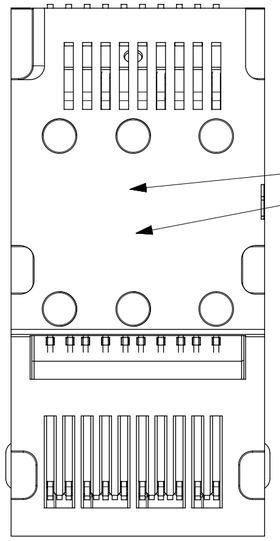
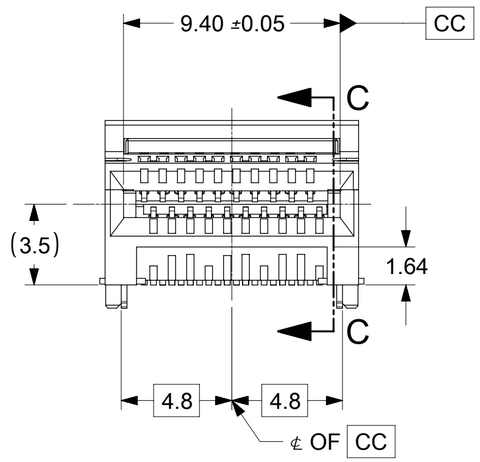
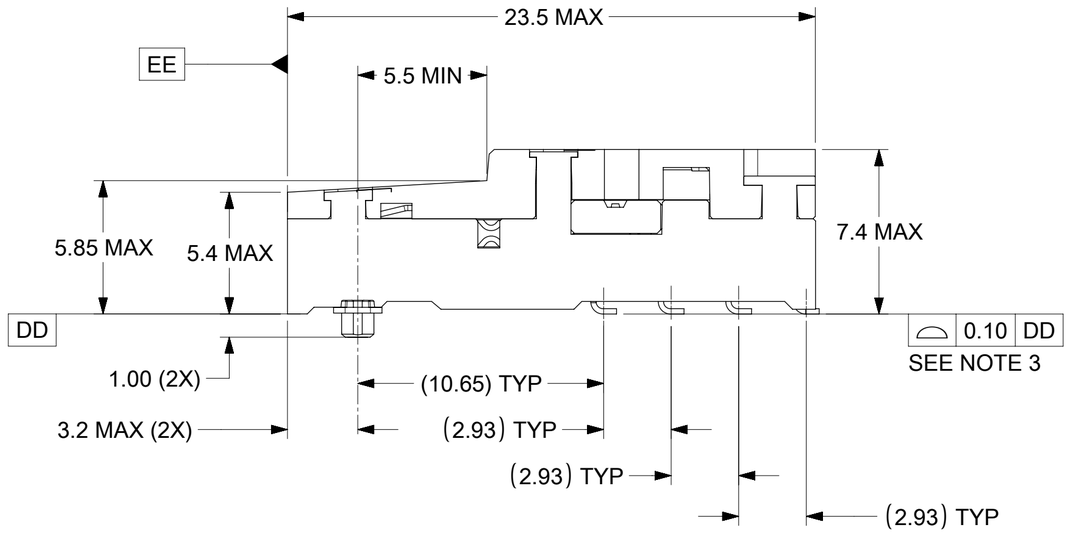
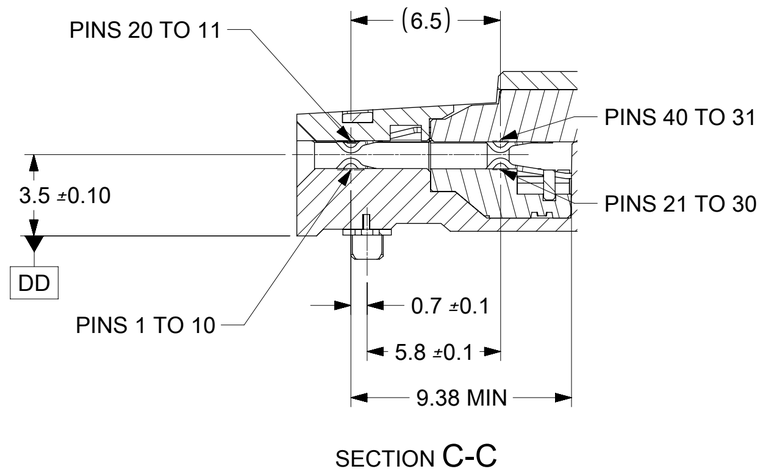


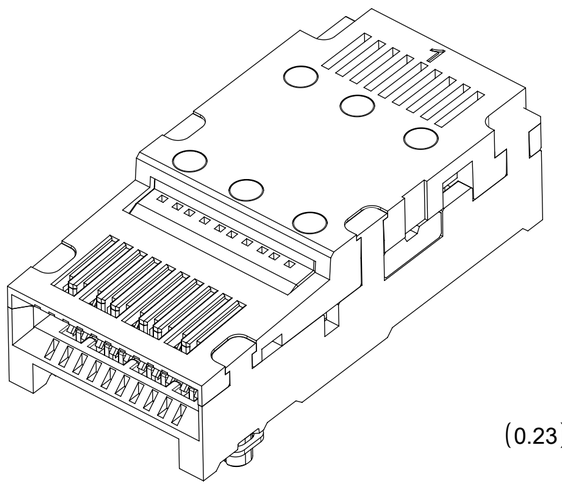
NOTES:
1. MATERIAL:
   HOUSING - HIGH TEMPERATURE THERMOPLASTIC, GLASS FILLED. UL 94V-0, BLACK
   TERMINALS - COPPER ALLOY
   SOLDER RING / NAIL: NICKEL SILVER
2. PLATING:
   CONTACT AREA - 0.76 MICROMETERS MINIMUM GOLD OVER 2.54 MICROMETERS MINIMUM NICKEL
   SOLDER AREA - 2.54 MICROMETERS MINIMUM TIN OVER 2.54 MICROMETERS MAXIMUM NICKEL
3. TERMINAL SOLDER FEET COPLANARITY TO BE MEASURED FROM THE FRONT HOUSING STANDOFF DD
4. DATE CODE: 4 DIGIT (DDDY = 3 DIGIT DATE, 1 DIGIT YEAR)
5. PACKAGED PER PACKAGING SPECIFICATION: 204750 0030
6. THIS PART CONFORMS TO PRODUCT SPECIFICATION: 204730 9010-PS
7. THIS PART CONFORMS TO CLASS C REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002
8. APPLICATION SPECIFICATION: 2047309030-AS

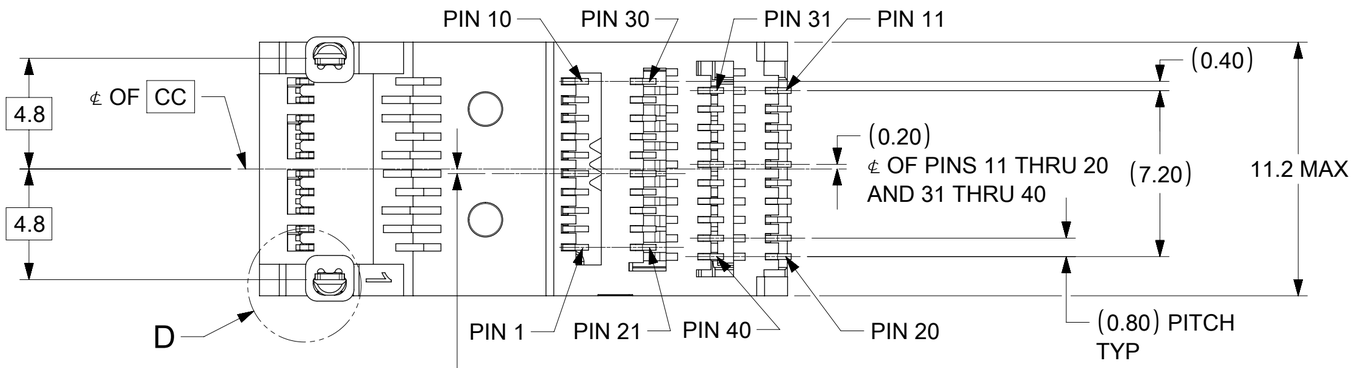


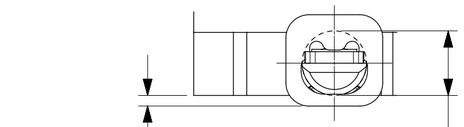




SECTION C-C







DETAIL D
SCALE 10:1

0.08 Ⓜ	DD	EE	CC

SYMBOLS	DIMENSION UNITS	SCALE
F = 0	mm	5:1
C = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)	
P = 0	ANGULAR TOL ± °	
S = 0	4 PLACES ±	
▼ = 0	3 PLACES ±	
C = 0	2 PLACES ± 0.13	
☒ = 0	1 PLACE ± 0.25	
■ = 0	0 PLACES ±	
V = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

CURRENT REV DESC:

EC NO: 632267
DRWN: SSU09 2020/02/13
CHK'D: JKACHLIC 2020/02/19
APPR: JKACHLIC 2020/02/19

INITIAL REVISION:
DRWN: RMIKLINSKI 2019/03/22
APPR: RNELSON 2019/05/31

molex

SFP-DD SMT CONNECTOR SALES DRAWING
40 CKT

PRODUCT CUSTOMER DRAWING

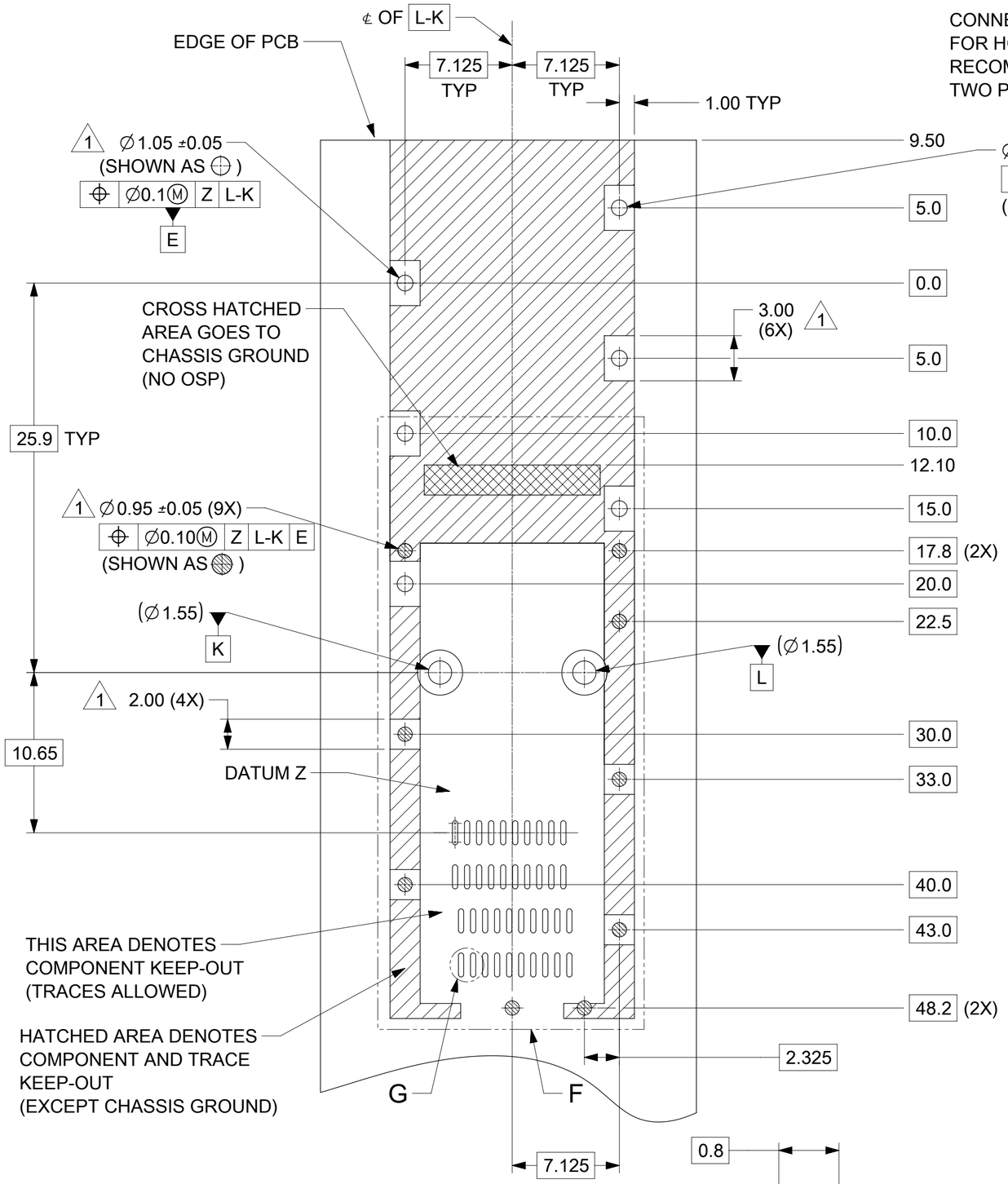
DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
2047301000	PSD	000	A2

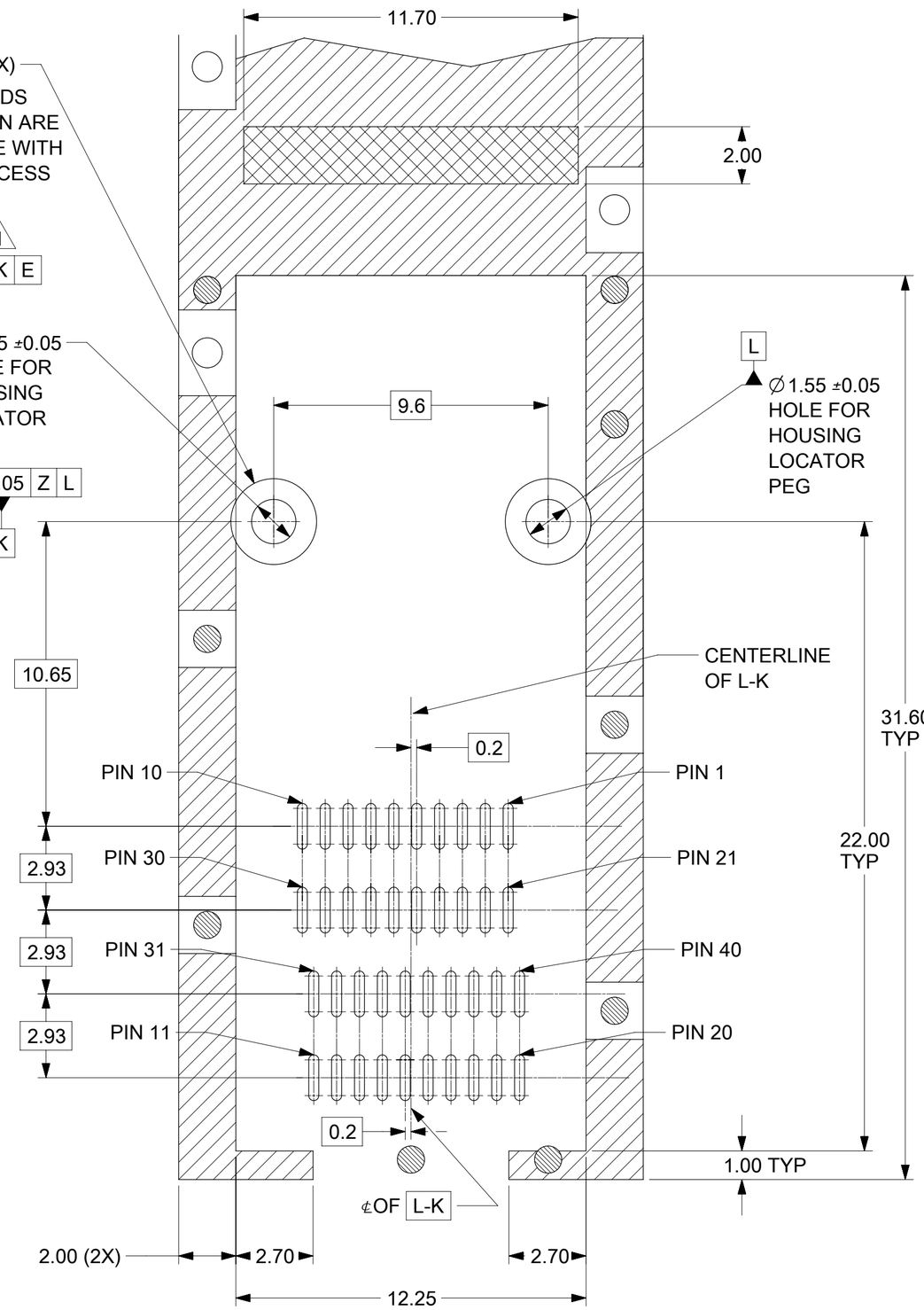
THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
	C-SIZE	204730	2047301000	GENERAL MARKET	1 OF 7

DOCUMENT STATUS	P1	RELEASE DATE	2020/02/19 03:41:55

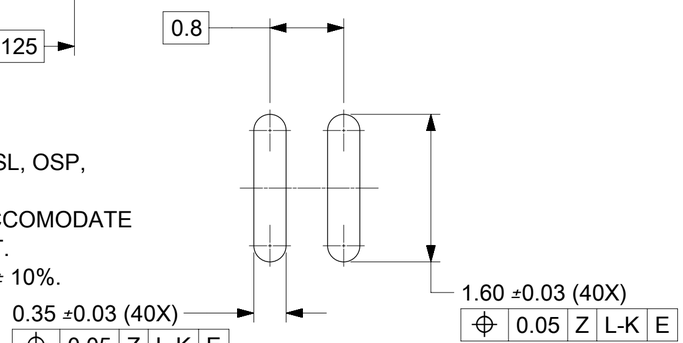
FORMAT: master-tb-prod-C
REVISION: H
DATE: 2018/01/18

PCB LAYOUT FOR SINGLE SIDE MOUNTING SHOWN FOR REFERENCE ONLY
SEE THE CAGE DRAWINGS FOR LAYOUT VARIATIONS





DETAIL F
SCALE 7:1



DETAIL G
SCALE 20:1

NOTES:
1. PADS AND VIAS CONNECT TO CHASSIS GROUND.
2. RECOMMENDED THRU HOLE PLATING INCLUDES HASL, OSP, OR IMMERSION (GOLD, SILVER, OR TIN).
3. CONNECTOR PAD LAYOUT PER SFP-DD MSA WILL ACCOMODATE MOLEX CONNECTOR SERIES 204730 OR EQUIVALENT.
4. PCB THICKNESS FOR SINGLE SIDED USE IS 1.57 mm ± 10%.

DOCUMENT STATUS	P1	RELEASE DATE	2020/02/19 03:41:55

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

SYMBOLS: FA = 0, FC = 0, FP = 0, S = 0, ▼ = 0, C = 0, ☒ = 0, ■ = 0, V = 0

DIMENSION UNITS	SCALE
mm	5:1

GENERAL TOLERANCES (UNLESS SPECIFIED)

ANGULAR TOL	±	°
4 PLACES	±	
3 PLACES	±	
2 PLACES	±	0.13
1 PLACE	±	0.25
0 PLACES	±	

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC:

EC NO: 632267
DRWN: SSU09 2020/02/13
CHK'D: JKACHLIC 2020/02/19
APPR: JKACHLIC 2020/02/19

INITIAL REVISION:
DRWN: RMIKLINSKI 2019/03/22
APPR: RNELSON 2019/05/31

THIRD ANGLE PROJECTION | DRAWING: C-SIZE | SERIES: 204730

molex

SFP-DD SMT CONNECTOR SALES DRAWING
40 CKT

PRODUCT CUSTOMER DRAWING

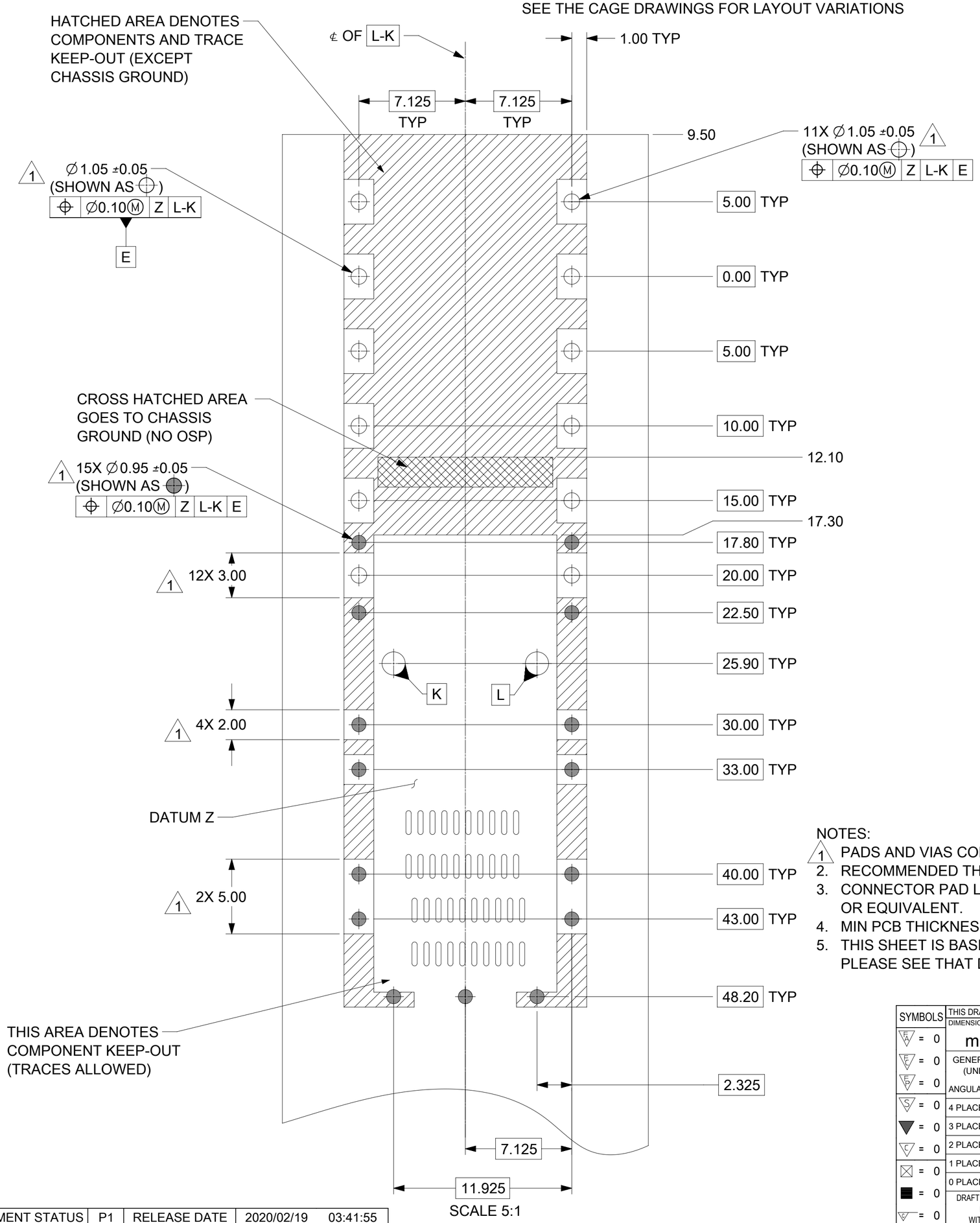
DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
2047301000	PSD	000	A2

MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
2047301000	GENERAL MARKET	2 OF 7

FORMAT: master-tb-prod-C
REVISION: H
DATE: 2018/01/18

PCB LAYOUT FOR BELLY TO BELLY MOUNTING SHOWN FOR REFERENCE ONLY

SEE THE CAGE DRAWINGS FOR LAYOUT VARIATIONS



SEE SHEET 2 FOR HOST CONNECTOR PCB LAYOUT

NOTES:

1. PADS AND VIAS CONNECT TO CHASSIS GROUND.
2. RECOMMENDED THRU HOLE PLATING INCLUDES HASL, OSP, OR IMMERSION (GOLD, SILVER, OR TIN).
3. CONNECTOR PAD LAYOUT PER SFP-DD MSA WILL ACCOMMODATE MOLEX CONNECTOR SERIES 204730 OR EQUIVALENT.
4. MIN PCB THICKNESS FOR BELLY TO BELLY USE IS 2.55 MM.
5. THIS SHEET IS BASED ON SHEET 4 OF CAGE PRODUCT CUSTOMER DRAWING 2048236206 REVISION D1. PLEASE SEE THAT DRAWING FOR ANY UPDATES.

DOCUMENT STATUS	P1
RELEASE DATE	2020/02/19 03:41:55

SYMBOLS: FA = 0; FV = 0; FP = 0; S = 0; ▼ = 0; C = 0; ☒ = 0; ■ = 0; V = 0

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

DIMENSION UNITS	SCALE
mm	1:1

GENERAL TOLERANCES (UNLESS SPECIFIED)

ANGULAR TOL ±	°
4 PLACES	±
3 PLACES	±
2 PLACES	± 0.13
1 PLACE	± 0.25
0 PLACES	±

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC:

EC NO: 632267
DRWN: SSU09 2020/02/13
CHK'D: JKACHLIC 2020/02/19
APPR: JKACHLIC 2020/02/19

INITIAL REVISION:
DRWN: RMIKLINSKI 2019/03/22
APPR: RNELSON 2019/05/31

molex

SFP-DD SMT CONNECTOR SALES DRAWING
40 CKT

PRODUCT CUSTOMER DRAWING

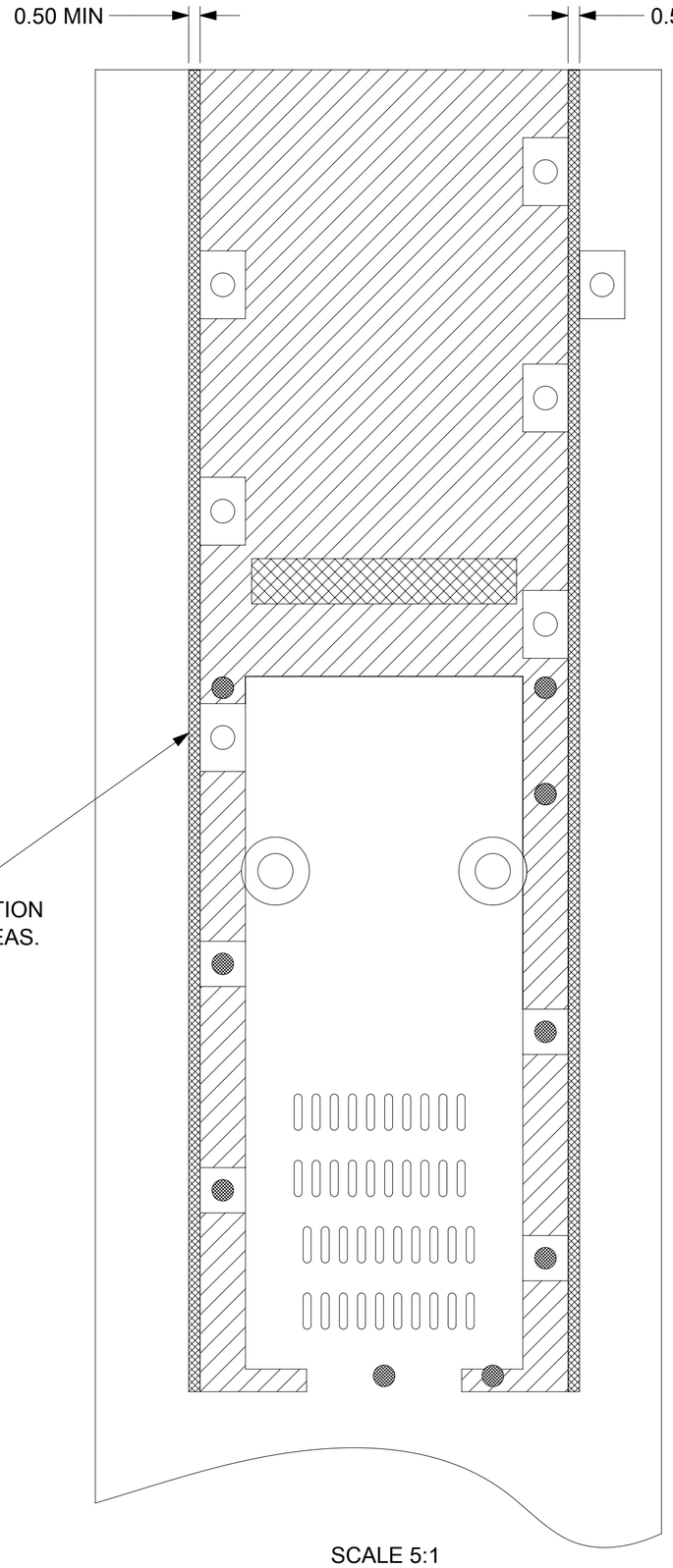
DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
2047301000	PSD	000	A2

THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
	C-SIZE	204730	2047301000	GENERAL MARKET	3 OF 7

FORMAT: master-tb-prod-C
REVISION: H
DATE: 2018/01/18

KEEP OUT AREA FOR INSERTION/EXTRACTION TOOL SHOWN FOR REFERENCE ONLY

SEE THE CAGE DRAWINGS FOR LAYOUT VARIATIONS



SCALE 5:1

THIS SHEET IS BASED ON SHEET 5 OF CAGE PRODUCT CUSTOMER DRAWING 2048236206 REVISION D1.
PLEASE SEE THAT DRAWING FOR ANY UPDATES.

DOCUMENT STATUS	P1	RELEASE DATE	2020/02/19 03:41:55		

FORMAT: master-lib-prod-C
REVISION: H
DATE: 2018/01/18

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

SYMBOLS
FA = 0
FC = 0
FP = 0
S = 0
= 0
C = 0
= 0
= 0
V = 0

DIMENSION UNITS	SCALE
mm	1:1

GENERAL TOLERANCES (UNLESS SPECIFIED)

ANGULAR TOL	± °
4 PLACES	±
3 PLACES	±
2 PLACES	± 0.13
1 PLACE	± 0.25
0 PLACES	±

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC:

EC NO: 632267
DRWN: SSU09 2020/02/13
CHK'D: JKACHLIC 2020/02/19
APPR: JKACHLIC 2020/02/19

INITIAL REVISION:
DRWN: RMIKLINSKI 2019/03/22
APPR: RNELSON 2019/05/31

THIRD ANGLE PROJECTION | DRAWING: C-SIZE | SERIES: 204730

molex

SFP-DD SMT CONNECTOR SALES DRAWING
40 CKT

PRODUCT CUSTOMER DRAWING

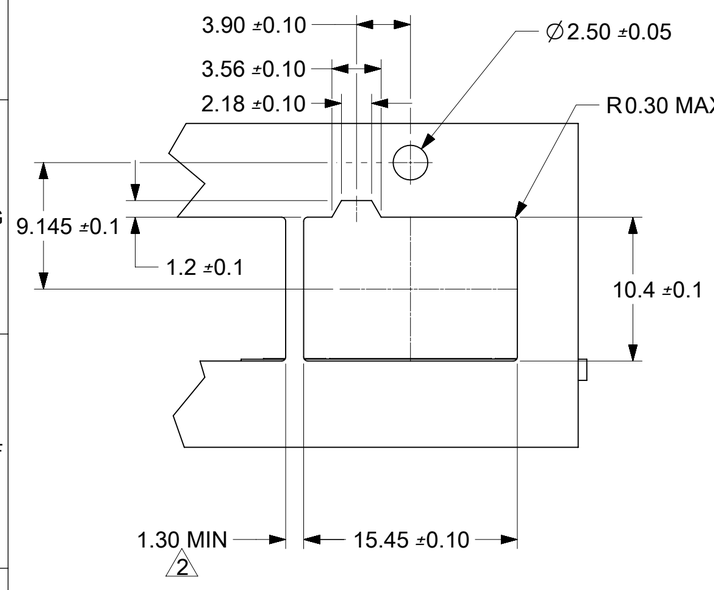
DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
2047301000	PSD	000	A2

MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
2047301000	GENERAL MARKET	4 OF 7

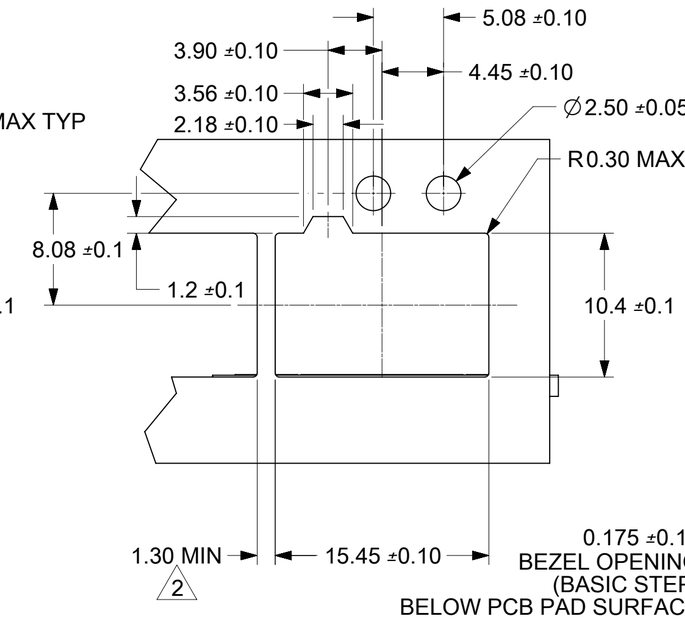
BEZEL AND BOARD POSITION DIMENSIONS FOR SINGLE SIDE MOUNTING SHOWN FOR REFERENCE ONLY

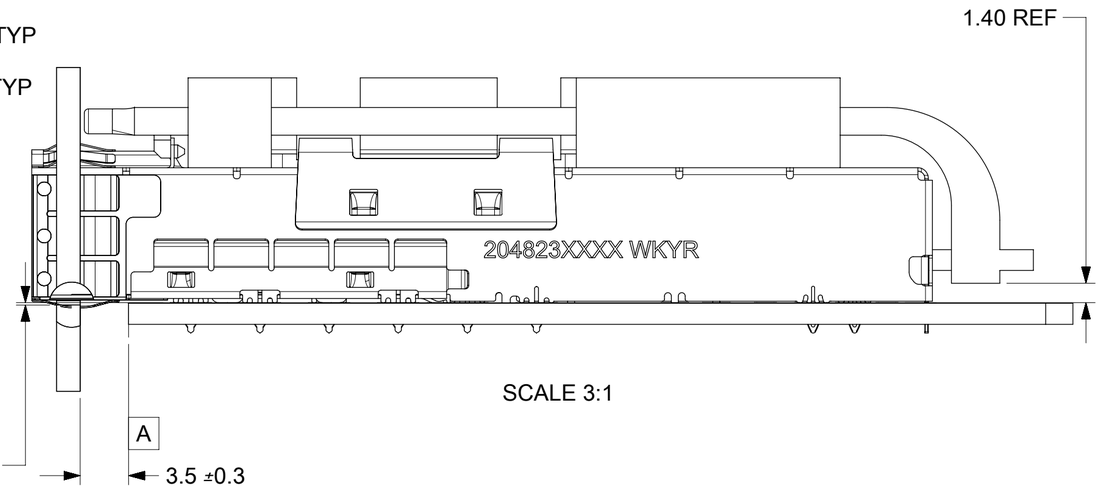
SEE THE CAGE DRAWINGS FOR LAYOUT VARIATIONS

(SINGLE LIGHT PIPE)



(DUAL LIGHT PIPE)



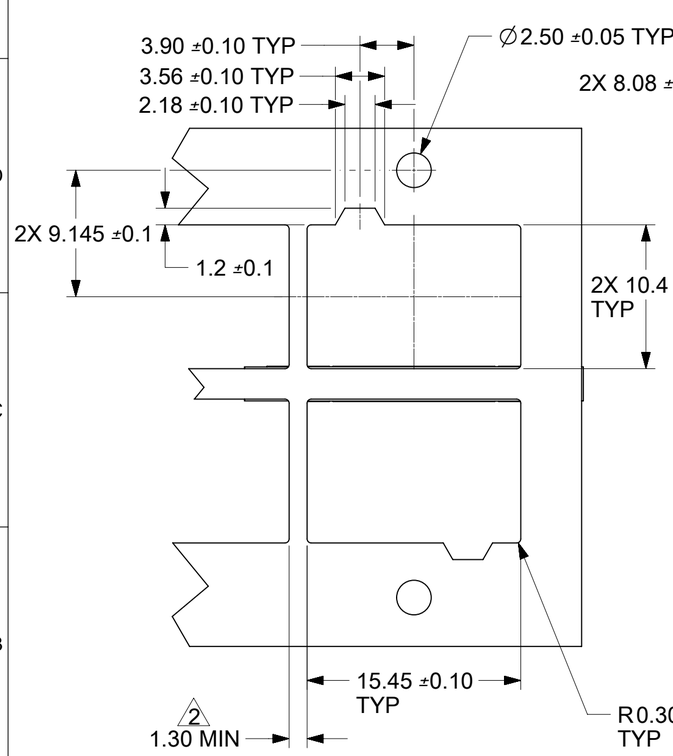


SCALE 3:1

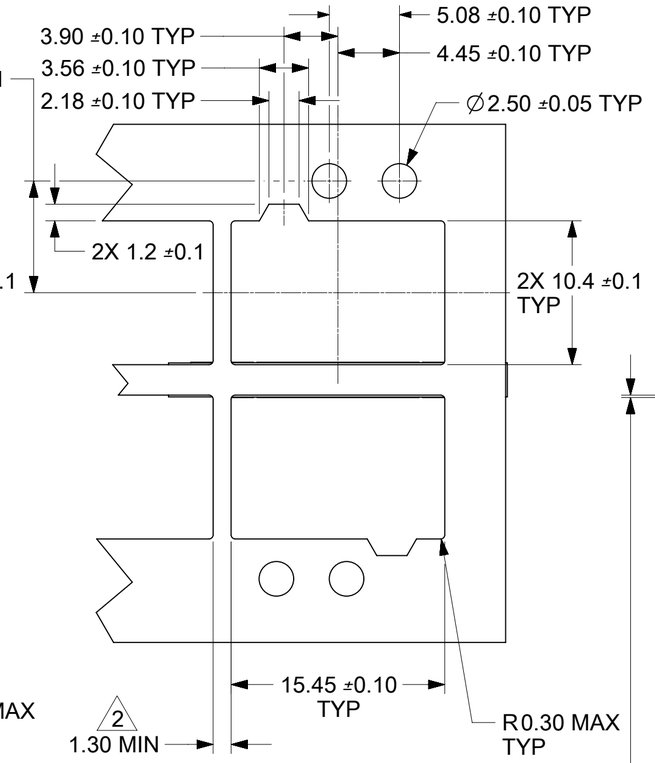
(NOTE: PCI VERSION IS 0.4 ±0.1 ABOVE PCB PAD SURFACE)

BEZEL AND BOARD POSITION DIMENSIONS FOR BELLY TO BELLY MOUNTING SHOWN FOR REFERENCE ONLY

SEE THE CAGE DRAWINGS FOR LAYOUT VARIATIONS

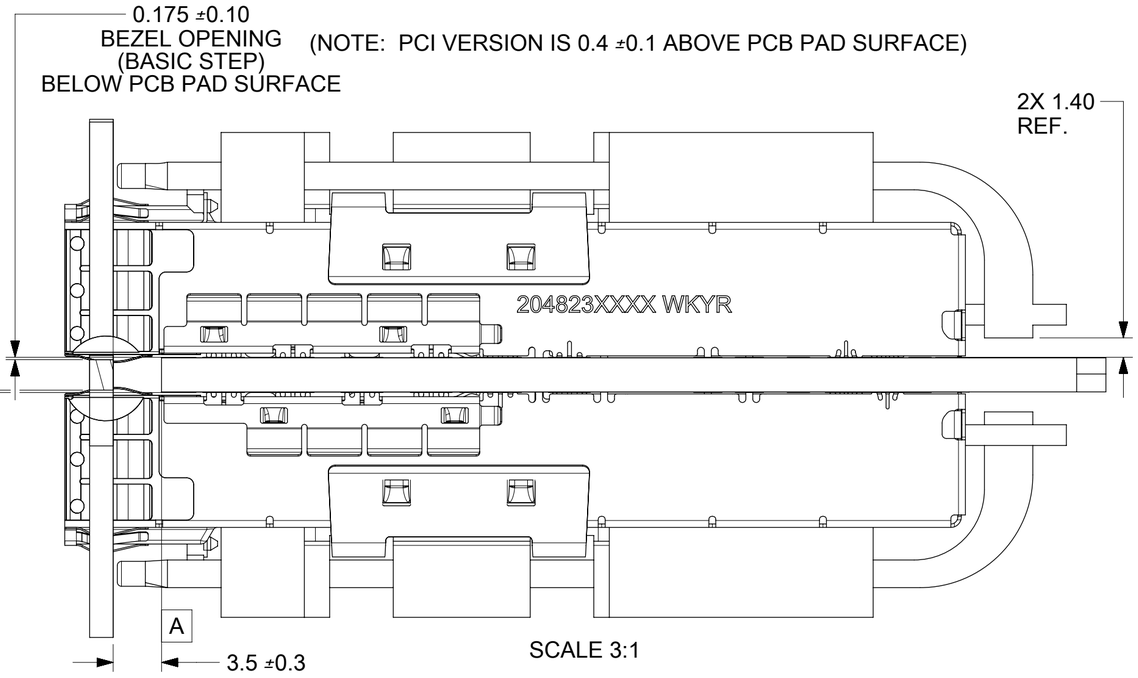


(SINGLE LIGHT PIPE)



(DUAL LIGHT PIPE)

0.175 ±0.10
BEZEL OPENING (BASIC STEP) ABOVE PCB PAD SURFACE
(NOTE: PCI VERSION IS 0.4 ±0.1 BELOW PCB PAD SURFACE)



SCALE 3:1

1. PCB THICKNESS VARIATION MUST BE CONSIDERED WHEN DETERMINING BEZEL OPENING AND LOCATION.
2. THIS DIMENSION IS FOR REFERENCE ONLY. USER CAN MODIFY IT DEPENDING ON THE APPLICATION.
3. THIS SHEET IS BASED ON SHEET 6 OF CAGE PRODUCT CUSTOMER DRAWING 2048236206 REVISION D1. PLEASE SEE THAT DRAWING FOR ANY UPDATES.

DOCUMENT STATUS	P1	RELEASE DATE	2020/02/19	03:41:55

SYMBOLS	
FA = 0	
EC = 0	
EP = 0	
S = 0	
▼ = 0	
C = 0	
☒ = 0	
■ = 0	
V = 0	

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

DIMENSION UNITS	SCALE
mm	1:1

GENERAL TOLERANCES (UNLESS SPECIFIED)

ANGULAR TOL	±	°
4 PLACES	±	
3 PLACES	±	
2 PLACES	±	0.13
1 PLACE	±	0.25
0 PLACES	±	

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC:

EC NO: 632267
DRWN: SSU09 2020/02/13
CHK'D: JKACHLIC 2020/02/19
APPR: JKACHLIC 2020/02/19

INITIAL REVISION:
DRWN: RMIKLINSKI 2019/03/22
APPR: RNELSON 2019/05/31

THIRD ANGLE PROJECTION | DRAWING: C-SIZE | SERIES: 204730

molex

SFP-DD SMT CONNECTOR SALES DRAWING
40 CKT

PRODUCT CUSTOMER DRAWING

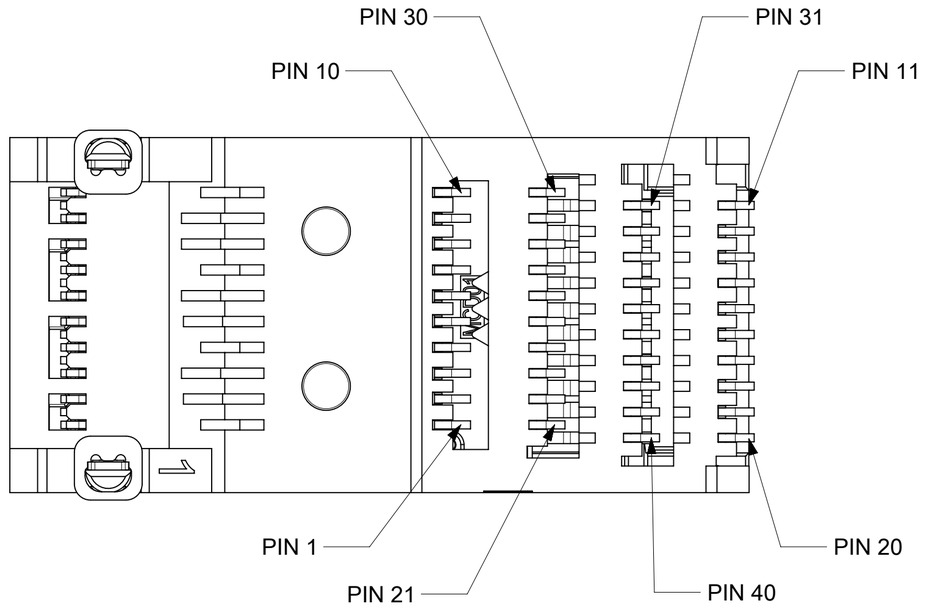
DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
2047301000	PSD	000	A2

MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
2047301000	GENERAL MARKET	5 OF 7

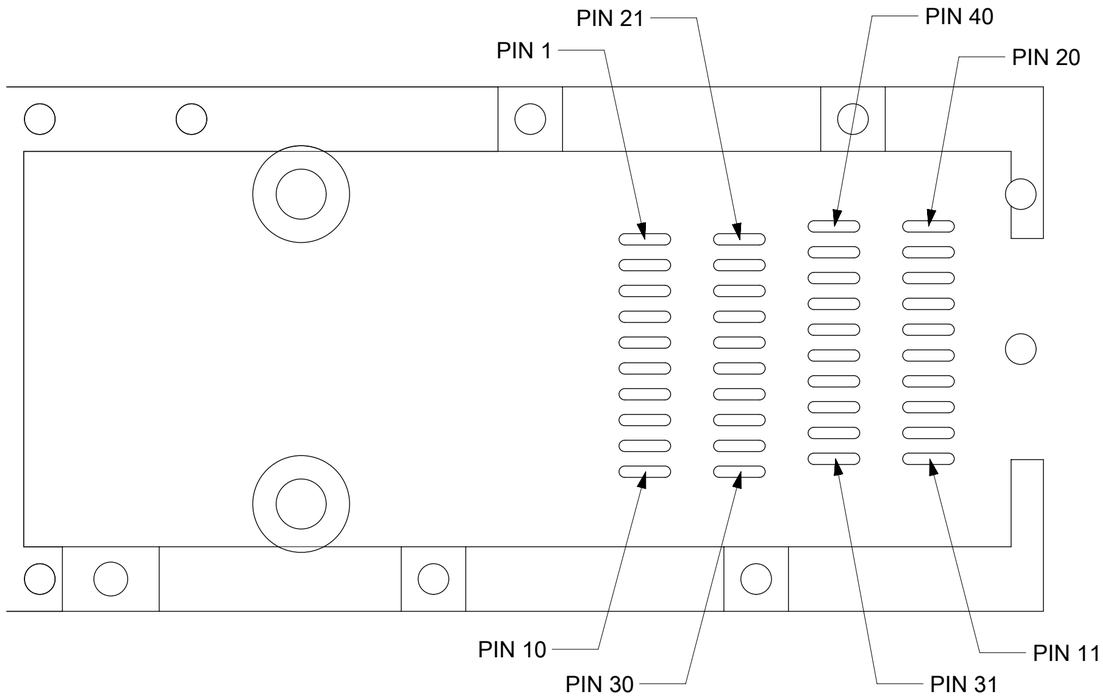
FORMAT: master-tb-prod-C
REVISION: H
DATE: 2018/01/18

PINOUT TABLE

Pin #	Symbol	Description	Notes
1	GND	Ground	
2	Tx Fault	Module Fault Indication	Legacy Low Speed
3	TxDisable0	Transmitter Disable for channel 0	Legacy Low Speed
4	SDA	Management I/F data line	
5	SCL	Management I/F clock	
6	Mod_ABS	Module Absent	
7	Speed0-1	Rx Rate Select for channel 0	Legacy Low Speed
8	RxLOS0	Rx Loss of Signal for channel 0	Legacy Low Speed
9	Speed0-2	Tx Rate Select for channel 0	Legacy Low Speed
10	GND	Ground	
11	GND	Ground	
12	RD0-	Inverse Received Data Out for channel 0	Legacy Rx-
13	RD0+	Received Data Out for channel 0	Legacy Rx+
14	GND	Ground	
15	VccR0	Receiver Power	Legacy Power
16	VccT0	Transmitter Power	Legacy Power
17	GND	Ground	
18	TD0+	Transmit Data In for channel 0	Legacy Tx+
19	TD0-	Inverse Transmit Data In for channel 0	Legacy Tx-
20	GND	Ground	
21	GND	Ground	
22	IntL	Interrupt	DD SFP Channel
23	TxDisable1	Transmitter Disable for channel 1	DD SFP Channel
24	ePPS	Precision Time Protocol (PTP) reference clock input	
25	LPMode	Low Power Mode Control	
26	ResetL	Module Reset	
27	Speed1-1	Rx Rate Select for channel 1	DD SFP Channel
28	RxLOS1	Loss of Signal for channel 1	DD SFP Channel
29	Speed1-2	Tx Rate Select for channel 1	DD SFP Channel
30	GND	Ground	
31	GND	Ground	
32	RD1-	Inverse Received Data Out for channel 1	DD SFP Channel Rx-
33	RD1+	Received Data Out for channel 1	DD SFP Channel Rx+
34	GND	Ground	
35	VccR1	Receiver Power for channel 1	DD SFP Power
36	VccT1	Transmitter Power for channel 1	DD SFP Power
37	GND	Ground	
38	TD1+	Transmit Data In for channel 1	DD SFP Channel Tx+
39	TD1-	Inverse Transmit Data In for channel 1	DD SFP Channel Tx-
40	GND	Ground	



BOTTOM VIEW OF CONNECTOR



TOP VIEW OF PCB

NOTES:
FOR REFERENCE ONLY
PLEASE USE THE LATEST RELEASE SFP-DD MSA FOR PIN MAPPING

DOCUMENT STATUS	P1	RELEASE DATE	2020/02/19 03:41:55

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SYMBOLS: FAV = 0; FCV = 0; FEV = 0; S = 0; ▼ = 0; C = 0; ☒ = 0; ■ = 0; V = 0

DIMENSION UNITS: mm | SCALE: 5:1

GENERAL TOLERANCES (UNLESS SPECIFIED)

ANGULAR TOL	±	°
4 PLACES	±	
3 PLACES	±	
2 PLACES	±	0.13
1 PLACE	±	0.25
0 PLACES	±	

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC:

EC NO: 632267
DRWN: SSU09 2020/02/13
CHK'D: JKACHLIC 2020/02/19
APPR: JKACHLIC 2020/02/19

INITIAL REVISION:
DRWN: RMIKLINSKI 2019/03/22
APPR: RNELSON 2019/05/31

THIRD ANGLE PROJECTION | DRAWING: C-SIZE | SERIES: 204730

molex

SFP-DD SMT CONNECTOR SALES DRAWING
40 CKT

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
2047301000	PSD	000	A2

MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
2047301000	GENERAL MARKET	6 OF 7

FORMAT: master-tb-prod-C
REVISION: H
DATE: 2018/01/18

REVISION	DATE	DESCRIPTION
A	MAY 29, 2019	INITIAL RELEASE TO MEET MSA REVISION 2.1. WAS PREVIOUS P/N 2047300000.
A1	AUG 30, 2019	UPDATE THE PINOUT TABLE ON SHEET 6 TO MATCH SFP-DD MSA REV 3.1: PAD 2 FROM Transmitter Fault Indication TO Module Fault Indication, PAD 3 FROM TxDisable TO TxDisable0, 4 FROM BLANK TO SDA, 7 FROM RS0 TO Speed0-1, 8 FROM LOS TO RxLOS0 AND ADD “Rx” TO THE DESCRIPTION, 9 FROM RS1 TO Speed0-2, 12 FROM RD- TO RD0-, 13 FROM RD+ TO RD0+, 15 FROM VccR TO VccR0, 16 FROM VccT TO VccT0, 15 AND 16 FROM Legacy Low Speed TO Legacy Power, 18 FROM TD+ TO TD0+, 19 FROM TD- TO TD0-, 22 FROM TxFaultDD/Transmitter Fault Indication TO IntL/Interrupt, 23 FROM TxDisableDD TO TxDisable1, 24 FROM IntL/Interrupt TO ePPS/Precision Time Protocol (PTP) reference clock input, 25 FROM InitMode/Initialization Mode Control TO LPMode/Low Power Mode Control, 26 FROM RSVD/Reserved for Future Use TO ResetL/Module Reset, 27 FROM RS0DD TO Speed1-1, 28 FROM LOSDD TO RxLOS1, AND 29 RS1DD TO Speed1-2; ADD “for channel 0” TO THE DESCRIPTION FOR PINS 3, 7, 8, 9, 12, 13, 18, AND 19; ADD “for channel 1” TO THE DESCRIPTION FOR PINS 23, 27, 28, 29, 32, 33, 35, 36, 38, AND 39, 32 add “Rx-“ TO THE NOTES, 33 add “Rx+“ TO THE NOTES, 35 AND 36 ADD “DD SFP Power” TO THE NOTES, 38 add “Tx+“ TO THE NOTES, 39 add “Tx-“ TO THE NOTES. SHEETS 3, 4 AND 5-CHANGE THE REFERENCED CAGE DRAWING 2048236206 FROM REVISION C1 TO D. ADD NOTE 8. APPLICATION SPECIFICATION: 2047309030-AS.
A2	FEB 13,2020	UPDATE SHEET1 AND SHEET 6 HEAT STAKED

DOCUMENT STATUS	P1	RELEASE DATE	2020/02/19 03:41:55

FORMAT: master-tb-prod-C
REVISION: H
DATE: 2018/01/18

SYMBOLS
FA = 0
FC = 0
FP = 0
S = 0
= 0
C = 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
mm	1:1

GENERAL TOLERANCES (UNLESS SPECIFIED)

ANGULAR TOL	± °
4 PLACES	±
3 PLACES	±
2 PLACES	± 0.13
1 PLACE	± 0.25
0 PLACES	±

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC:

EC NO: 632267
DRWN: SSU09 2020/02/13
CHK'D: JKACHLIC 2020/02/19
APPR: JKACHLIC 2020/02/19

INITIAL REVISION:
DRWN: RMIKLINSKI 2019/03/22
APPR: RNELSON 2019/05/31

molex

SFP-DD SMT CONNECTOR SALES DRAWING
40 CKT

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
2047301000	PSD	000	A2

THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
	C-SIZE	204730	2047301000	GENERAL MARKET	7 OF 7