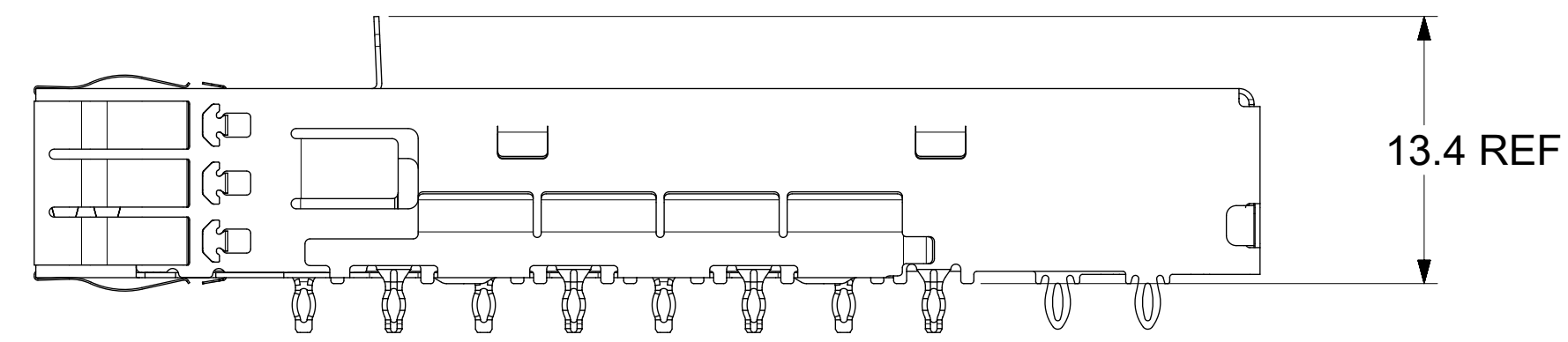
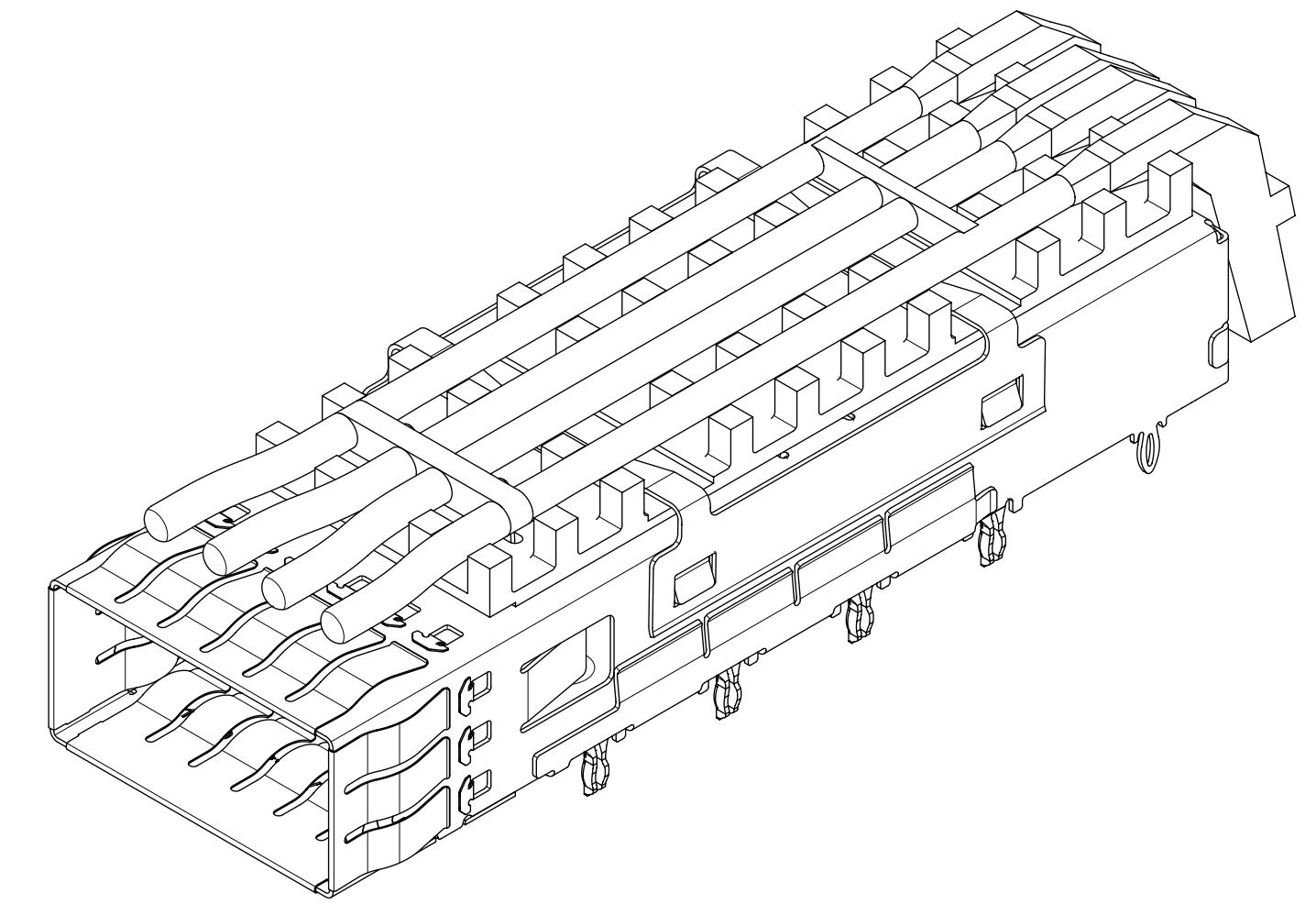
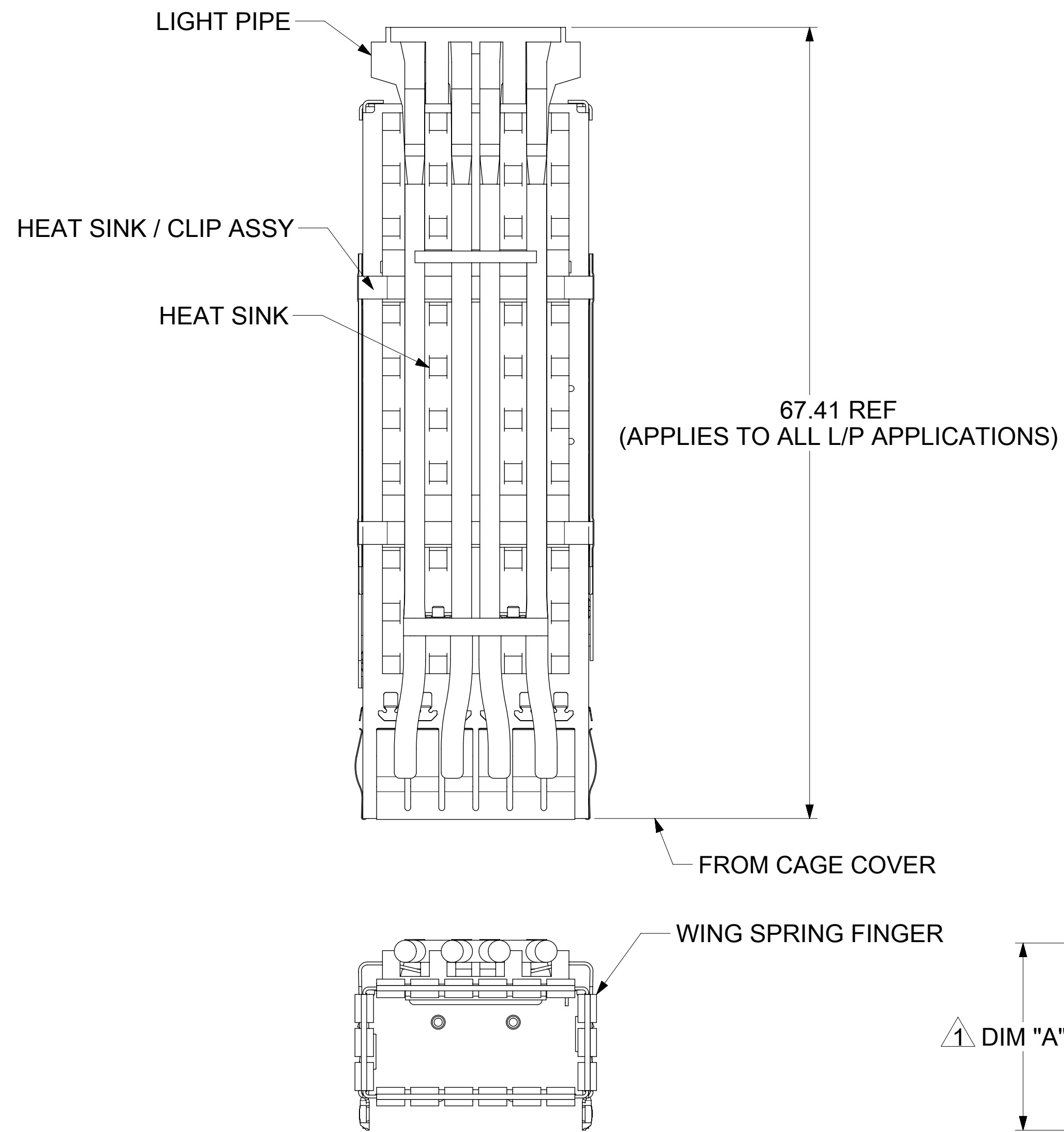




# CAGE ASSEMBLY OPTIONS

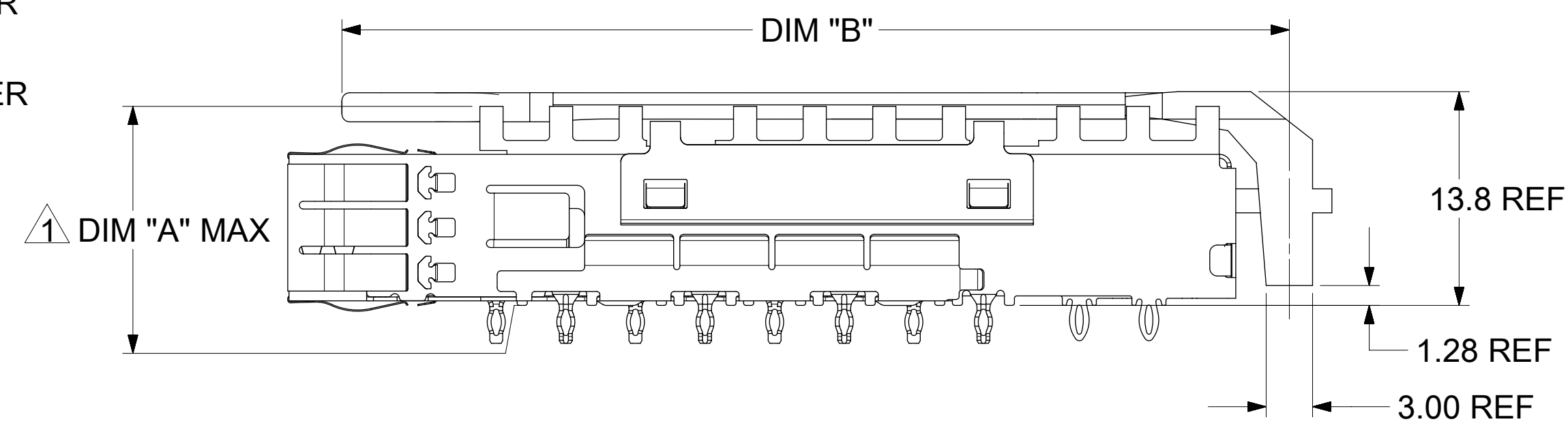
1000147446

SHOWN



## HEAT SINK HEIGHT OPTIONS

OVERALL HEAT SINK HEIGHT	DIM "A"
PCI	13.7
SAN	16.0
NET	23.0



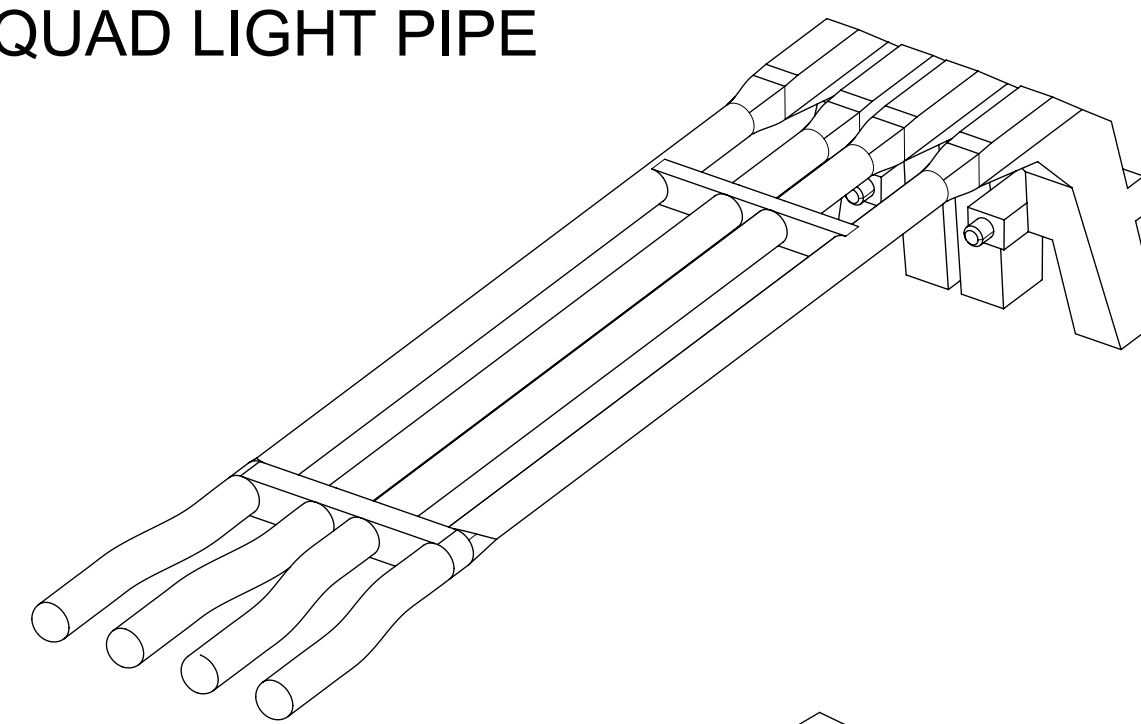
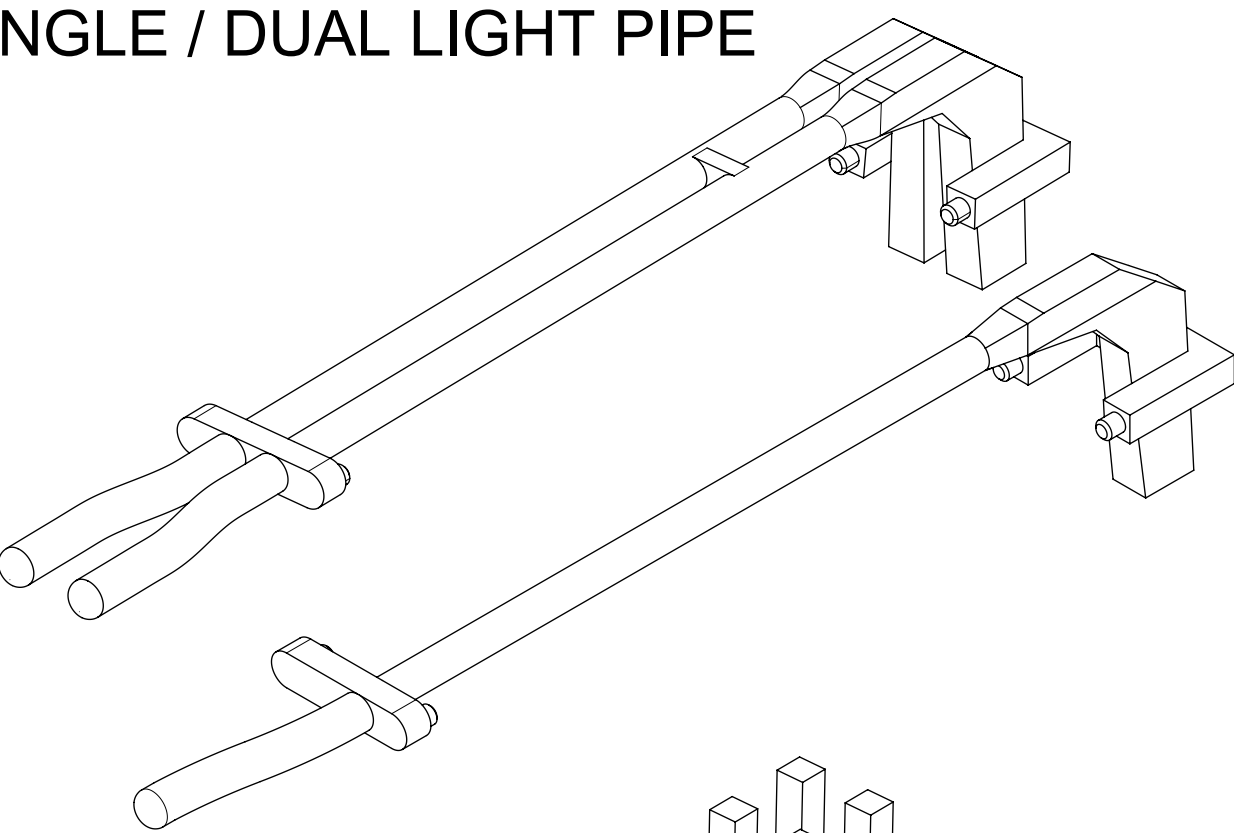
▲ HEIGHT OF HEAT SINK WITH MODULE INSERTED.  
DIMENSION MAY BE LESS DUE TO MODULE AND HEAT SINK VARIATIONS

## HEAT SINK AND LIGHT PIPE COMBINATIONS

HEAT SINK  
USED  
WITHOUT  
LIGHTPIPE

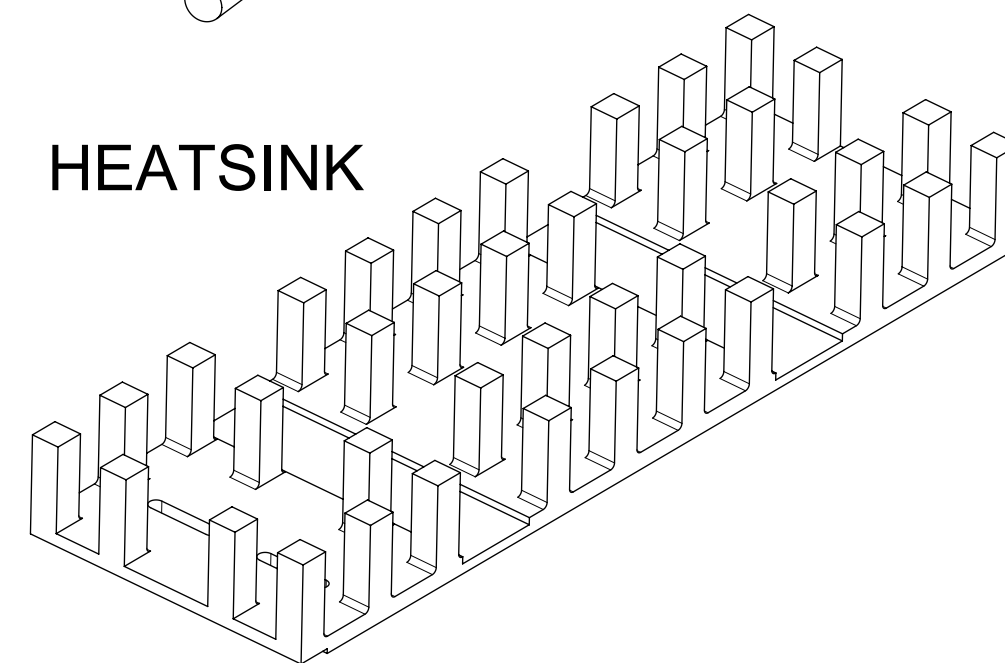
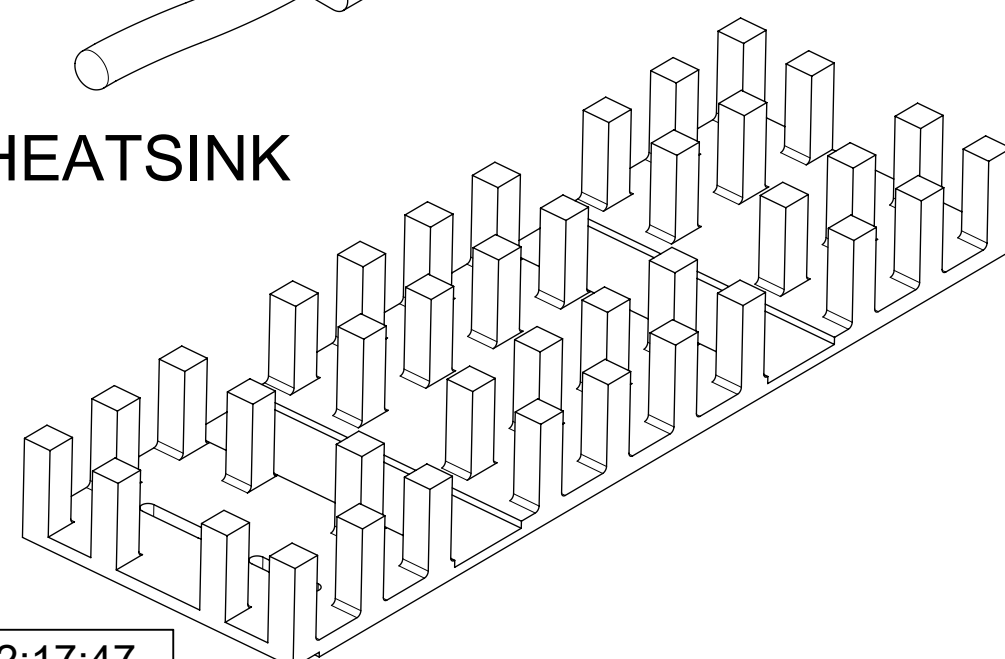
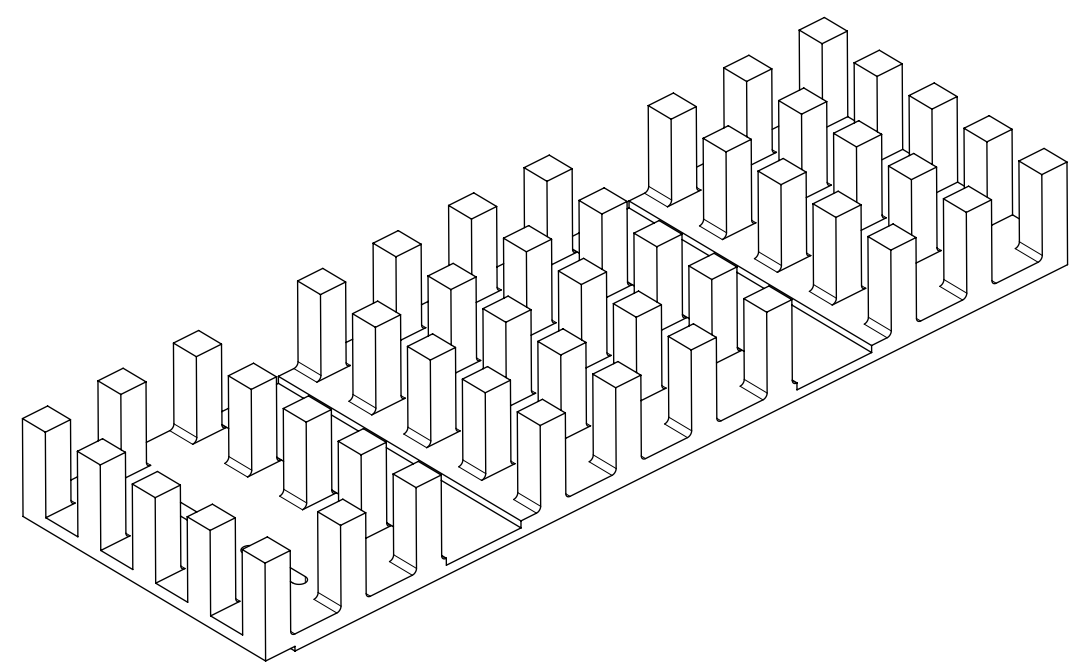
SINGLE / DUAL LIGHT PIPE

QUAD LIGHT PIPE

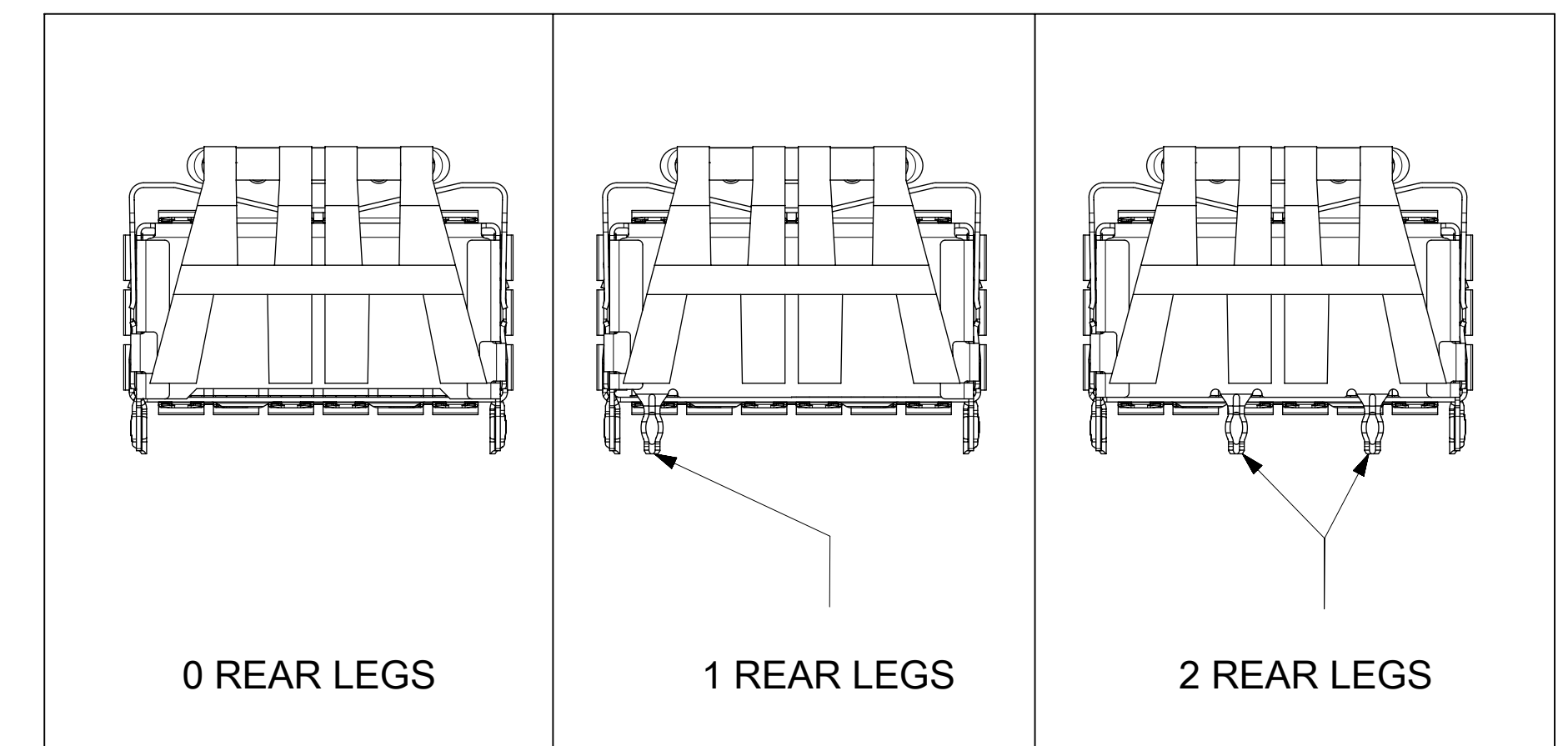


HEATSINK

HEATSINK



## REAR LEG OPTIONS



SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		CURRENT REV DESC: SEE REVISION TABLE	
	DIMENSION UNITS	SCALE	DOC NUMBER	DOC TYPE
▽ = 0	mm	3:1	1000147200	PSD
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		ASSEMBLY	ASSEMBLY
▽ = 0	ANGULAR TOL ± 2.0°		REVISION	D
▽ = 0	4 PLACES	±	PRODUCT CUSTOMER DRAWING	
▽ = 0	3 PLACES	±	DOCUMENT NUMBER	
▽ = 0	2 PLACES	± 0.13	1000147200	
▽ = 0	1 PLACE	± 0.25	DOC TYPE	
▽ = 0	0 PLACES	±	DOC PART	
▽ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		REVISION	
▽ = 0	THIRD ANGLE PROJECTION		1000147200	
▽ = 0	DRAWING		SERIES	
▽ = 0	D-SIZE		100014	
▽ = 0	MATERIAL NUMBER		CUSTOMER	
▽ = 0	SEE DRAWING		GENERAL MARKET	
▽ = 0	SHEET NUMBER		2 OF 7	

**molex**

ZQSFP+ 1X1 CAGE ASSEMBLY  
WING SPRING FINGER TYPE, HEAT SINK & LIGHT PIPE OPTIONS

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER

1000147200

PSD ASY D

MATERIAL NUMBER

SEE DRAWING

CUSTOMER

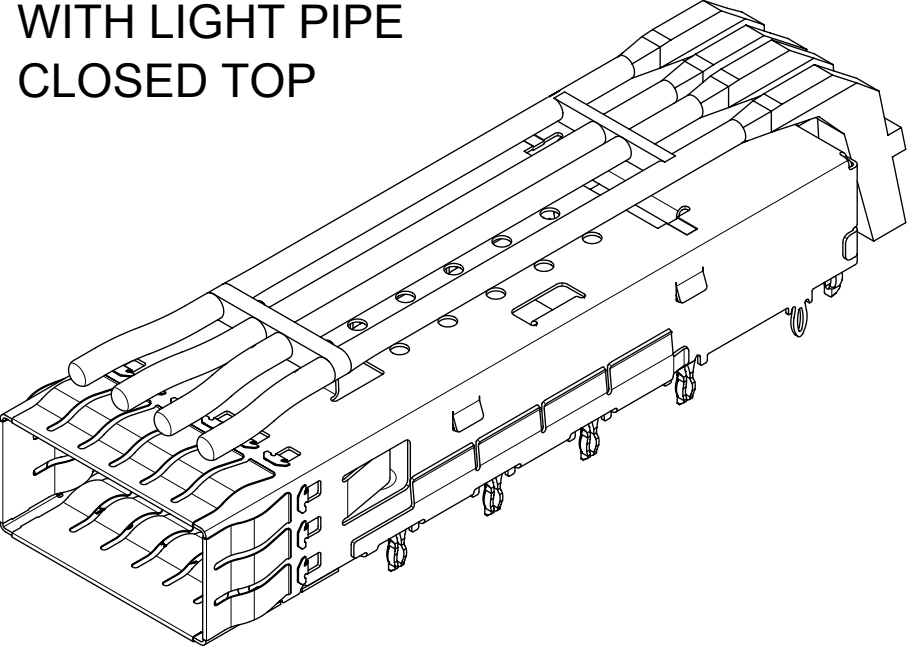
GENERAL MARKET

SHEET NUMBER

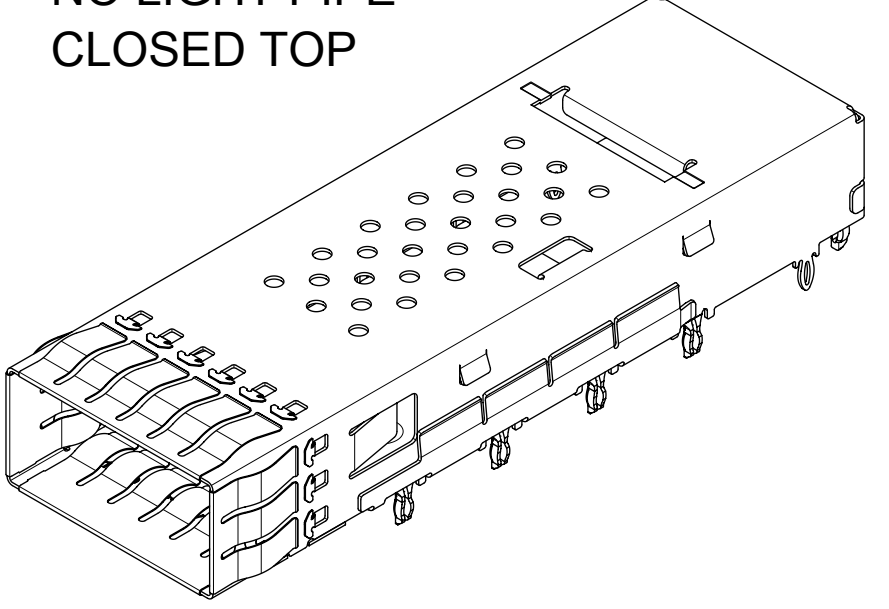
2 OF 7

# PART NUMBER SELECTION

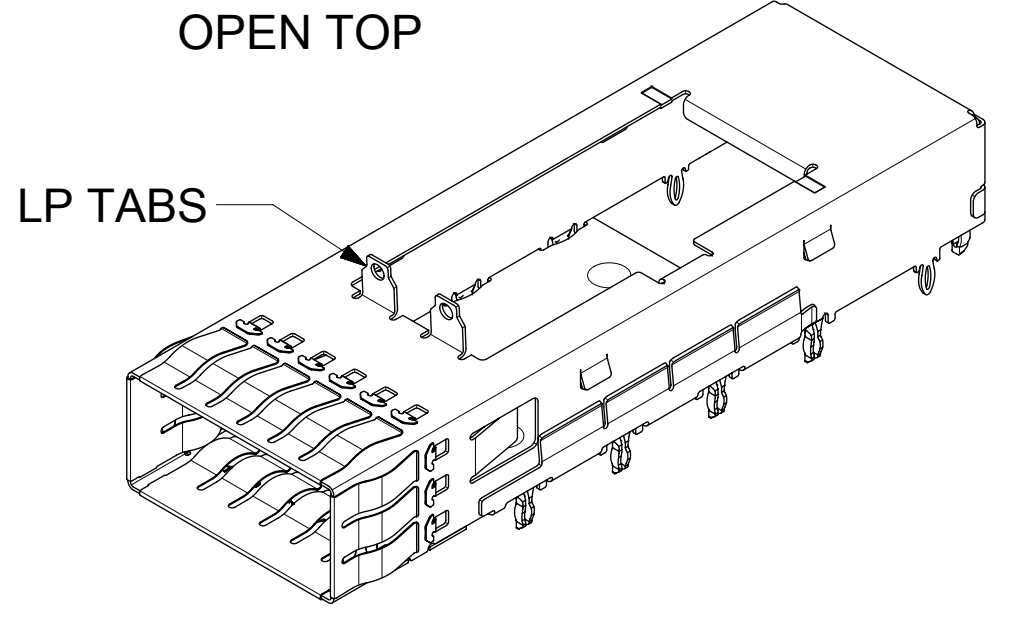
NO HEAT SINK  
WITH LIGHT PIPE  
CLOSED TOP



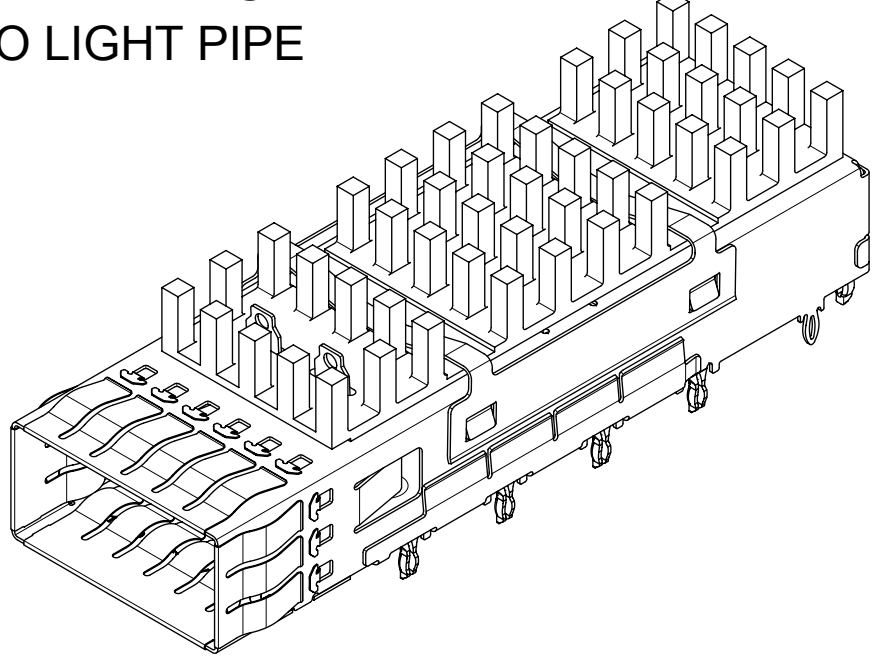
NO HEAT SINK  
NO LIGHT PIPE  
CLOSED TOP



NO HEAT SINKS  
NO LIGHT PIPES  
OPEN TOP



WITH HEAT SINK  
NO LIGHT PIPE



MOLEX P/N	LIGHT PIPE	#OF REAR LEGS PER PORT	DIM "B"
1000147231	SINGLE	0	61.25 REF
1000147232	SINGLE	1	61.25 REF
1000147233	DUAL	0	61.25 REF
1000147234	DUAL	1	61.25 REF
1000147235	QUAD	0	61.25 REF
1000147236	QUAD	1	61.25 REF

MOLEX P/N	#OF REAR LEGS PER PORT
1000147240	0
1000147242	1

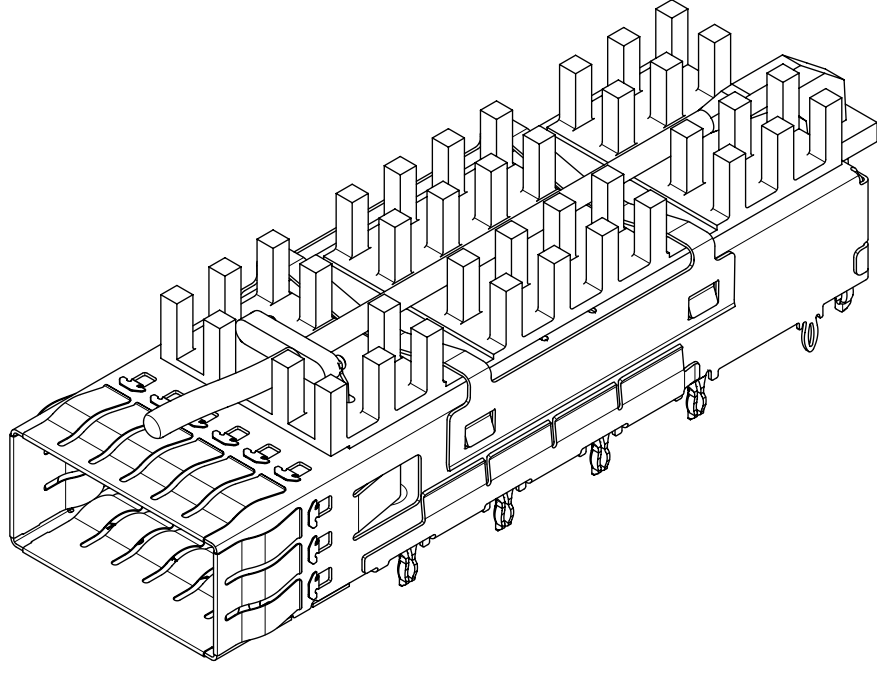
MOLEX P/N	#OF REAR LEGS PER PORT	LP TAB FEATURE
1000147250	0	YES
1000147252	1	YES
1000147253	2	YES
1000147256	2	NO

MOLEX P/N	HEAT SINK	#OF REAR LEGS PER PORT
1000147340	PCI	0
1000147341	SAN	0
1000147342	NET	0
1000147343	PCI	1
1000147344	SAN	1
1000147345	NET	1
1000147346	PCI	2
1000147347	SAN	2
1000147348	NET	2
1000147903	CUSTOM DIM A=20	2

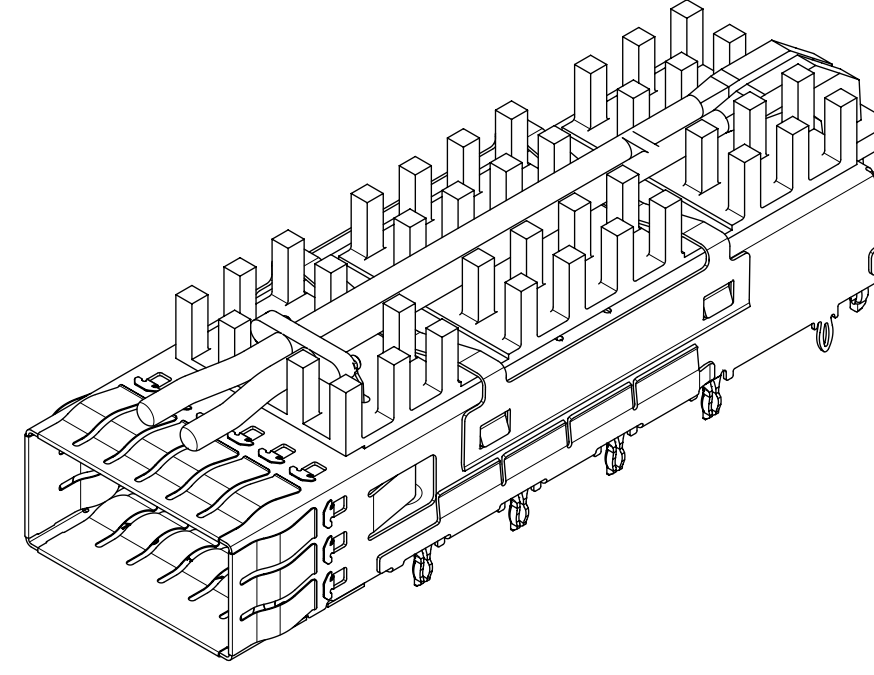
WITH HEAT SINKS AND LIGHT PIPES

MOLEX P/N	LIGHT PIPE	HEAT SINK	#OF REAR LEGS PER PORT	DIM "B"
1000147440	SINGLE	PCI	0	61.25 REF
1000147441	SINGLE	SAN	0	61.25 REF
1000147442	SINGLE	NET	0	61.25 REF
1000147443	DUAL	PCI	0	61.25 REF
1000147444	DUAL	SAN	0	61.25 REF
1000147445	DUAL	NET	0	61.25 REF
1000147446	QUAD	PCI	0	61.25 REF
1000147447	QUAD	SAN	0	61.25 REF
1000147448	QUAD	NET	0	61.25 REF
1000147540	SINGLE	PCI	1	61.25 REF
1000147541	SINGLE	SAN	1	61.25 REF
1000147542	SINGLE	NET	1	61.25 REF
1000147543	DUAL	PCI	1	61.25 REF
1000147544	DUAL	SAN	1	61.25 REF
1000147545	DUAL	NET	1	61.25 REF
1000147546	QUAD	PCI	1	61.25 REF
1000147547	QUAD	SAN	1	61.25 REF
1000147548	QUAD	NET	1	61.25 REF
1000147640	SINGLE	PCI	2	61.25 REF
1000147641	SINGLE	SAN	2	61.25 REF
1000147642	SINGLE	NET	2	61.25 REF
1000147643	DUAL	PCI	2	61.25 REF
1000147644	DUAL	SAN	2	61.25 REF
1000147645	DUAL	NET	2	61.25 REF
1000147646	QUAD	PCI	2	61.25 REF
1000147647	QUAD	SAN	2	61.25 REF
1000147648	QUAD	NET	2	61.25 REF
1000147744	DUAL	SAN	2	59.65 REF

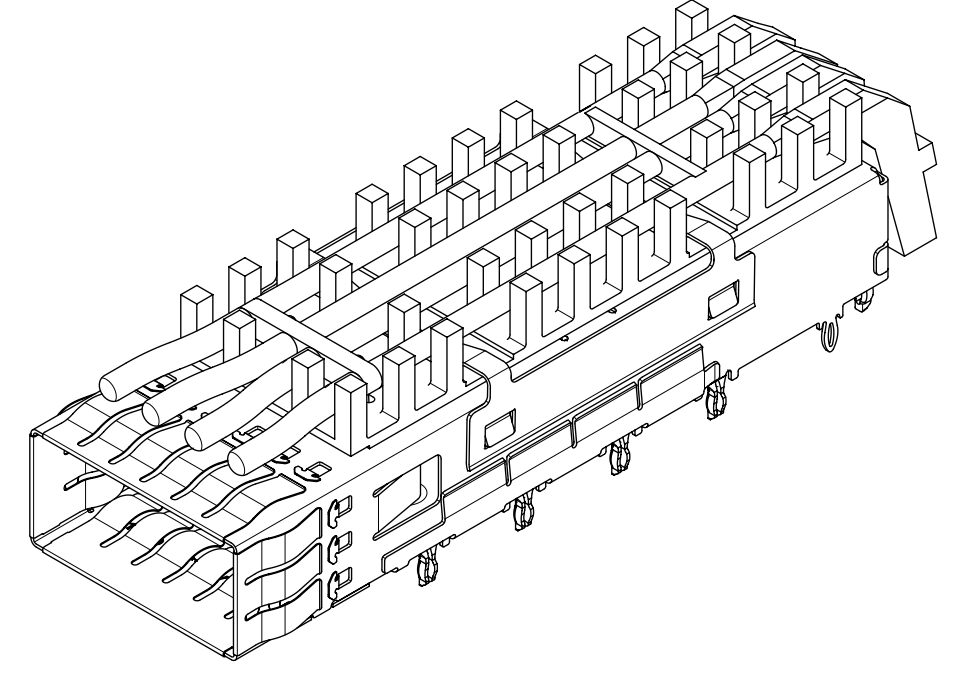
SINGLE LIGHT PIPE



DUAL LIGHT PIPE



QUAD LIGHT PIPE



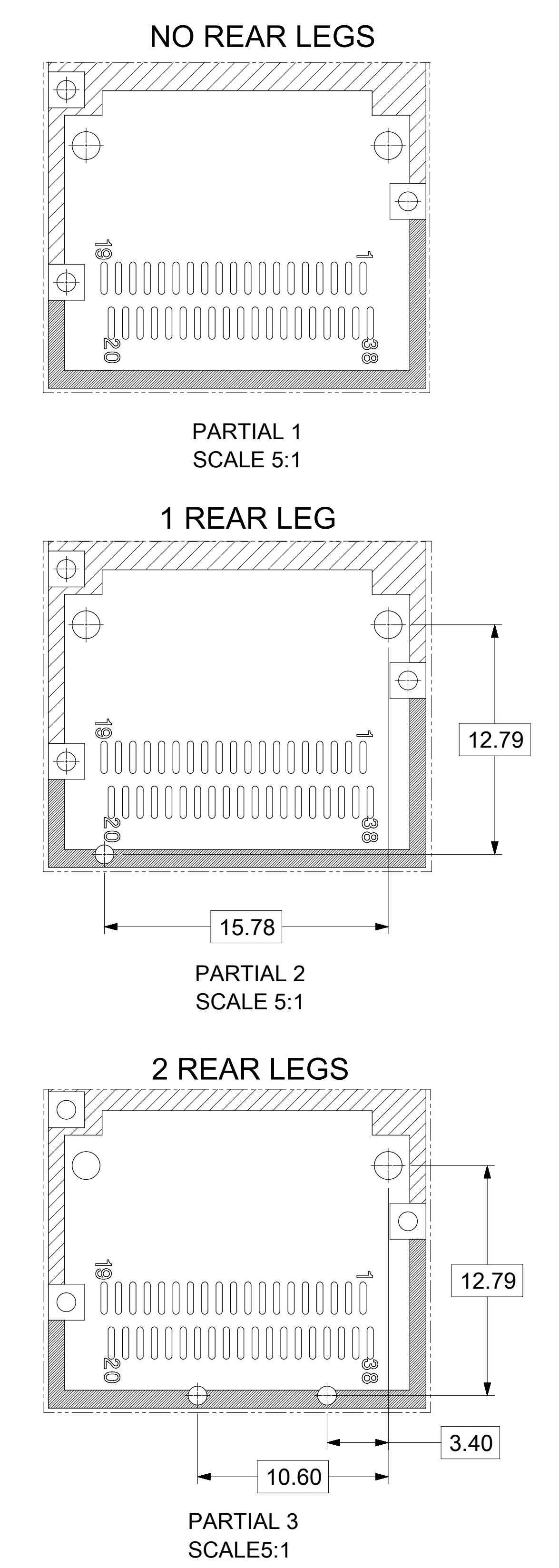
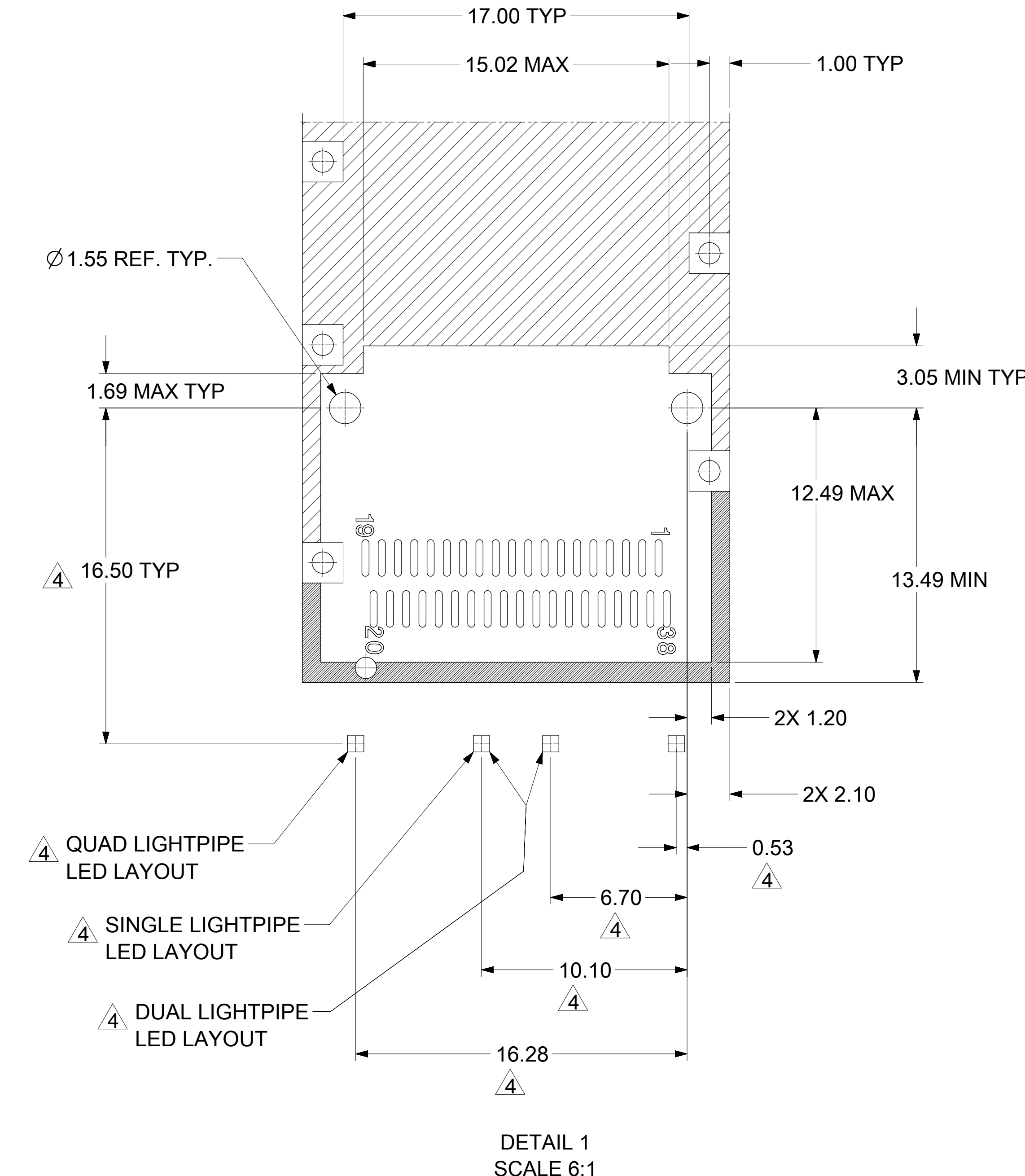
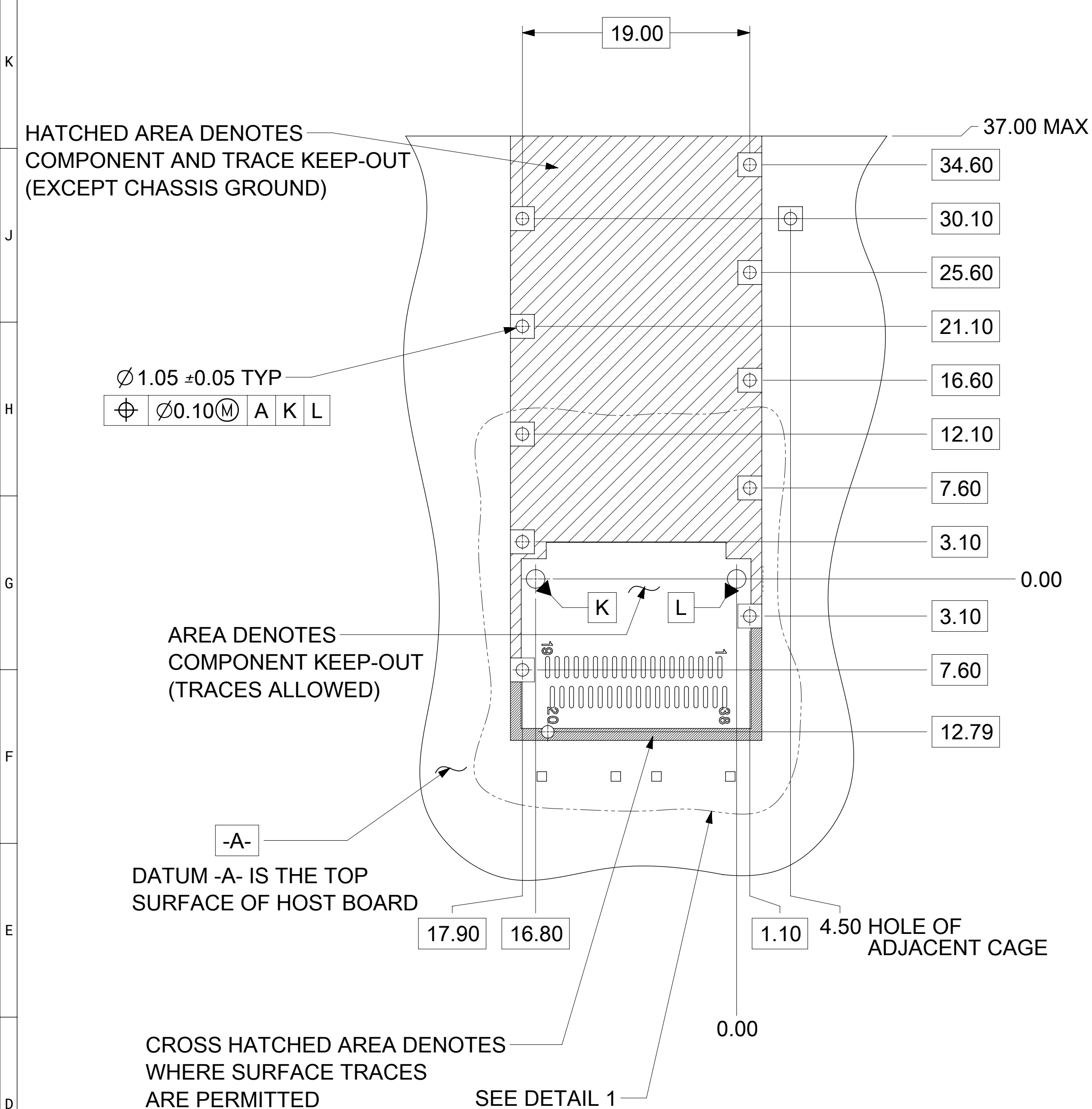
SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		CURRENT REV DESC: SEE REVISION TABLE	
	DIMENSION UNITS	SCALE		
▽ = 0	mm	2:1		
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)			
▽ = 0	ANGULAR TOL ± 2.0°			
▽ = 0	4 PLACES	±	EC NO: 603674	
▽ = 0	3 PLACES	±	DRWN: MKEMPEGOWDA 2018/08/27	
▽ = 0	2 PLACES	± 0.13	CHK'D: TKUMARKC 2018/08/30	
▽ = 0	1 PLACE	± 0.25	APPR: RCHEN08 2018/08/31	
▽ = 0	0 PLACES	±	INITIAL REVISION:	
▽ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING SERIES
▽ = 0			D-DRAWING	100014
DOCUMENT STATUS		P1	RELEASE DATE	2018/08/31 02:17:47
DOCUMENT NUMBER		DOC TYPE		DOC PART
1000147200		PSD	ASY	D
MATERIAL NUMBER		CUSTOMER		SHEET NUMBER
SEE DRAWING		GENERAL MARKET		3 OF 7



ZQSFP+ 1X1 CAGE ASSEMBLY  
WING SPRING FINGER TYPE, HEAT SINK & LIGHT PIPE OPTIONS

PRODUCT CUSTOMER DRAWING

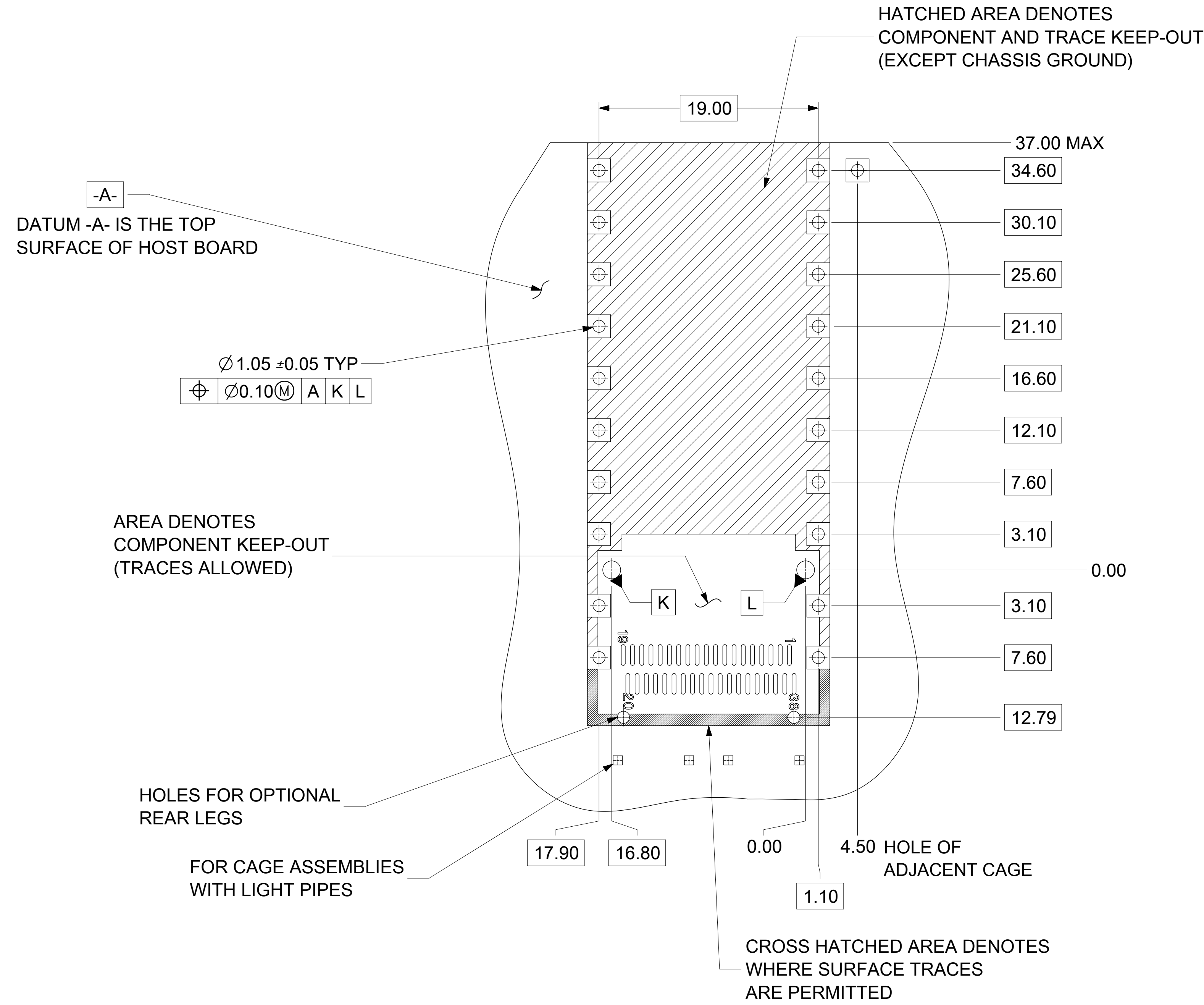
# PCB LAYOUT FOR SINGLE SIDED MOUNTING



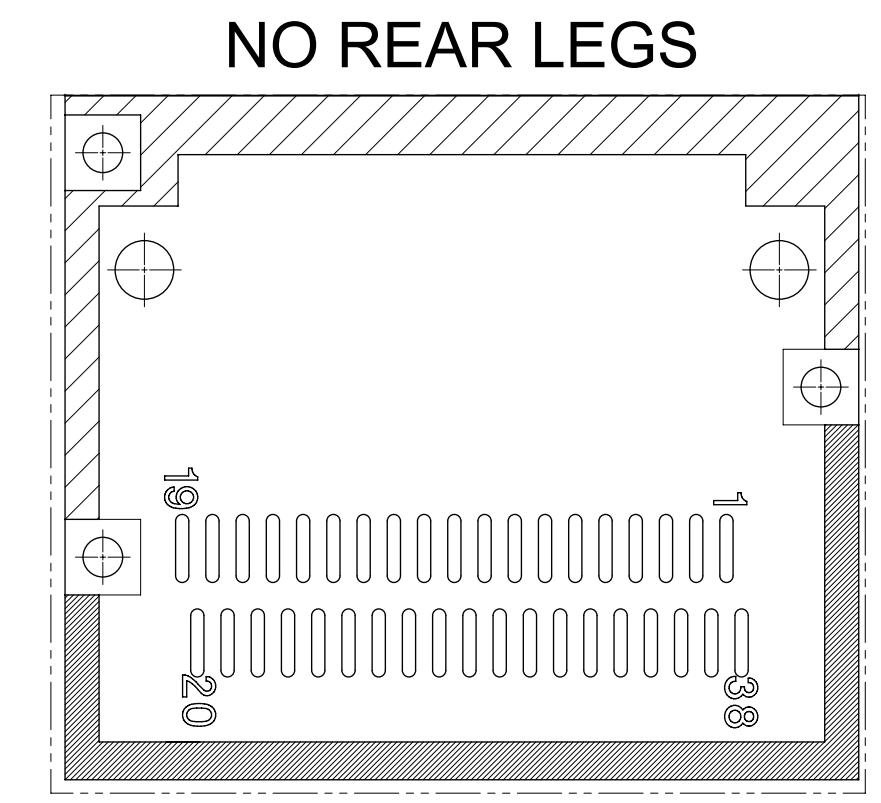
- NOTES:
1. PADS AND VIAS GO TO CHASSIS GROUND. (RECOMMENDED PADS TO BE 2.00mm SQUARE.)
  2. RECOMMENDED THRU HOLE PLATING INCLUDES HASL, OSP, OR IMMERSION (GOLD, SILVER, OR TIN).
  3. CONNECTOR PAD LAYOUT PER SFF-8663 WILL ACCOMODATE MOLEX CONNECTOR SERIES 170432.
  4. NOTED DIMENSIONS ONLY APPLY TO CAGE ASSEMBLIES WITH LIGHT PIPES.

SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		CURRENT REV DESC: SEE REVISION TABLE		
	DIMENSION UNITS	SCALE			
▽ = 0	mm	3.5:1			
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)				
▽ = 0	ANGULAR TOL ± 2.0°				
▽ = 0	4 PLACES	±	EC NO: 603674		
▽ = 0	3 PLACES	±	DRWN: MKEMPEGOWDA 2018/08/27		
▽ = 0	2 PLACES	± 0.13	CHK'D: TKUMARKC 2018/08/30		
▽ = 0	1 PLACE	± 0.25	APPR: RCHEN08 2018/08/31		
▽ = 0	0 PLACES	±	INITIAL REVISION:		
▽ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES
▽ = 0			D-SIZE	100014	100014
DOCUMENT STATUS		P1	RELEASE DATE	2018/08/31 02:17:47	
DOCUMENT NUMBER		DOC TYPE		DOC PART	REVISION
1000147200		PSD		ASY	D
MATERIAL NUMBER		CUSTOMER		SHEET NUMBER	
SEE DRAWING		GENERAL MARKET		4 OF 7	

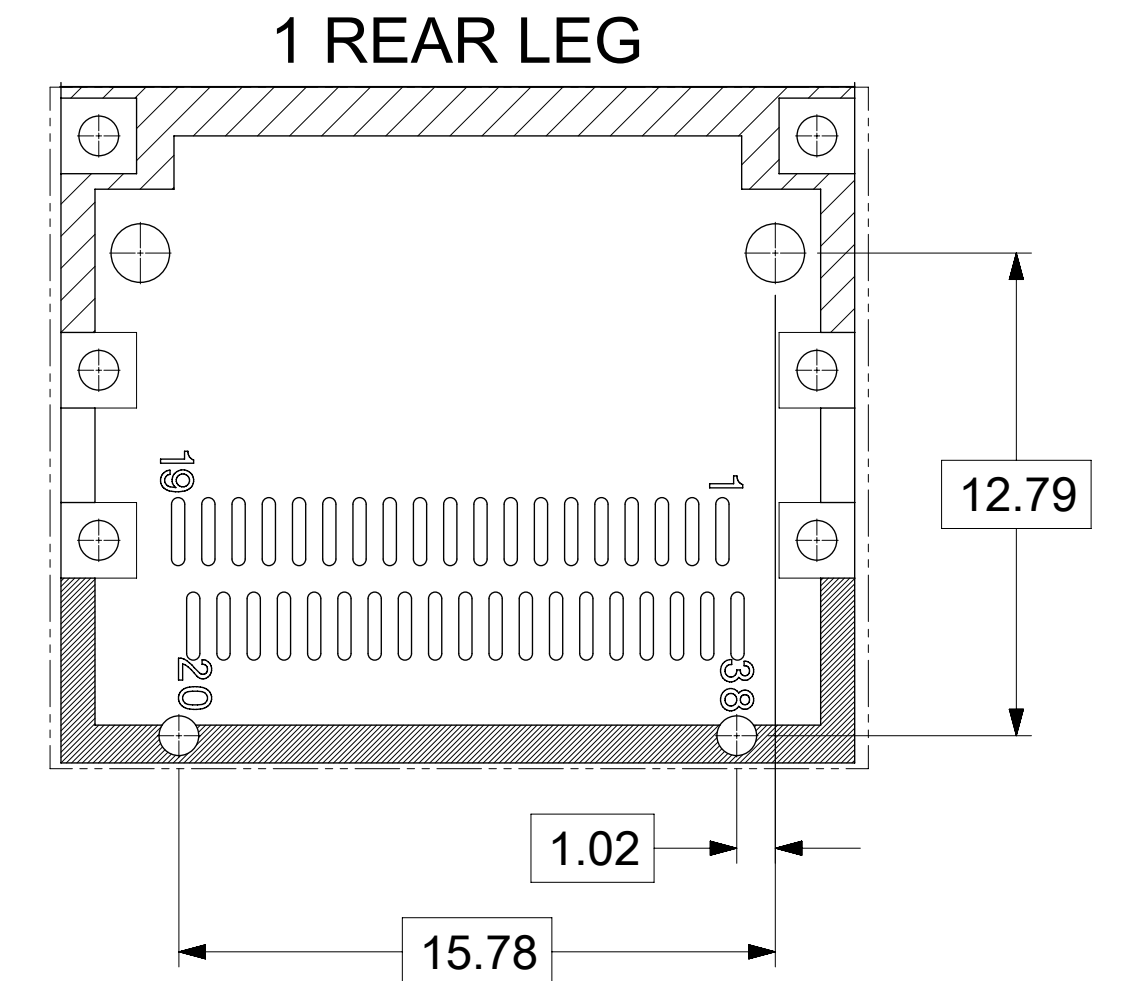
# PCB LAYOUT FOR BELLY TO BELLY MOUNTING



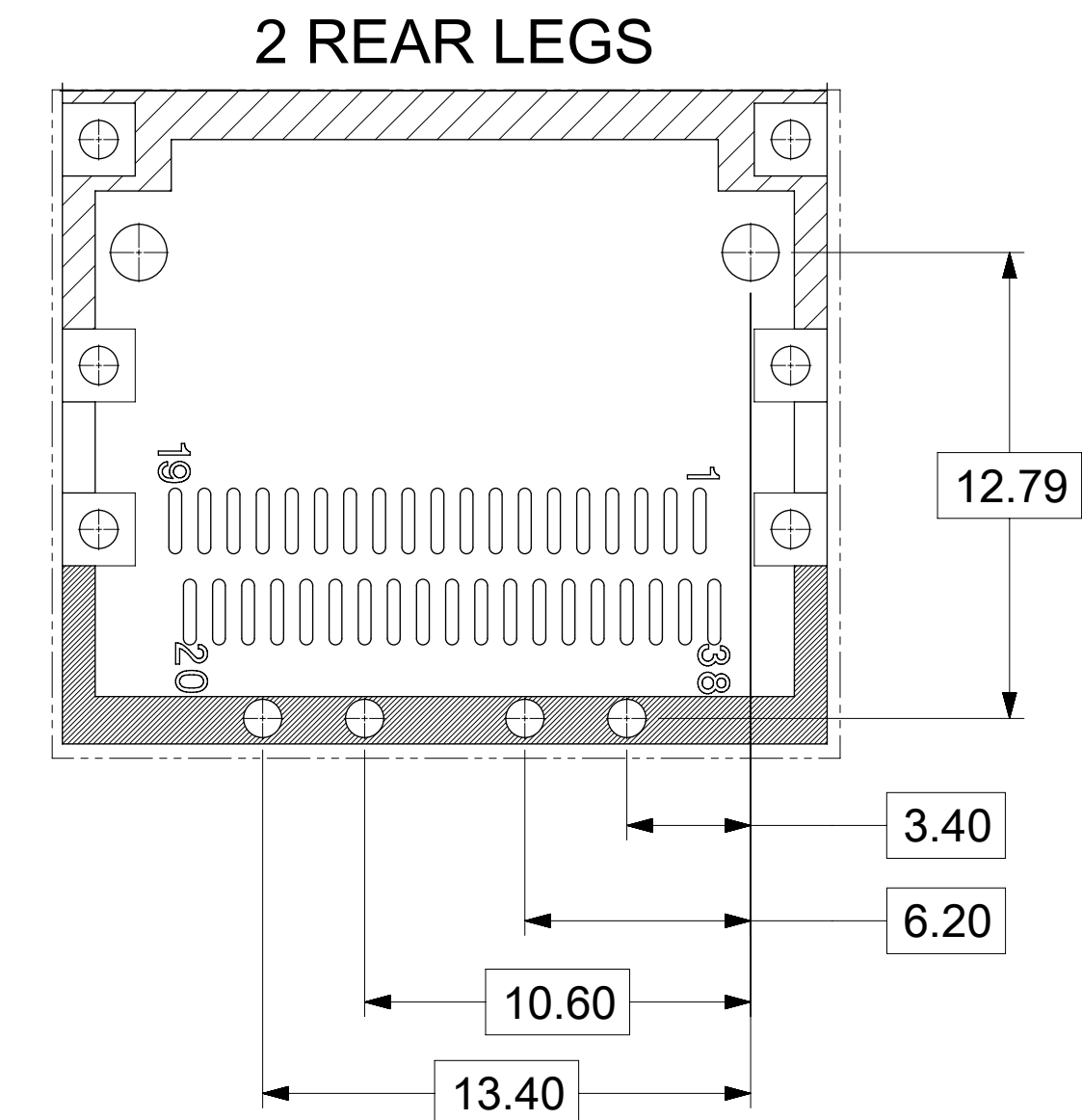
NOTE:  
SEE SHEET 4 FOR  
HOST CONNECTOR DETAIL  
AND LED LOCATION DETAILS



PARTIAL 1  
SCALE 5:1



PARTIAL 5  
SCALE 5:1

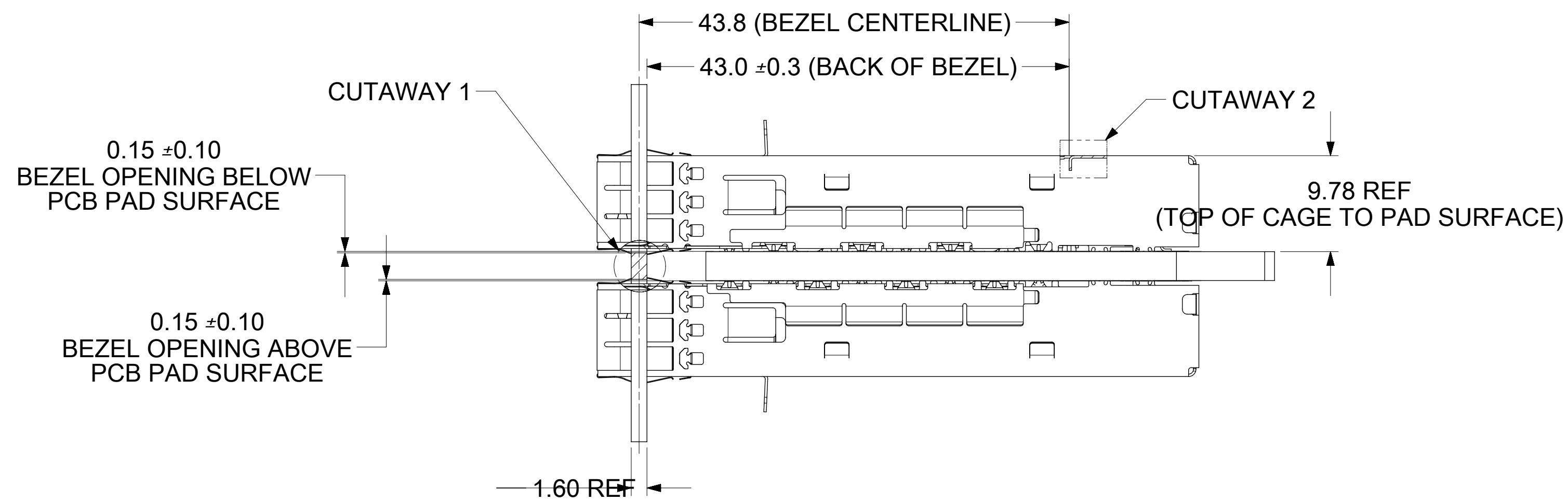


PARTIAL 6  
SCALE 5:1

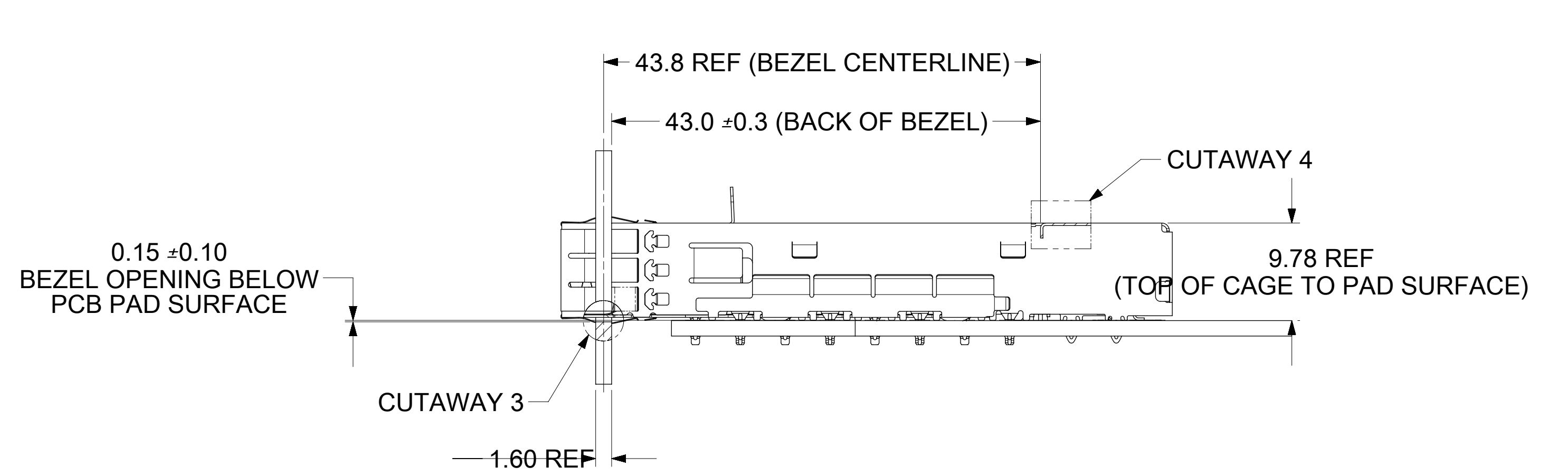
- NOTES:
1. PADS AND VIAS GO TO CHASSIS GROUND. (RECOMMENDED PADS TO BE 2.00mm SQUARE.)
  2. RECOMMENDED THRU HOLE PLATING INCLUDES HASL, OSP, OR IMMERSION (GOLD, SILVER, OR TIN).
  3. CONNECTOR PAD LAYOUT PER SFF-8663 WILL ACCOMODATE MOLEX CONNECTOR SERRIES 170432.

SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		CURRENT REV DESC: SEE REVISION TABLE		
	DIMENSION UNITS	SCALE			
▽ = 0	mm	4:1			
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		EC NO: 603674		
▽ = 0	ANGULAR TOL ± 2.0°		DRWN: MKEMPEGOWDA 2018/08/27		
▽ = 0	4 PLACES ±		CHK'D: TKUMARKC 2018/08/30		
▽ = 0	3 PLACES ±		APPR: RCHEN08 2018/08/31		
▽ = 0	2 PLACES ± 0.13		INITIAL REVISION:		
▽ = 0	1 PLACE ± 0.25		DRWN: MKEMPEGOWDA 2016/06/22		
▽ = 0	0 PLACES ±		APPR: RCHEN08 2016/09/26		
▽ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES
▽ = 0			THIRD ANGLE PROJECTION	D-SIZE	100014
			MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
			1000147200	GENERAL MARKET	5 OF 7
			DOCUMENT NUMBER	DOC TYPE	DOC PART
			1000147200	PSD	ASY
			REVISION		

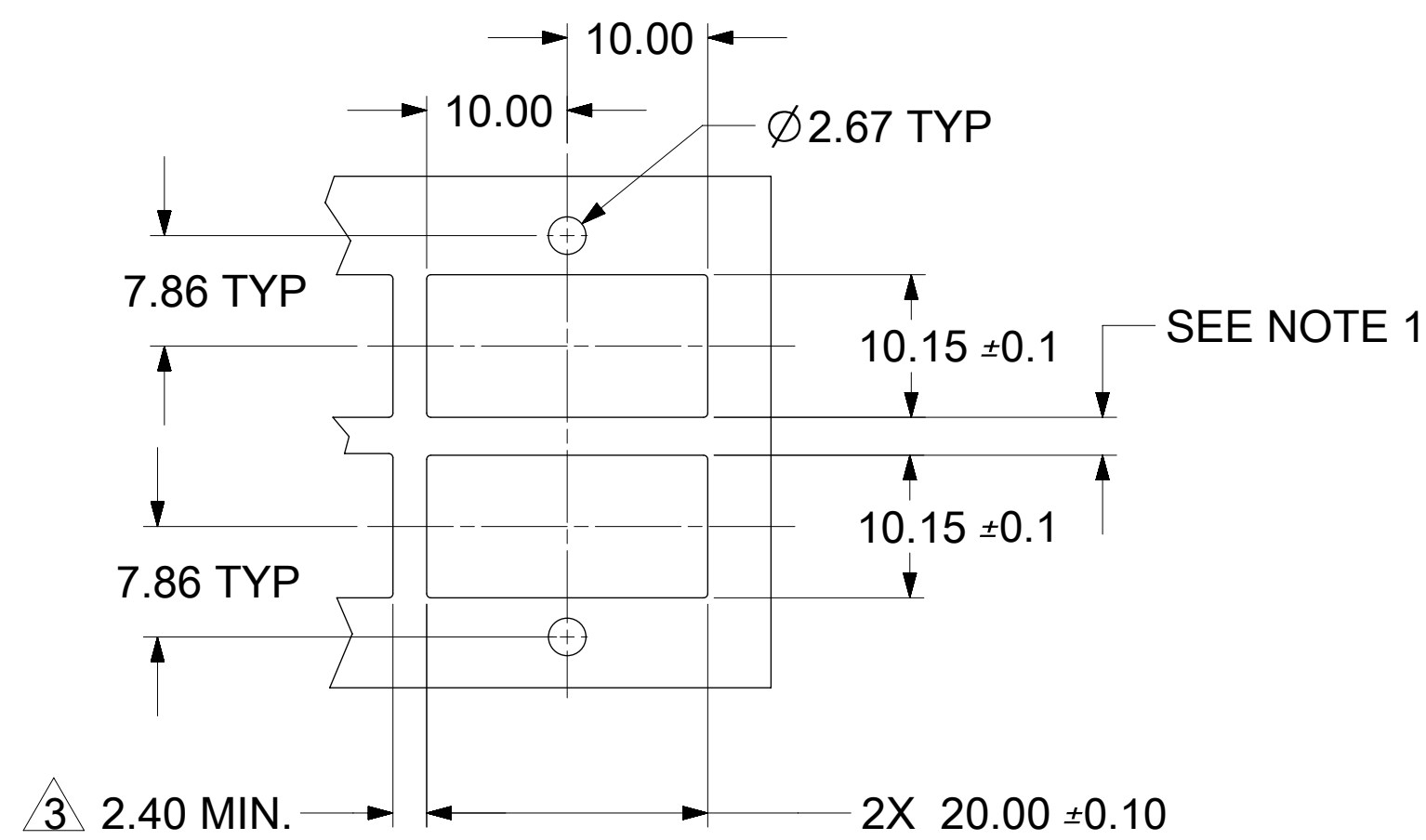
BEZEL AND BOARD POSITION DIMENSIONS FOR BELLY TO BELLY MOUNTING



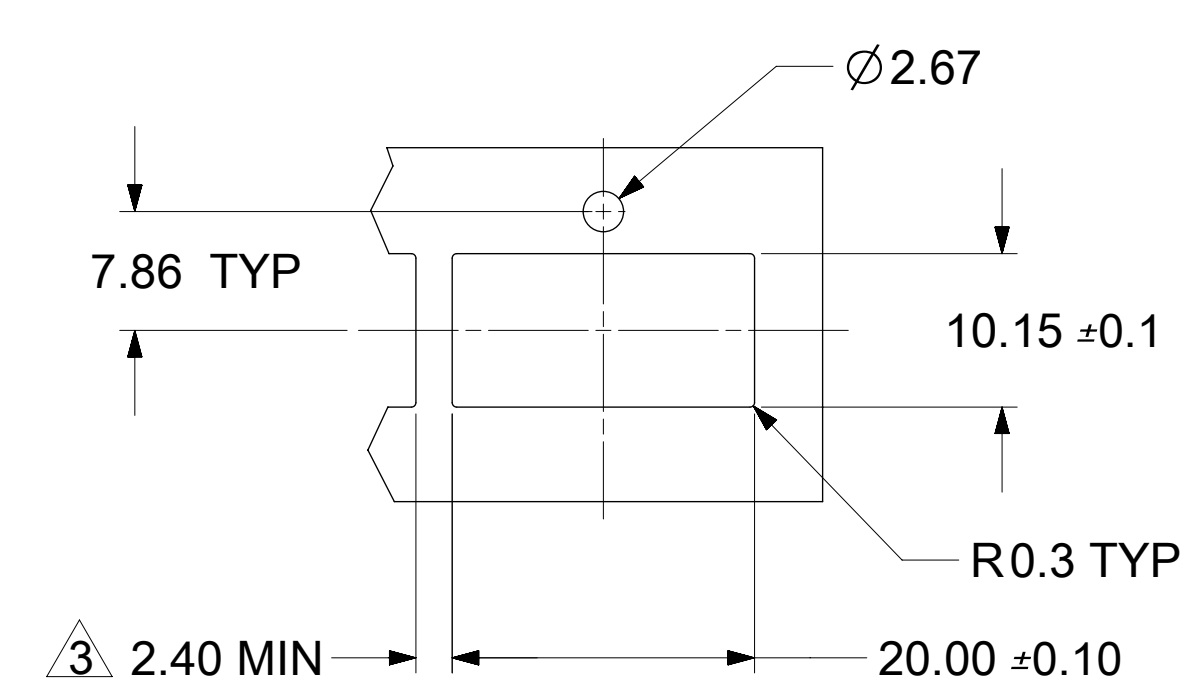
BEZEL AND BOARD POSITION DIMENSIONS FOR SINGLE SIDE MOUNTING



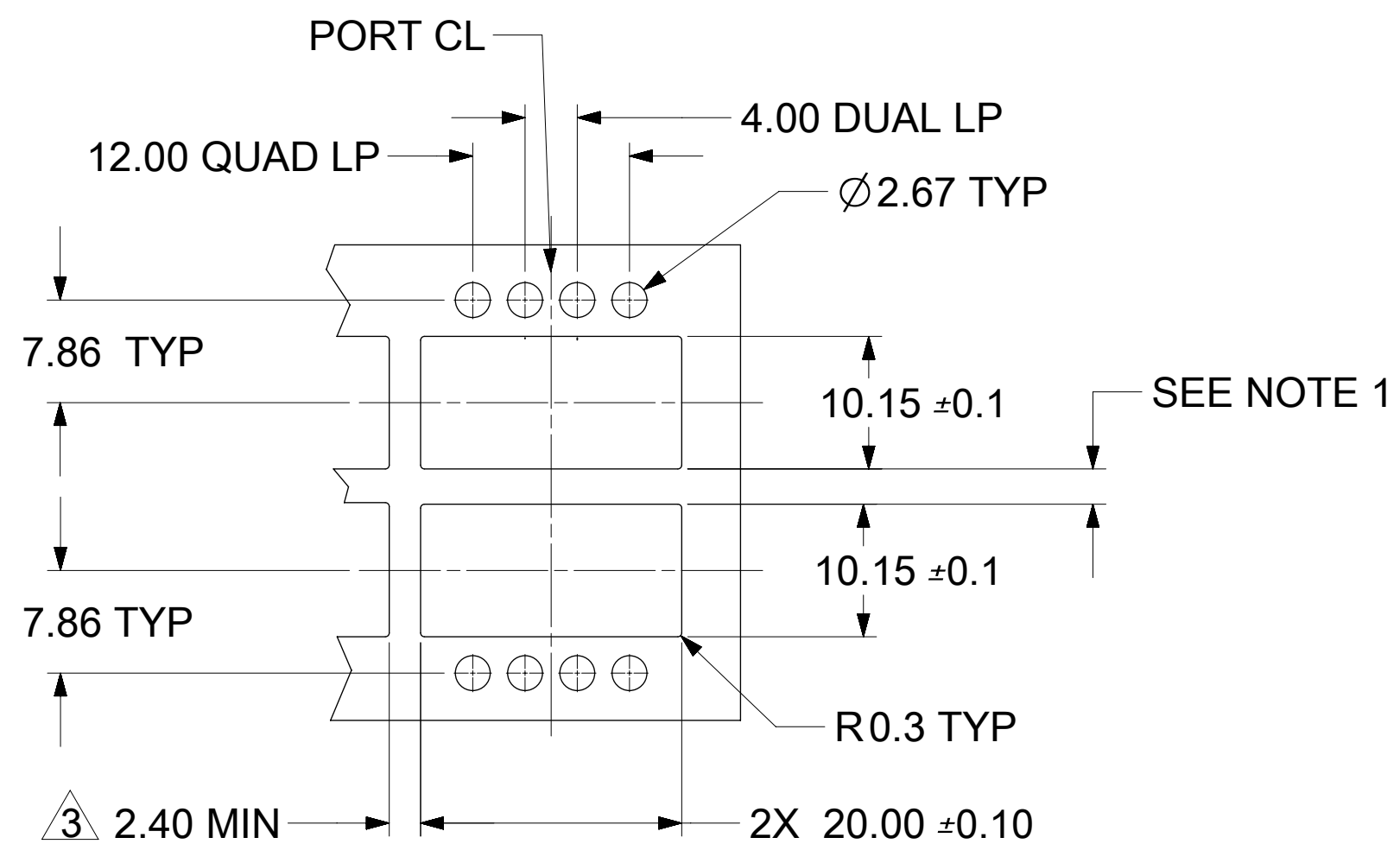
SINGLE LIGHT PIPE



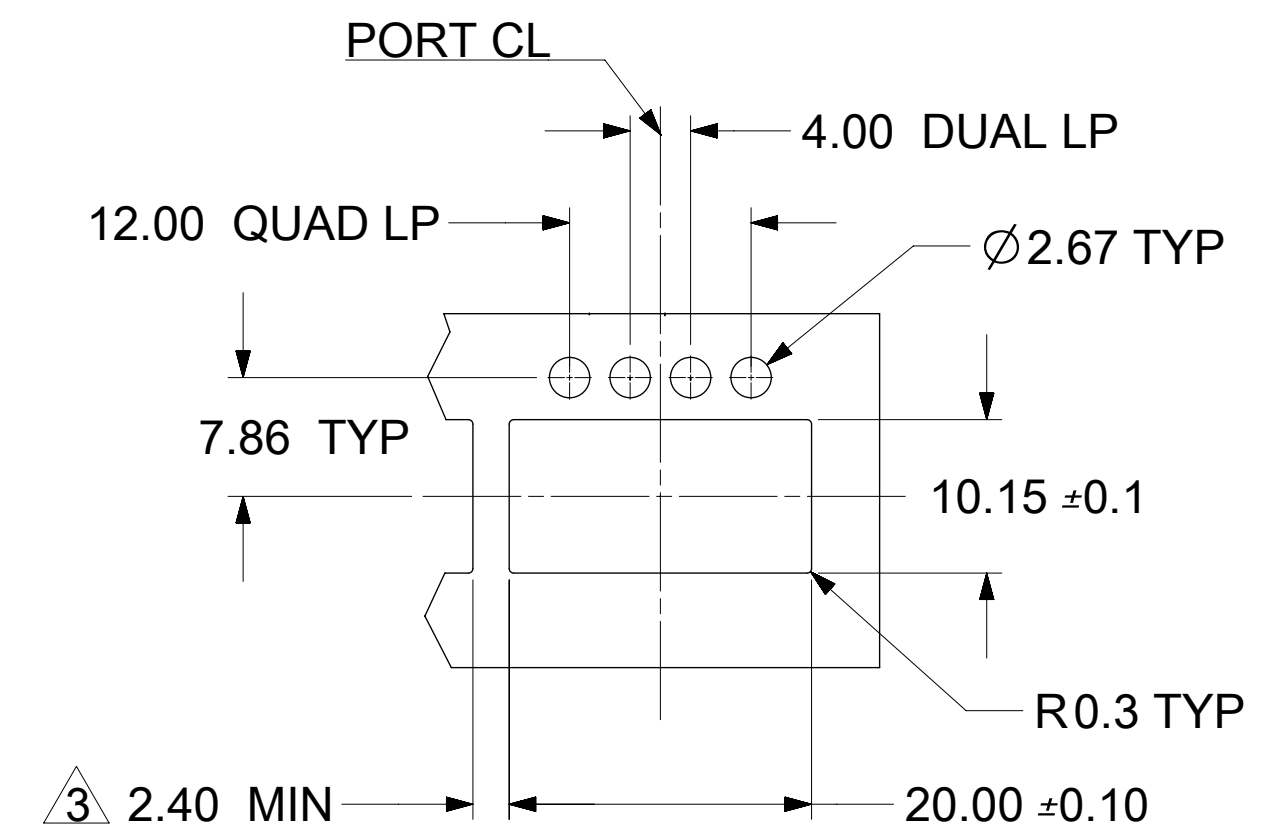
SINGLE LIGHT PIPE



DUAL/QUAD LIGHT PIPE



DUAL/QUAD LIGHT PIPE



- NOTE:
1. PCB THICKNESS VARIATION MUST BE CONSIDERED WHEN DETERMINING BEZEL OPENING LOCATION.
  2. NOTED DIMENSIONS ONLY APPLY TO CAGE ASSEMBLIES WITH LIGHT PIPES.
  3. THIS DIMENSION IS FOR REFERENCE ONLY. USER CAN MODIFY UT DEPENDS ON APPLICATION. (THIS DIMENSION VARIES BASED ON DISTANCE OF "HOLE OF ADJACENT CAGE" ON PCB LAYOUT.)

SYMBOLS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
▽ = 0	DIMENSION UNITS	SCALE	CURRENT REV DESC: SEE REVISION TABLE
▽ = 0	mm	2.5:1	
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		
▽ = 0	ANGULAR TOL	± 2.0°	
▽ = 0	4 PLACES	±	EC NO: 603674
▽ = 0	3 PLACES	±	DRWN: MKEMPEGOWDA 2018/08/27
▽ = 0	2 PLACES	± 0.13	CHK'D: TKUMARKC 2018/08/30
▽ = 0	1 PLACE	± 0.25	APPR: RCHEN08 2018/08/31
▽ = 0	0 PLACES	±	INITIAL REVISION:
▽ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRWN: MKEMPEGOWDA 2016/06/22
▽ = 0	THIRD ANGLE PROJECTION		APPR: RCHEN08 2016/09/26
		DRAWING	SERIES
		D-SIZE	100014
DOCUMENT STATUS		MATERIAL NUMBER	CUSTOMER
P1	RELEASE DATE	1000147200	GENERAL MARKET
2018/08/31	02:17:47	DOC TYPE	DOC PART
		PSD	ASY
		REVISION	D
		SHEET NUMBER	
		6 OF 7	

**molex**

ZQSFP+ 1X1 CAGE ASSEMBLY  
WING SPRING FINGER TYPE, HEAT SINK & LIGHT PIPE OPTIONS

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER: 1000147200  
DOC TYPE: PSD  
DOC PART: ASY  
REVISION: D

MATERIAL NUMBER: SEE DRAWING  
CUSTOMER: GENERAL MARKET  
SHEET NUMBER: 6 OF 7

