIT FREELY INTO THE CHECKING-AID SHOWN ON THIS PAGE
3. FOR OTHER MECHANICAL REQUIREMENTS ON CRIMPED TERMINALS, REFER TO SAE/USCAR-21 (5-13-02) SECTIONS 4.2 (VISUAL INSPECTION), 4.2 (CROSS SECTION ANALYSIS) AND 4.4 (CONDUCTOR CRIMP PULLOUT FORCE)

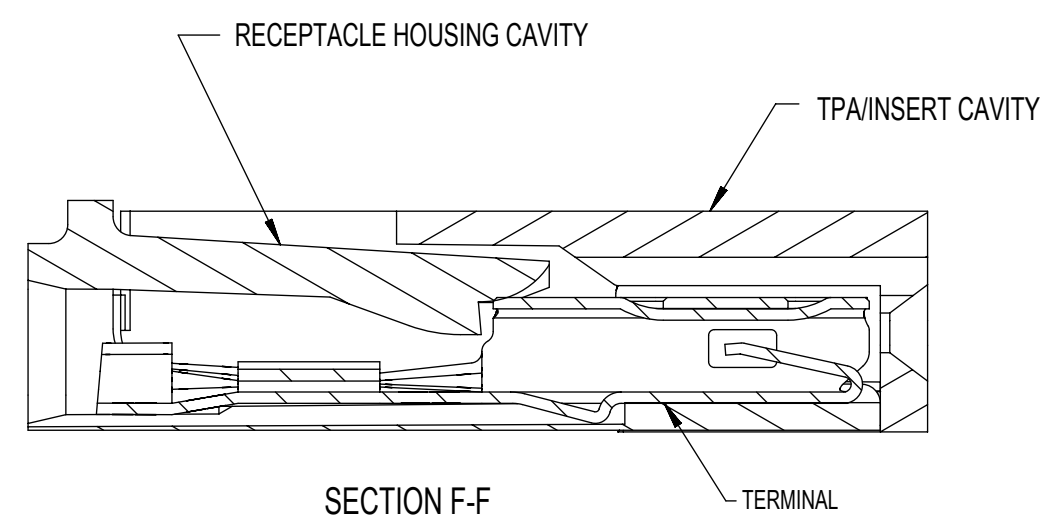
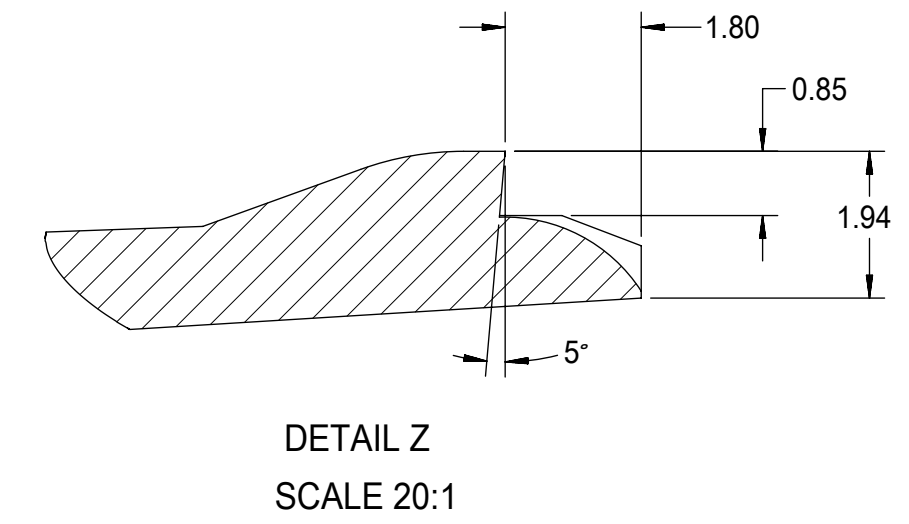
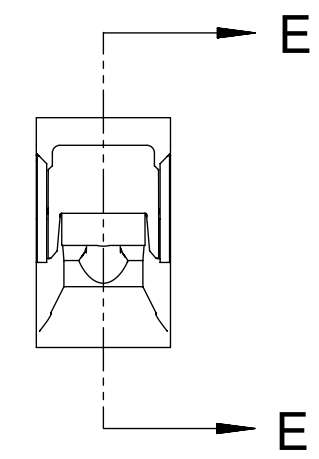
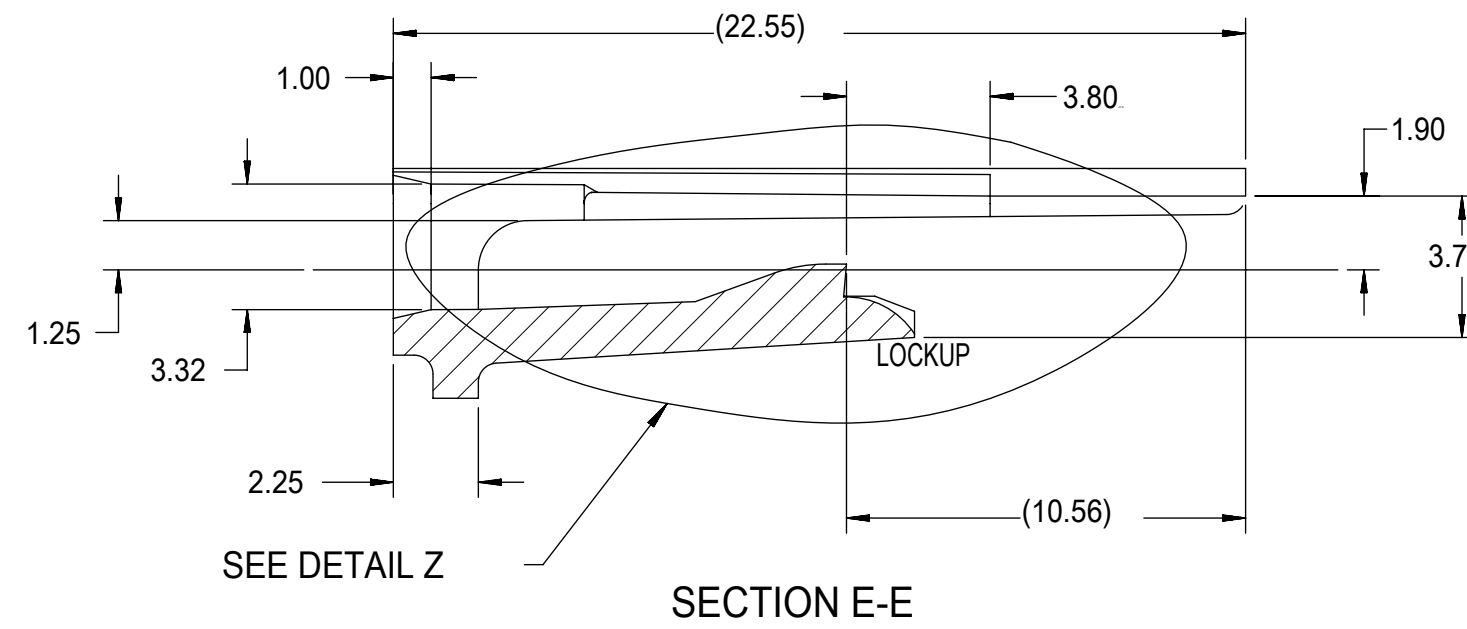
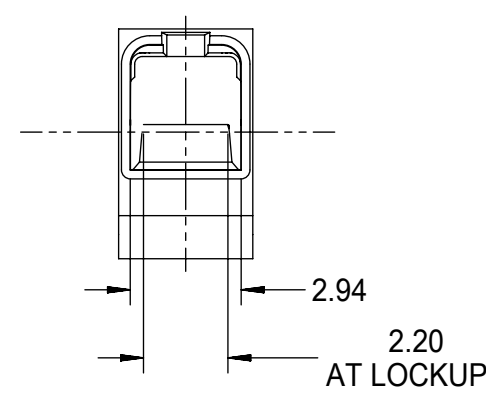


UPPER & LOWER
CHECKING-AID
A2 TOOL STEEL
HARDEN & GRIND
ROCKWELL "C" 56-58

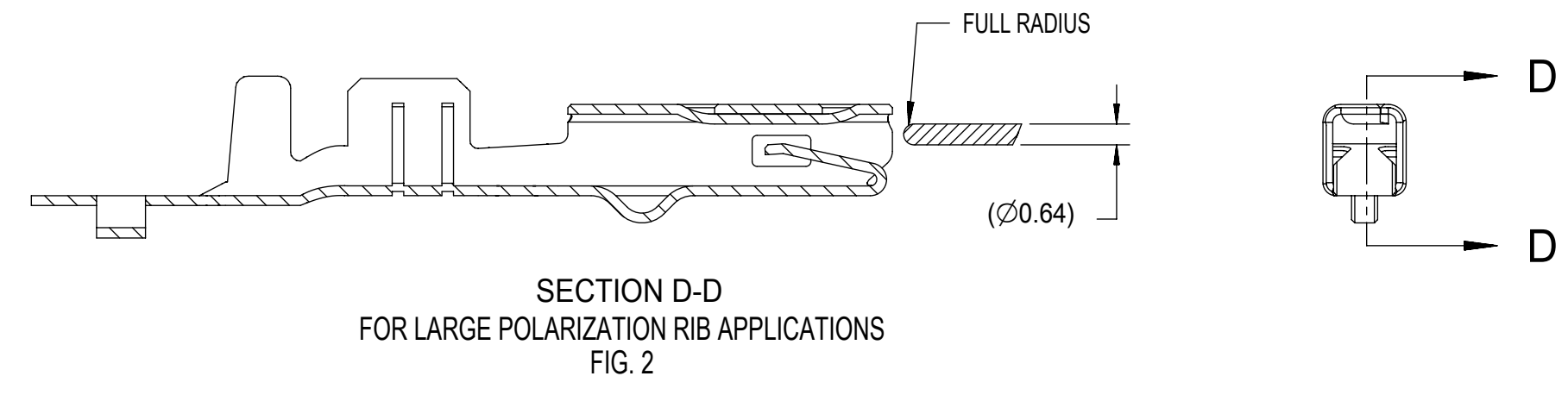
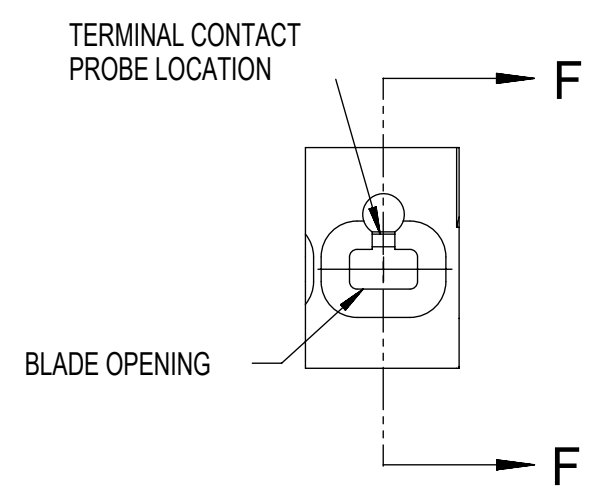
SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		CURRENT REV DESC:						
	DIMENSION UNITS	SCALE						EC NO: 645050 DRWN: BSKANTHARAJU 2020/09/03 CHK'D: JCUATACERVAN 2020/09/18 APPR: JCUATACERVAN 2020/09/18	
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▽ = 0	ANGULAR TOL ± 3.0°		APPR: BMOSEY 2005/06/22						
▽ = 0	4 PLACES ±		DRAWING			SEE TABLE	GENERAL MARKET	3 OF 5	SHEET NUMBER
▽ = 0	3 PLACES ±		SERIES						
▽ = 0	2 PLACES ± 0.10		C-SIZE			MATERIAL NUMBER			
▽ = 0	1 PLACE ± 0.3		THIRD ANGLE PROJECTION			CUSTOMER			
▽ = 0	0 PLACES ±		DRAWING			GENERAL MARKET			
▽ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SERIES			33012			



- NOTES: UNLESS OTHERWISE SPECIFIED
1. TOLERANCES: LINEAR ± 0.10
ANGULAR $\pm 3^\circ$
 2. ALL DRAFT WITHIN TOLERANCE.
 3. MAX RADII ON ALL CORNERS SHOWN SHARP: 0.10
 4. MAX FLASH PERMISSIBLE: 0.1
 5. EJECTOR PIN MARKS PERMISSIBLE IF FLUSH TO 0.25 BELOW SURFACE.
 6. MATERIAL: HOUSING/FINGER SPECIFICATION ENGINEERED FOR MATERIAL WITH THE FOLLOWING PROPERTIES:
A. FLEXURAL MODULUS = 4,500 TO 9,400 MPa
PER ASTM TEST D790
B. ELONGATION AT YIELD = 2.3% OR BETTER
PER ASTM TEST D638 TYPE V
 7. CAVITY SPEC FOR USE ONLY WITH MOLEX RECEPTACLE
TERMINAL PART NUMBERS SPECIFIED ELSEWHERE ON THIS
DRAWING



RECEPTACLE CAVITY ASSEMBLED VIEWS
FOR SMALL POLARIZATION RIB APPLICATIONS
FIG. 1



SECTION D-D
FOR LARGE POLARIZATION RIB APPLICATIONS
FIG. 2

PROBING DOWN THE THROAT MUST USE THIS TERMINAL PROBE

FOR PROBING INFORMATION REFERENCE
MOLEX MX150 APPLICATION SPEC AS-33472-100

PREFERRED PROBING LOCATION IS NOT ON SPRING MEMBER

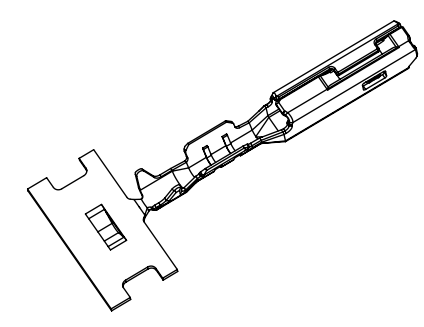
IF ELECTRICAL CONTINUITY PROBE TOUCHES SPRING MEMBER USE PROBING AS SHOWN IN FIG. 2

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									
SYMBOLS		DIMENSION UNITS		SCALE		CURRENT REV DESC:			
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▽ = 0		4 PLACES \pm				APPR: JCUATACERVAN 2020/09/18			
▽ = 0		3 PLACES \pm				INITIAL REVISION:			
▽ = 0		2 PLACES ± 0.10				DRWN: LPULLIAM 2005/06/21			
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▽ = 0		0 PLACES \pm				THIRD ANGLE PROJECTION			
▽ = 0		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				DRAWING		SERIES	
		C-SIZE		33012		MATERIAL NUMBER		CUSTOMER	
		SEE TABLE		GENERAL MARKET		DOCUMENT NUMBER		DOC TYPE DOC PART REVISION	
						SD-33012-002		PSD 001 D	
						SHEET NUMBER		4 OF 5	

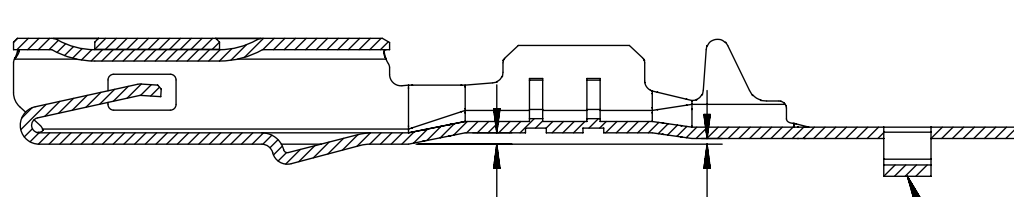
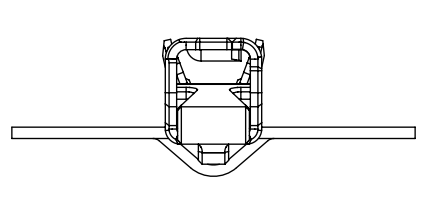
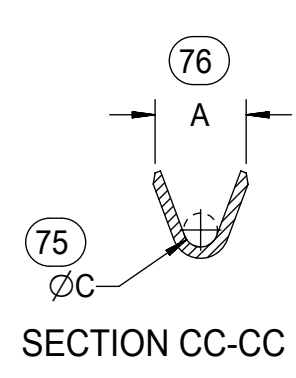
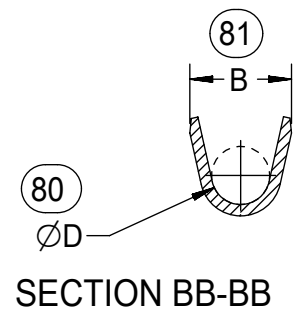
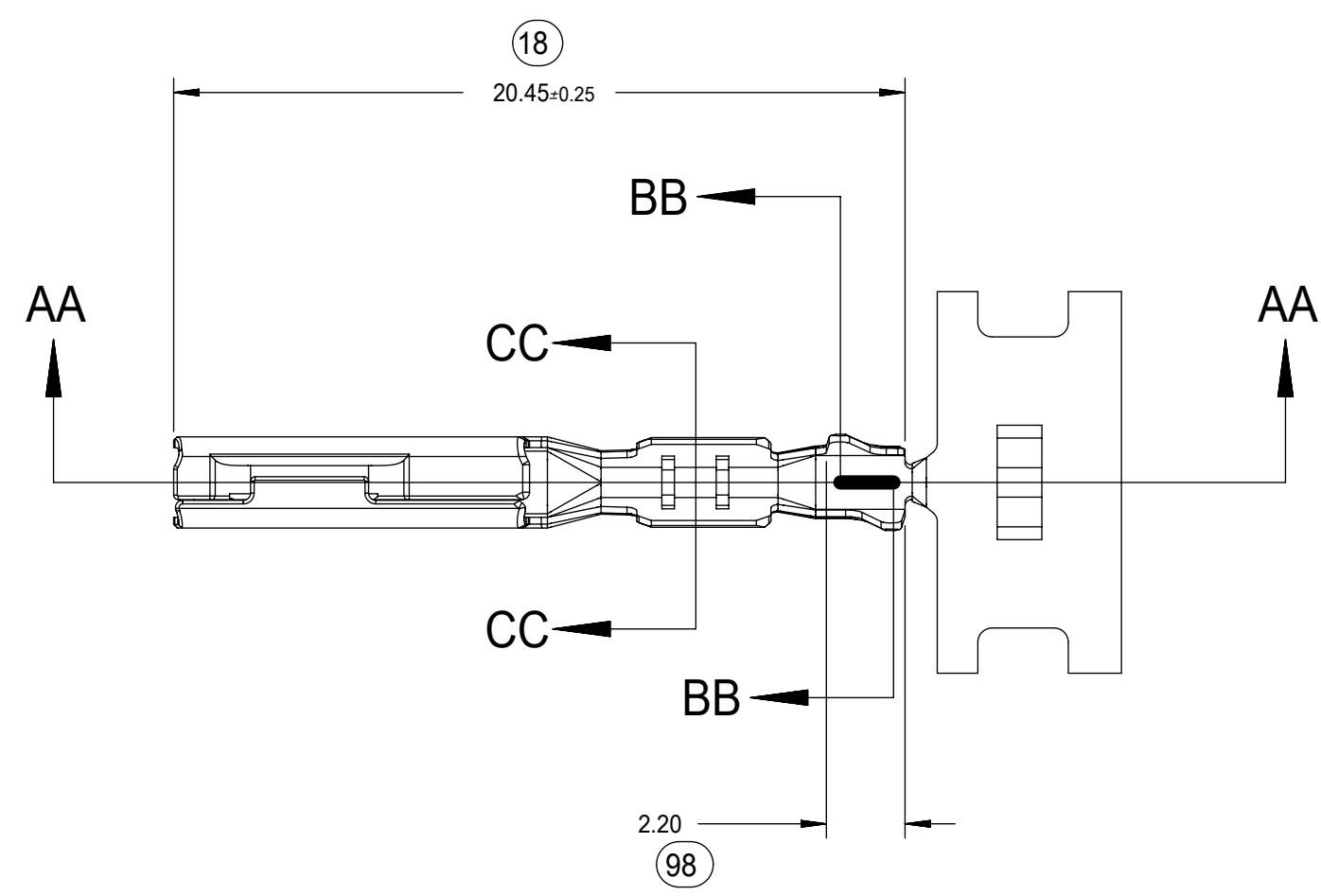


MX150
RECEPTACLE TERMINAL

PRODUCT CUSTOMER DRAWING



ISO VIEW
SCALE 2:1



SECTION AA-AA
M3 GRIP CODE TERMINAL
SEE TABLE (SHEET 2) FOR PART NUMBERS

CARRIER BUMP DIRECTION
POINTS DOWN FOR TIN PLATED TERMINAL
POINTS UP FOR PRECIOUS METAL PLATED TERMINAL

SYMBOLS ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		CURRENT REV DESC:					
	DIMENSION UNITS	SCALE	EC NO: 645050					DOCUMENT NUMBER
	mm	5:1	DRWN: BSKANTHARAJU 2020/09/03		MX150			
	GENERAL TOLERANCES (UNLESS SPECIFIED)		CHK'D: JCUATACERVAN 2020/09/18		RECEPTACLE TERMINAL			
	ANGULAR TOL ± 3.0°		APPR: JCUATACERVAN 2020/09/18		PRODUCT CUSTOMER DRAWING			
	4 PLACES ±		INITIAL REVISION:		SD-33012-002			
	3 PLACES ±		DRWN: LPULLIAM 2005/06/21		PSD 001 D			
	2 PLACES ± 0.10		APPR: BMOSEY 2005/06/22		SEE TABLE			
	1 PLACE ± 0.3		THIRD ANGLE PROJECTION		GENERAL MARKET			
	0 PLACES ±		DRAWING		SHEET NUMBER			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		C-SIZE		5 OF 5				