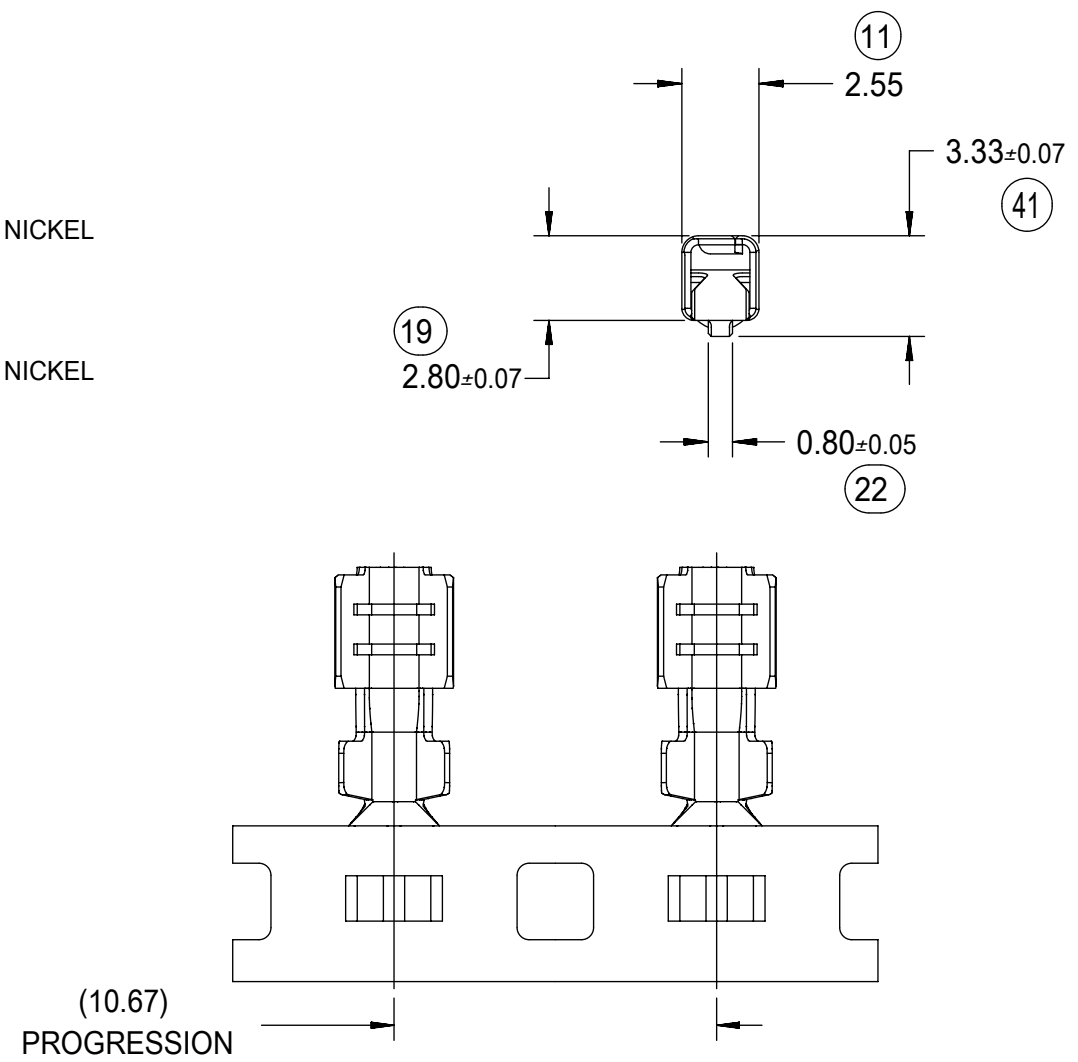


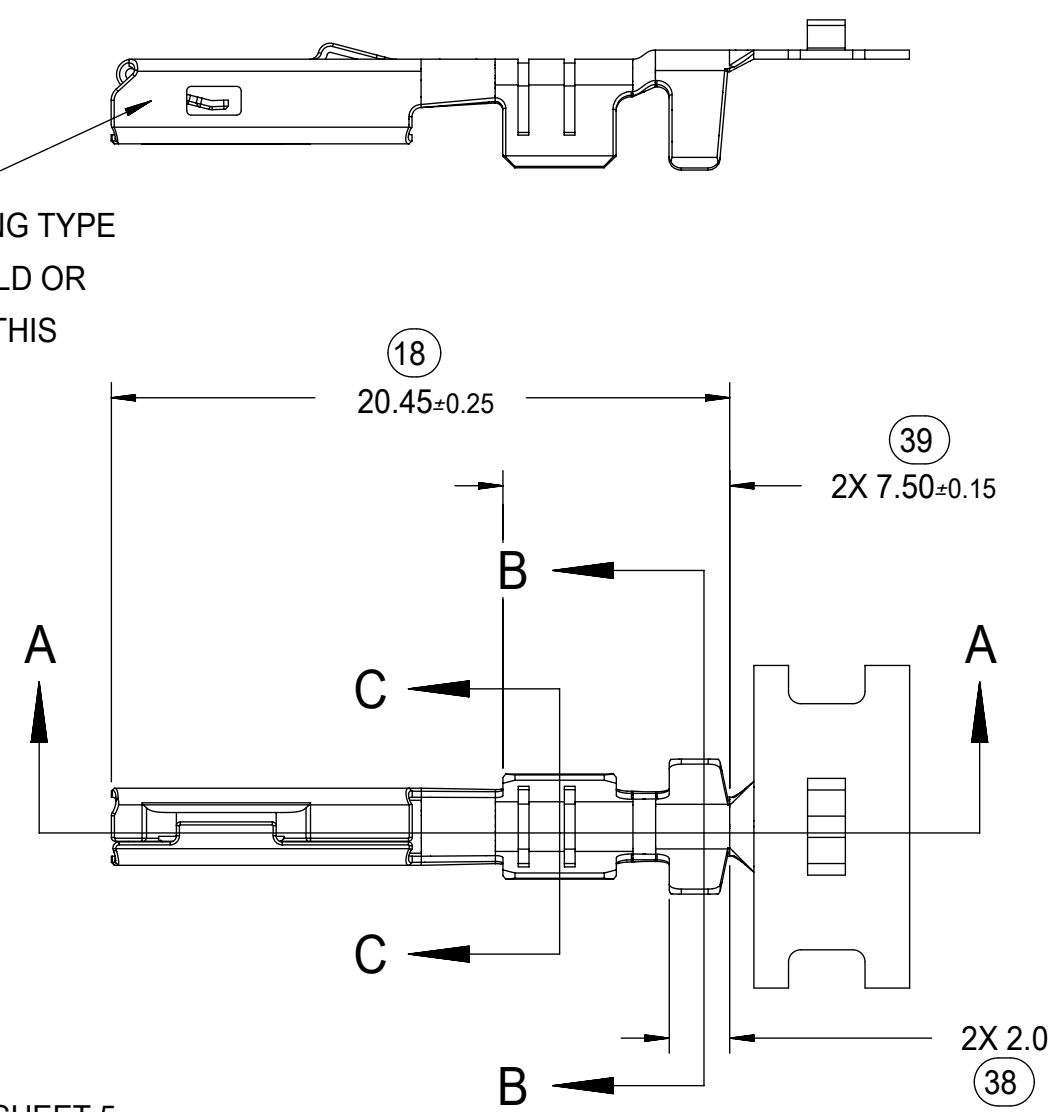
DIMENSIONS FOR LARGE POLARIZATION RIB TERMINAL ONLY

NOTES: (UNLESS OTHERWISE SPECIFIED)

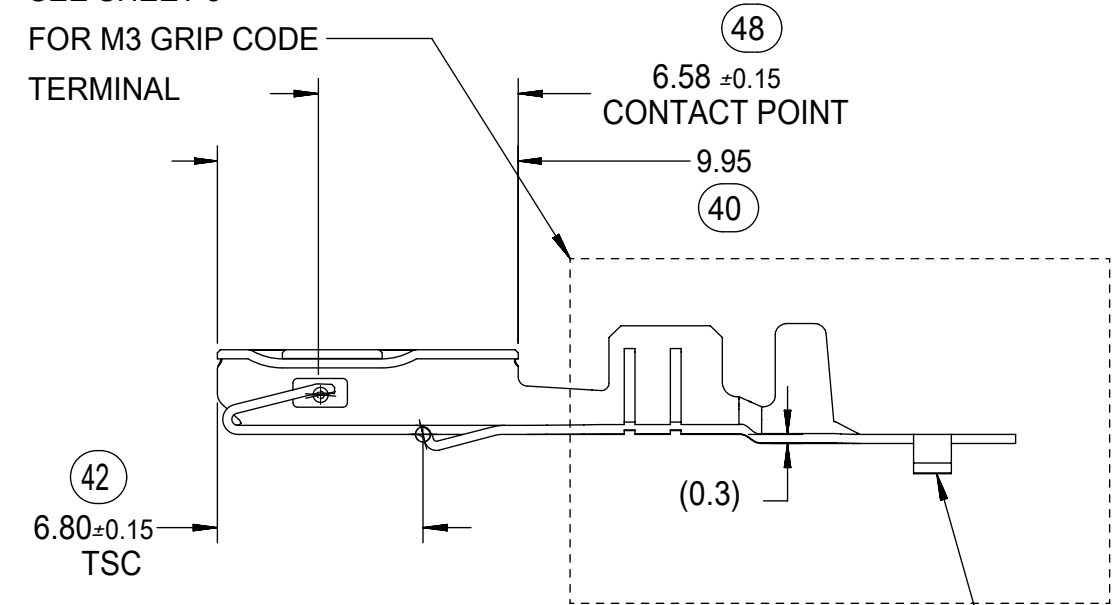
- MATING TERMINAL SHOWN ON SD-33000-001
- MATERIAL: ASTM B422, UNS C19025, HR04
THICKNESS: 0.30 mm ±0.01
TEMPER: FULL HARD (REF)
TENSILE: 496 MIN MPA
- TIN PLATED TERMINAL FINISH:
OVERALL UNDERPLATE ELECTRODEPOSITED NICKEL
OVERALL ELECTRODEPOSITED REFLOW TIN
- GOLD PLATED TERMINAL FINISH
OVERALL UNDERPLATE 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



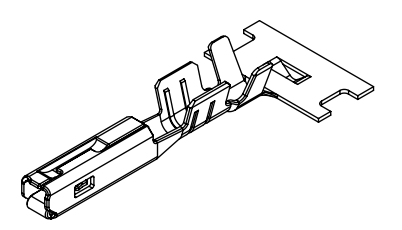
STAMP PLATING TYPE
Sn-TIN, Au-GOLD OR
Ag-SILVER IN THIS
AREA



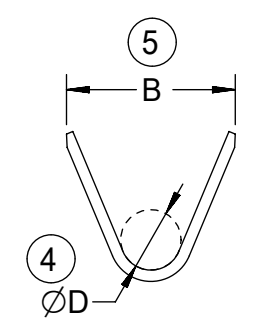
SEE SHEET 5
FOR M3 GRIP CODE
TERMINAL



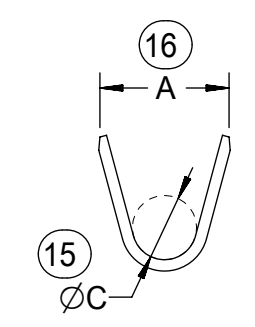
SECTION A-A



SCALE 2:1



SECTION B-B
SCALE 5:1



SECTION C-C
SCALE 5:1

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

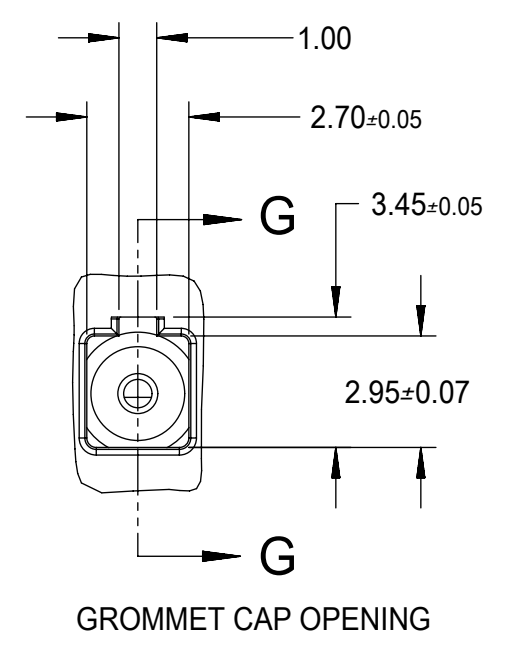
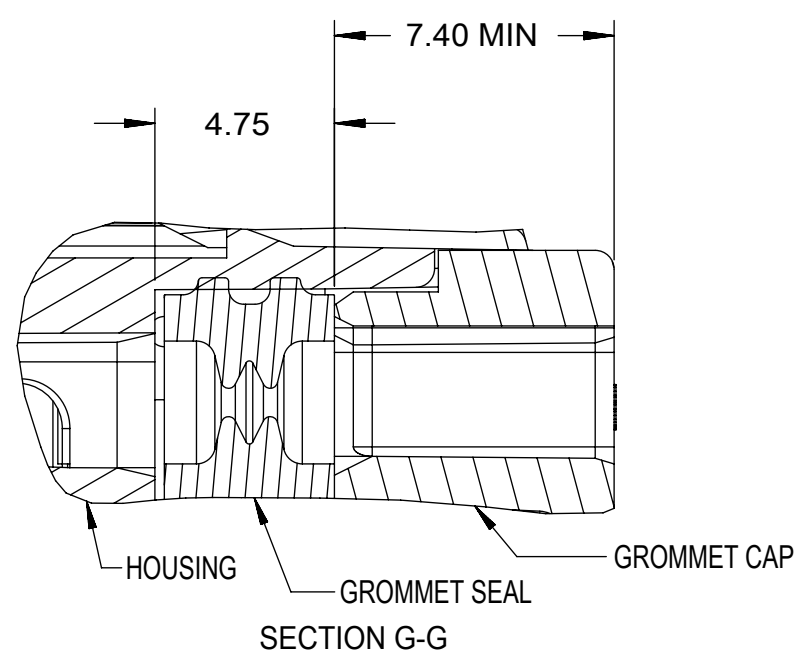
SYMBOLS										THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									
DIMENSION UNITS		SCALE		CURRENT REV DESC:															
mm		4:1		EC NO: 645050															
GENERAL TOLERANCES (UNLESS SPECIFIED)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

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)							

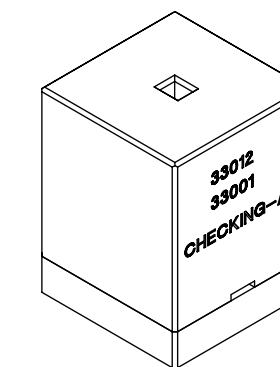
* REFERENCE AS-33012-002 FOR SPECIFIC WIRE TYPES



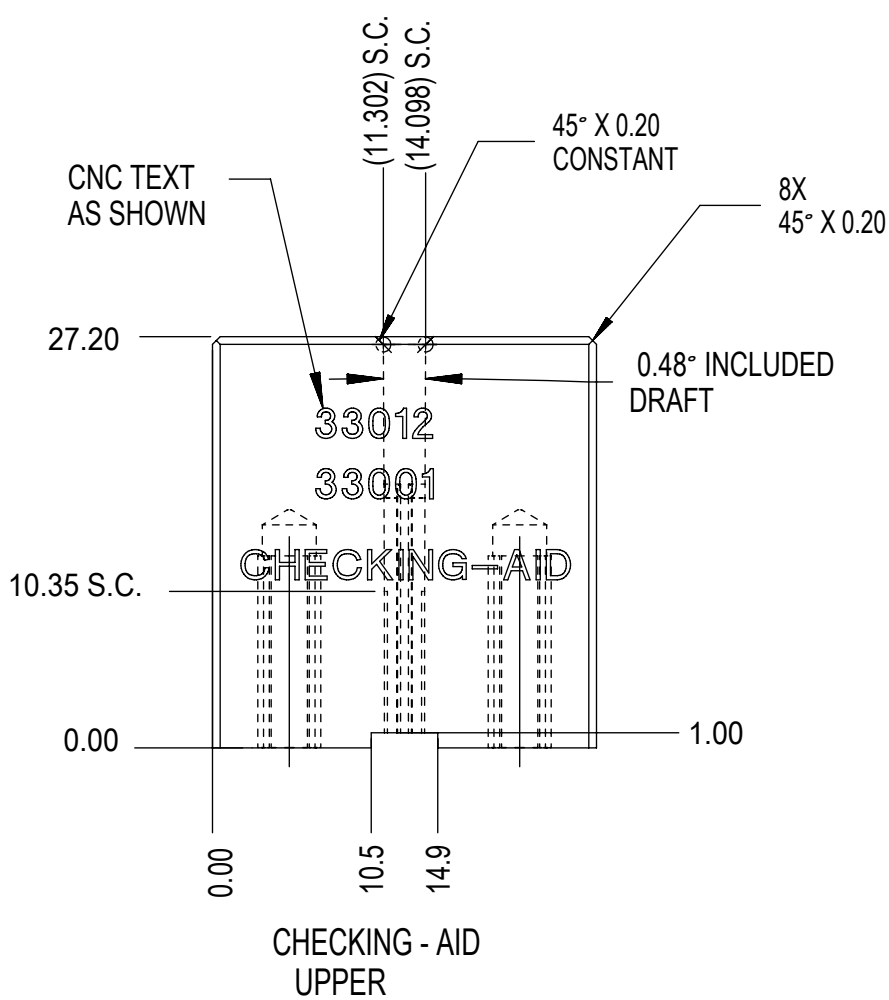
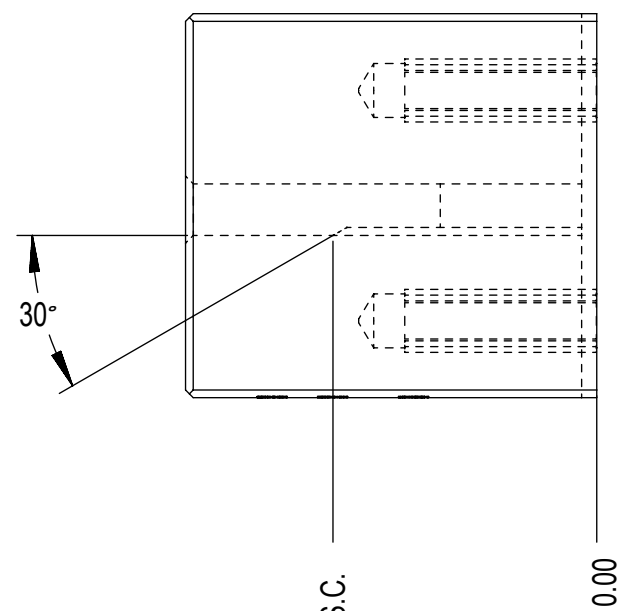
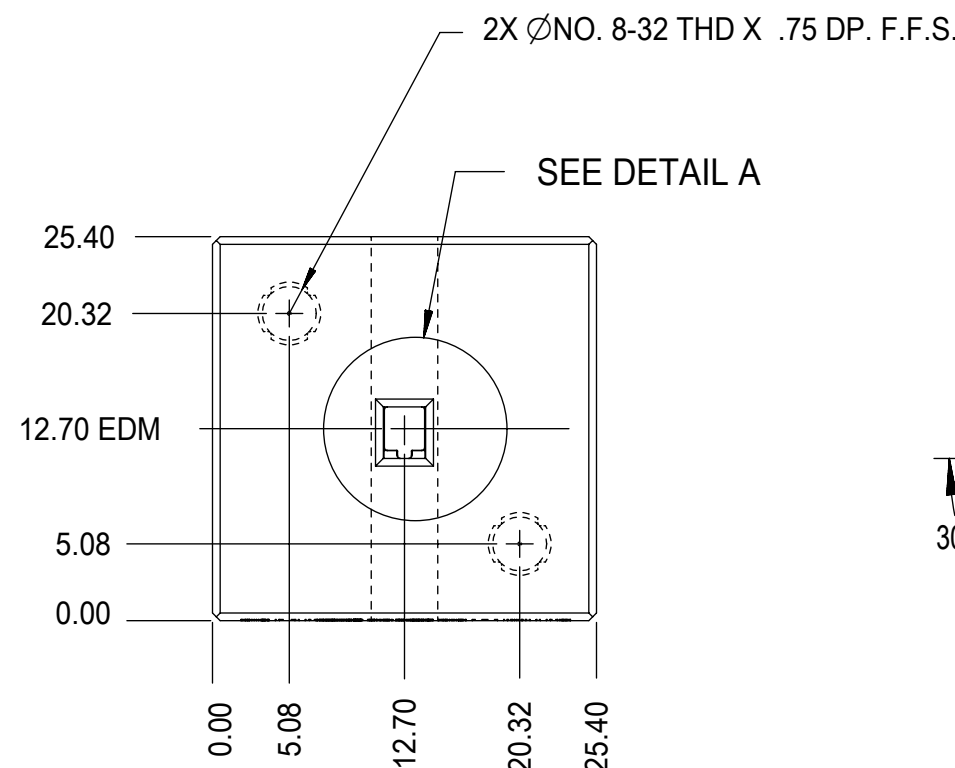
GROMMET SEAL / CAP CONFIGURATION TO MODIFY LARGE POLARIZATION RIB CAVITY TO ACCEPT SMALL POLARIZATION RIB APPLICATIONS

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:								
▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0		mm		EC NO: 645050 DRWN: BSKANTHARAJU 2020/09/03 CHK'D: JCUATACERVAN 2020/09/18 APPR: JCUATACERVAN 2020/09/18								
▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0		GENERAL TOLERANCES (UNLESS SPECIFIED)		INITIAL REVISION: DRWN: LPULLIAM 2005/06/21 APPR: BMOSEY 2005/06/22				MX150 RECEPTACLE TERMINAL PRODUCT CUSTOMER DRAWING				
▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0		ANGULAR TOL ± 3.0°		4 PLACES ± 3 PLACES ± 2 PLACES ± 0.10 1 PLACE ± 0.3 0 PLACES ±				DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION
▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		DRAWING	SERIES	MATERIAL NUMBER		CUSTOMER		SHEET NUMBER
▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0						C-SIZE	33012	SEE TABLE		GENERAL MARKET		2 OF 5
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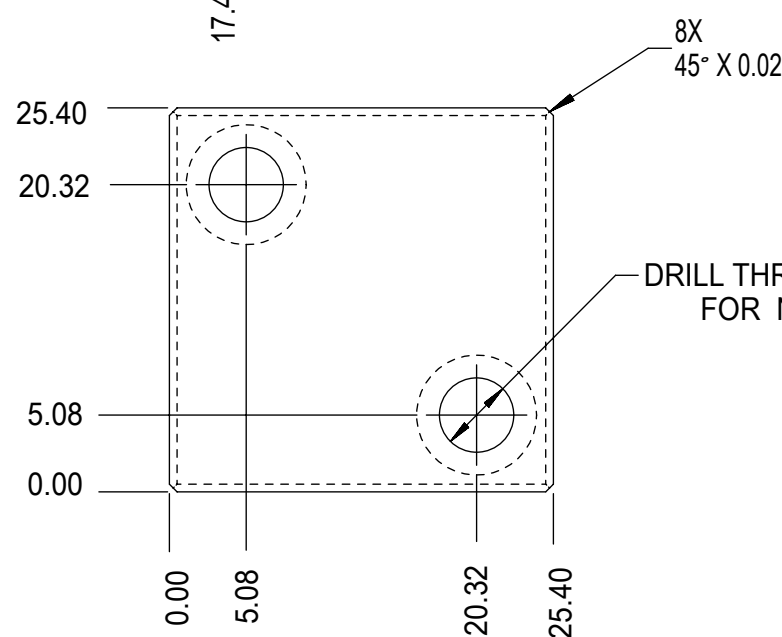
THIS CHECKING - AID IS FOR SMALL POLARIZATION RIB TERMINALS ONLY



CHECKING - AID ASSEMBLY
SCALE 1:1

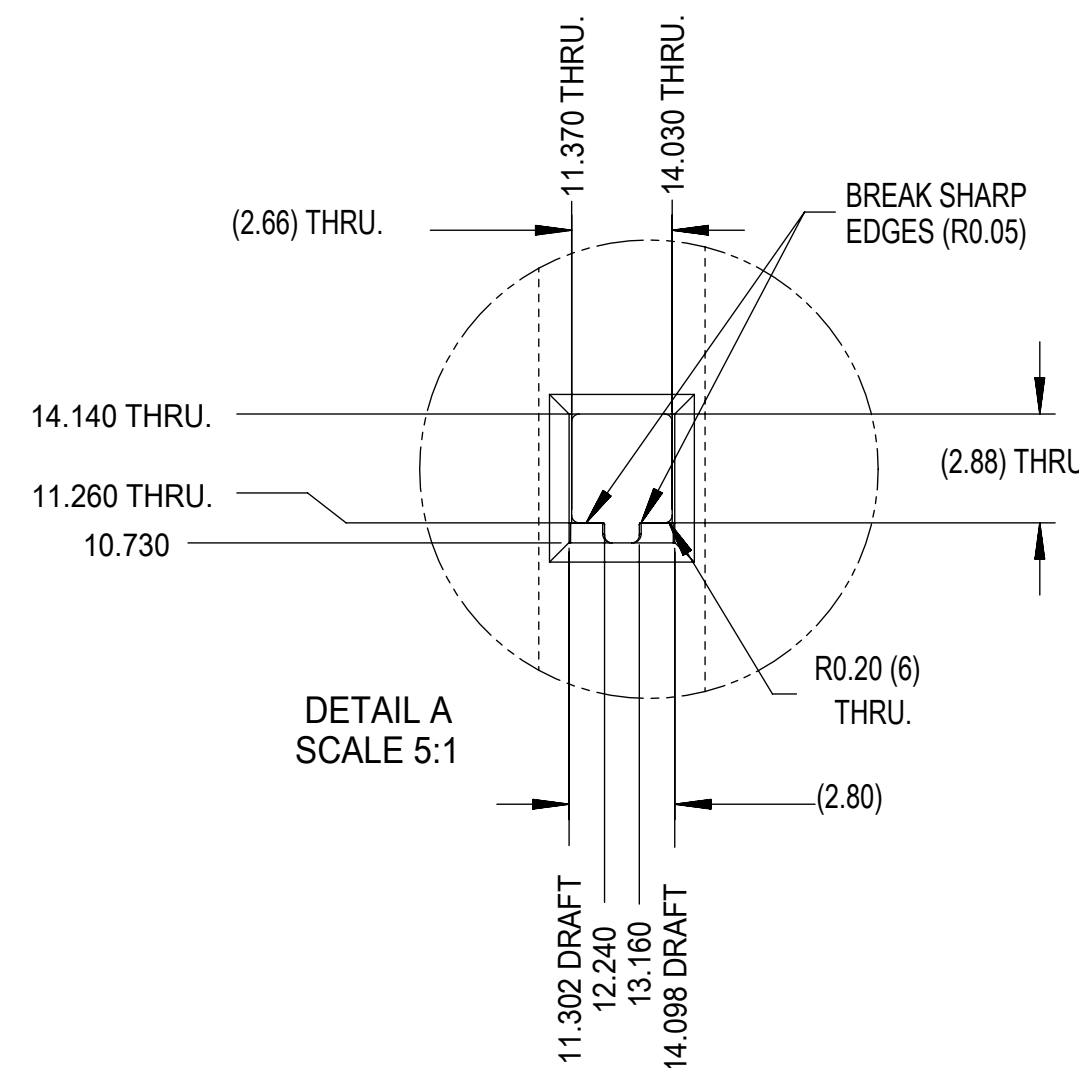


CHECKING - AID
UPPER

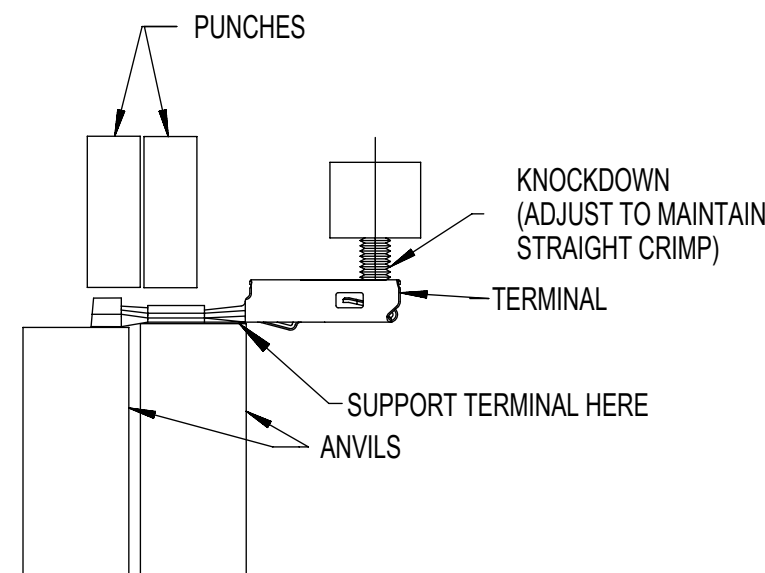


CHECKING - AID
LOWER

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



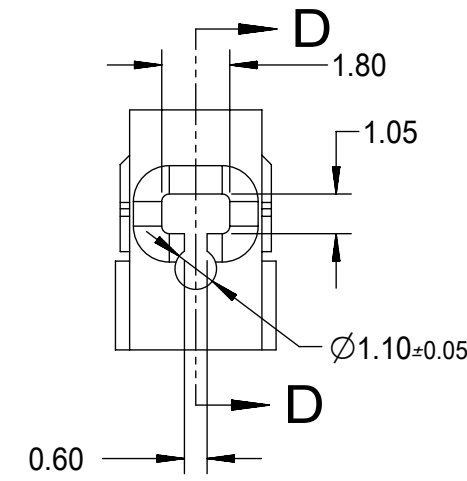
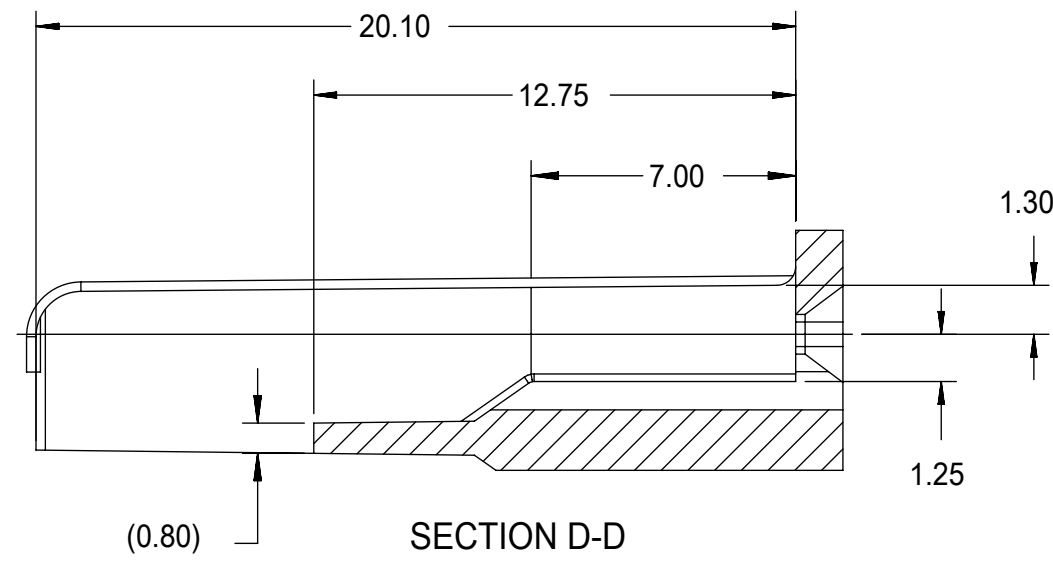
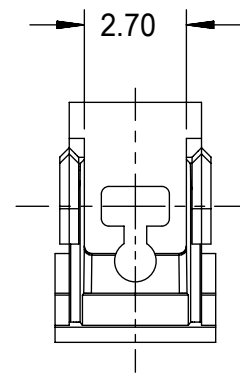
DETAIL A
SCALE 5:1



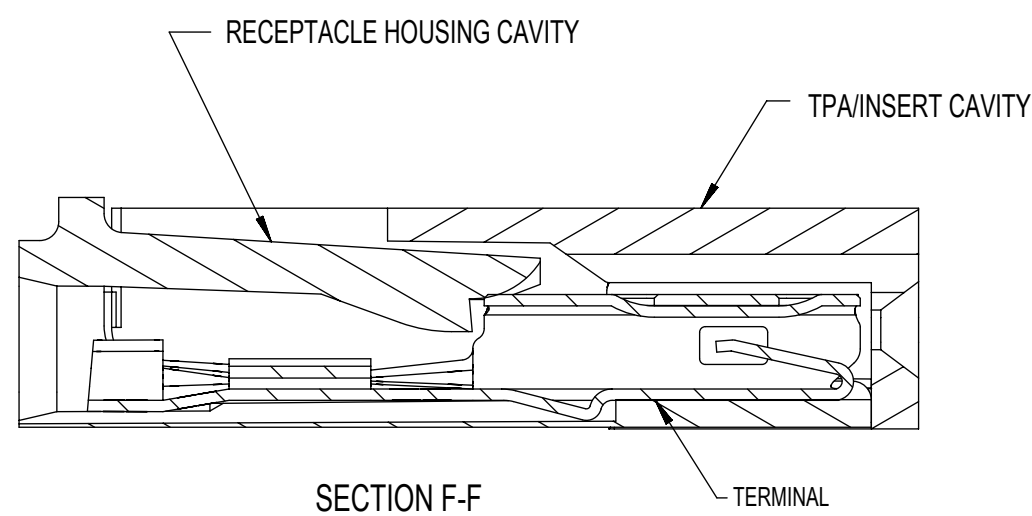
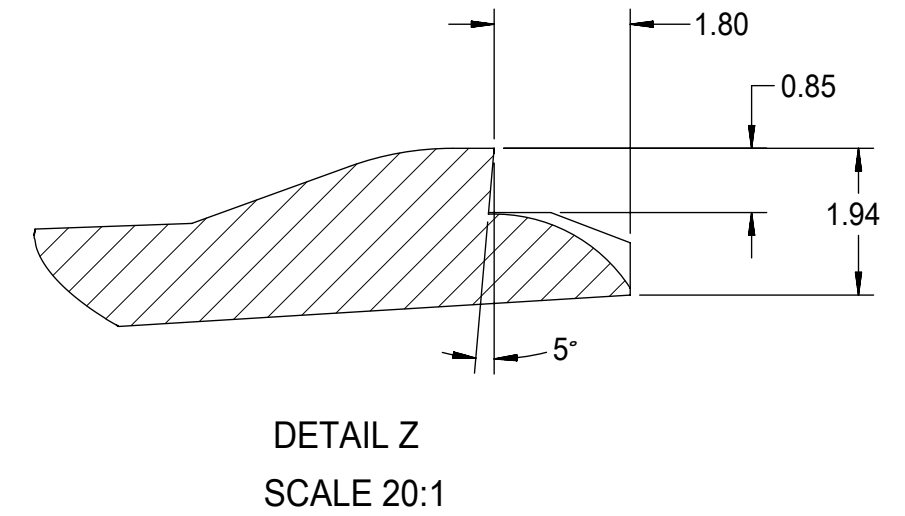
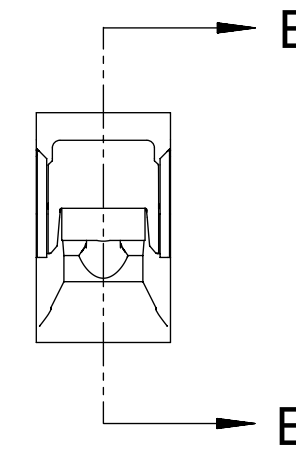
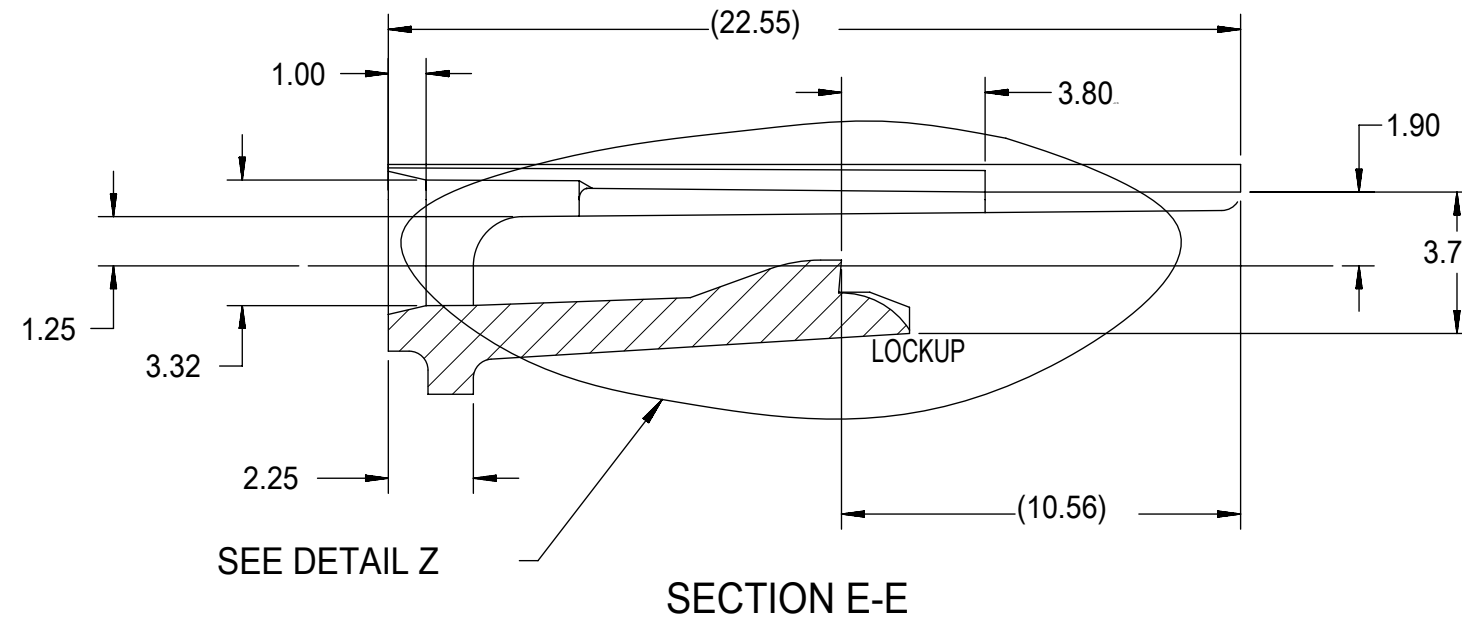
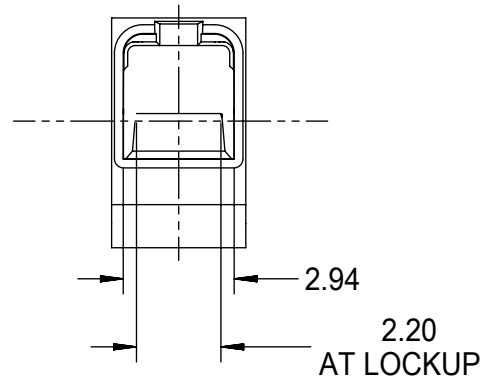
CRIMP REQUIREMENTS:

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)

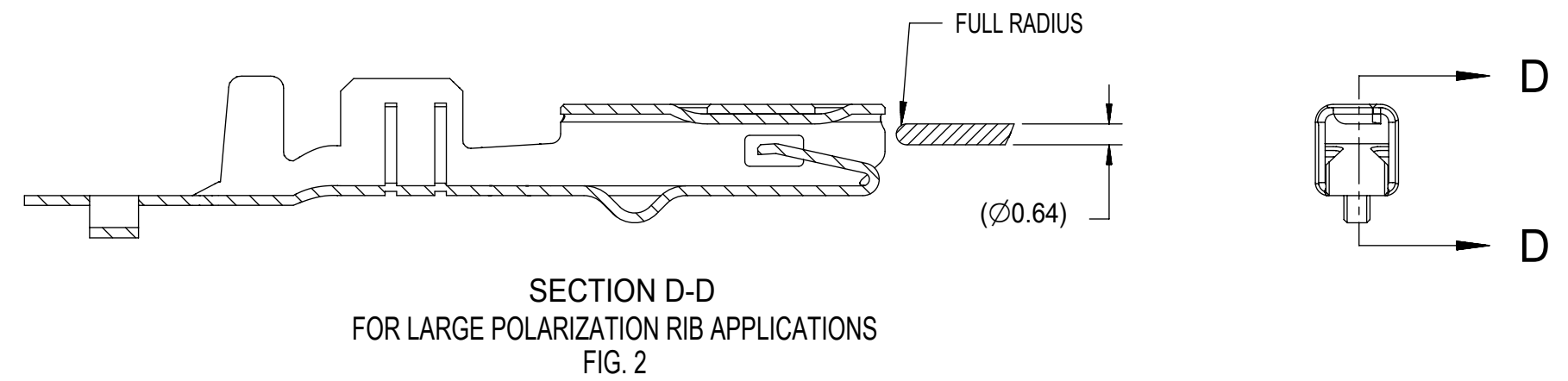
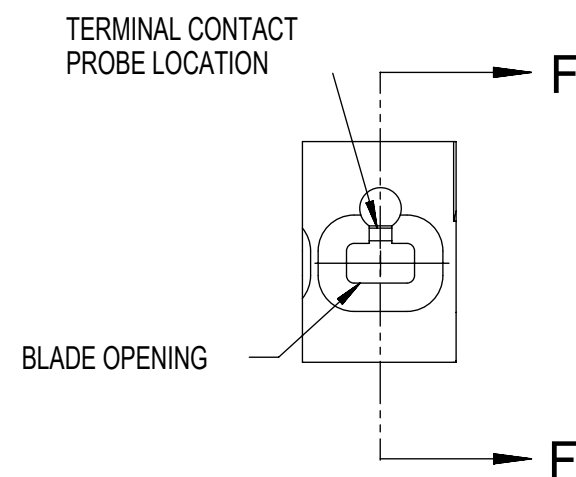
SYMBOLS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		CURRENT REV DESC:		molex		
▽ = 0	mm	SCALE	2:1	EC NO: 645050		MX150		
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DRWN: BSKANTHARAJU 2020/09/03		RECEPTACLE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



- 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

SYMBOLS		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:	
$\nabla = 0$	mm	5:1	
$\nabla = 0$	GENERAL TOLERANCES (UNLESS SPECIFIED)		
$\nabla = 0$	ANGULAR TOL $\pm 3.0^\circ$		
$\nabla = 0$	4 PLACES	\pm	
$\nabla = 0$	3 PLACES	\pm	
$\nabla = 0$	2 PLACES	± 0.10	
$\nabla = 0$	1 PLACE	± 0.3	
$\nabla = 0$	0 PLACES	\pm	
$\nabla = 0$	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		
	THIRD ANGLE PROJECTION	DRAWING	SERIES
		C-SIZE	33012
	EC NO: 645050		DOC TYPE
	DRWN: BSKANTHARAJU 2020/09/03		DOC PART
	CHK'D: JCUATACERVAN 2020/09/18		REVISION
	APPR: JCUATACERVAN 2020/09/18		
	INITIAL REVISION:		
	DRWN: LPULLIAM 2005/06/21		
	APPR: BMOSER 2005/06/22		
	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
	SEE TABLE	GENERAL MARKET	4 OF 5

molex

MX150 RECEPTACLE TERMINAL

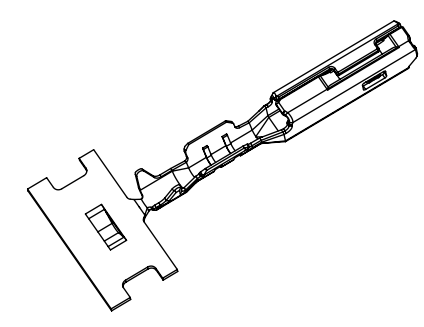
PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER DOC TYPE DOC PART REVISION

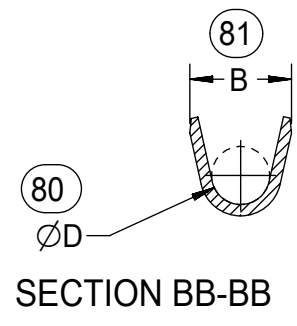
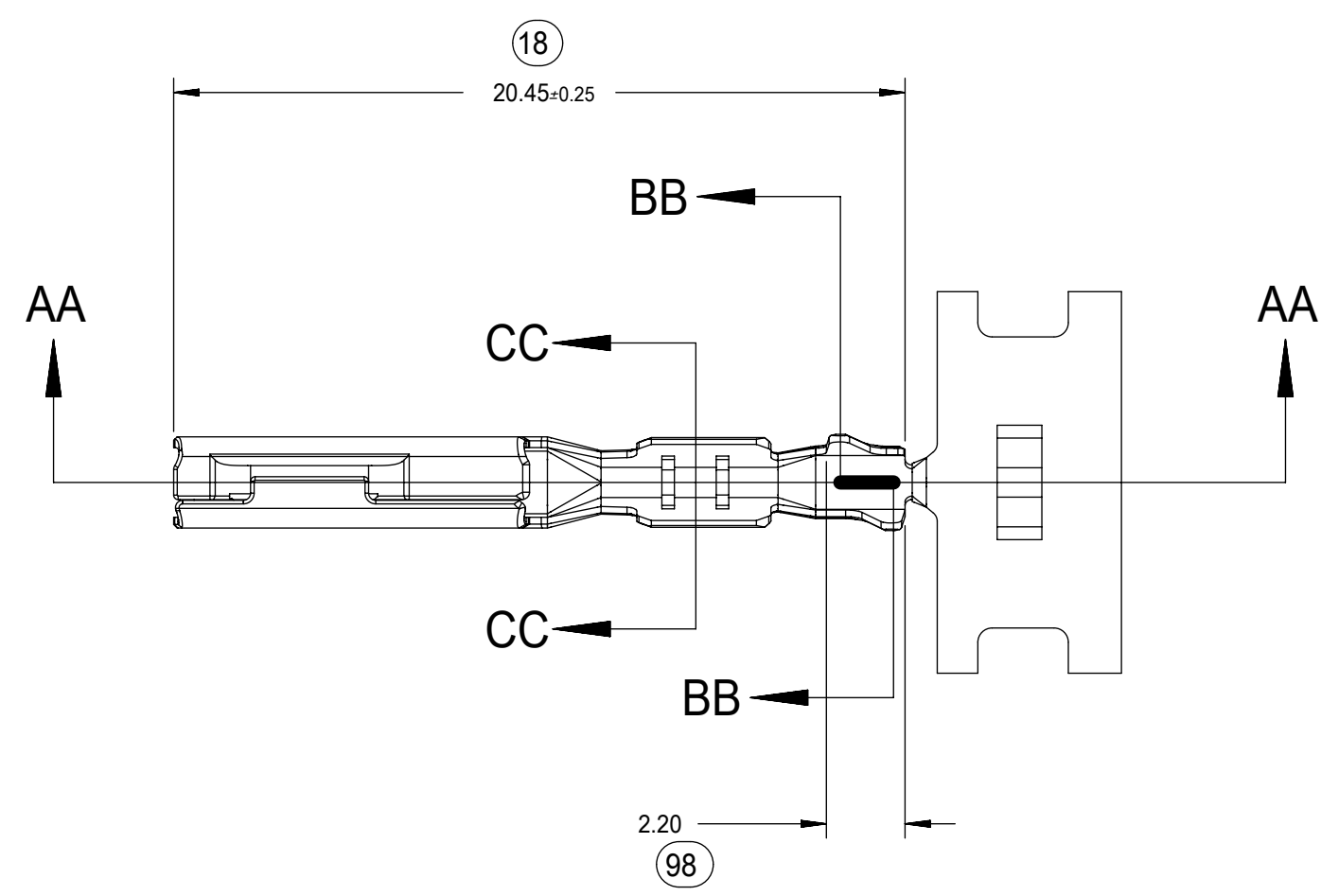
SD-33012-002 PSD 001 D

MATERIAL NUMBER CUSTOMER SHEET NUMBER

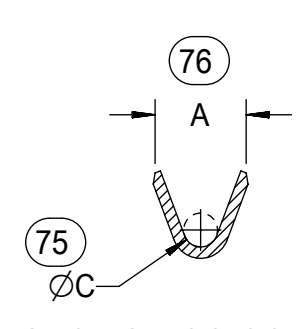
SEE TABLE GENERAL MARKET 4 OF 5



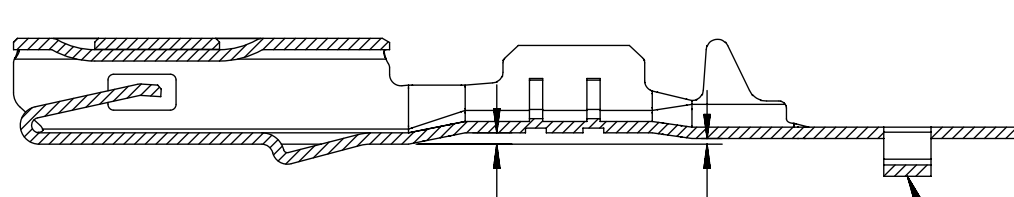
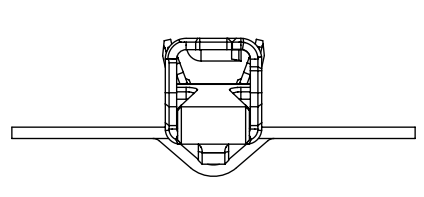
ISO VIEW
SCALE 2:1



SECTION BB-BB



SECTION CC-CC



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	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:								
$\nabla = 0$	mm	5:1	EC NO: 645050								
$\nabla = 0$	GENERAL TOLERANCES (UNLESS SPECIFIED)		DRWN: BSKANTHARAJU 2020/09/03							RECEPTACLE TERMINAL	
$\nabla = 0$	ANGULAR TOL $\pm 3.0^\circ$		CHK'D: JCUATACERVAN 2020/09/18							PRODUCT CUSTOMER DRAWING	
$\nabla = 0$	4 PLACES \pm		APPR: JCUATACERVAN 2020/09/18							DOCUMENT NUMBER	
$\nabla = 0$	3 PLACES \pm		INITIAL REVISION:							DOC TYPE	
$\nabla = 0$	2 PLACES ± 0.10		DRWN: LPULLIAM 2005/06/21							DOC PART	
$\nabla = 0$	1 PLACE ± 0.3		APPR: BMOSEK 2005/06/22							REVISION	
$\nabla = 0$	0 PLACES \pm		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
$\nabla = 0$					C-SIZE	33012	SEE TABLE	GENERAL MARKET	SD-33012-002	PSD 001 D	
										5 OF 5	