



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



AMPHENOL PART NUMBER CONFIGURATION

U90 - G 3X1 - 1XXX

HEATSINK OPTION

- I** = NO HEATSINK OR CLIP SHIPPED
- S** = PIN STYLE HEATSINK AND CLIP (H1=15.1; H2=6.5; SAN HEIG HT)
- G** = PIN STYLE HEATSINK AND CLIP (H1=12.8; H2=4.2; PC I HEIG HT)
- Z** = PIN STYLE HEATSINK AND CLIP (H1= 22.1; H2=13.5; TALL)
- D** = PIN-FIN STYLE HEATSINK AND CLIP (H1=15.1; H2=6.5; SAN HEIG HT)
- E** = PIN-FIN STYLE HEATSINK AND CLIP (H1=12.8; H2=4.2; PC I HEIG HT)
- F** = PIN-FIN STYLE HEATSINK AND CLIP (H1= 22.1; H2=13.5; TALL)
- K** = PIN STYLE HEATSINK AND CLIP (H1=18.1; H2=9.5; C USTO M HEIG HT)

NOTE:
FOR LOCATION OF "H1" AND "H2" DIMENSIONS SEE SHEET 2

PACKAGING OPTIONS

- Q** = TRAY PACKAGING (HEATSINK & CLIP SHIPPED IN SEPARATE TRAY, IF ORDERED)
- A** = TRAY PACKAGING, HEATSINK & CLIP SHIPPED ASSEMBLED
- B** = TRAY PACKAGING, HEATSINK & CLIP SHIPPED ASSEMBLED WITH LIGHT PIPE BULK PACKED

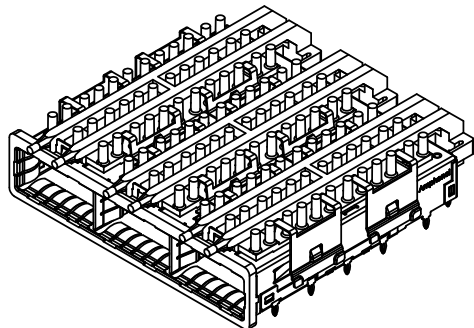
LIGHT PIPE AND BEHIND BEZEL COVER OPTIONS

- 0** = STANDARD (NO LIGHT PIPES)
- 1** = WITH ROUND LIGHT PIPES
- 2** = WITH ROUND LIGHT PIPES AND WITH BEHIND BEZEL EMIGASKET SHIPPED LOOSE
- 3** = WITH SQUARE LIGHT PIPES
- 7** = WITH ROUND SINGLE BARREL LIGHT PIPE
- 8** = WITH SQUARE LIGHT PIPES, WITH LIGHT PIPE INLET SURFACE AT 1.45 mm OFF THE PCB

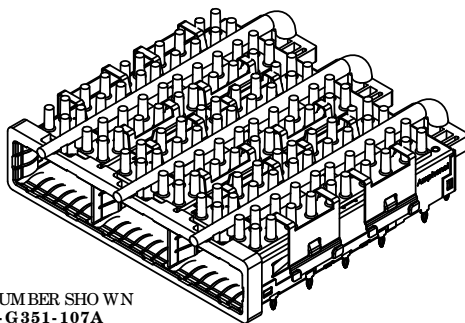
OPTIONAL DUST COVER

- 0** = WITH OUT DUST COVER
- D** = WITH DUST COVER (SHIPPED AS LOOSE PIECE)

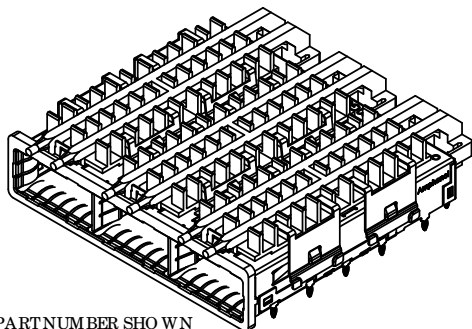
REV	DESCRIP	DATE	APPRVD
U	CORRECTED EMIGASKET NOTE	SEP 29/10	
V	CUSTOM POSITION REVISED	JAN 03/12	
W	ADDED NEW OPTION	JUN 19/12	
Z	ADDED NEW OPTION "B"	SEP 10/12	
Y	ADDED NEW OPTION "K"	OCT 15/12	



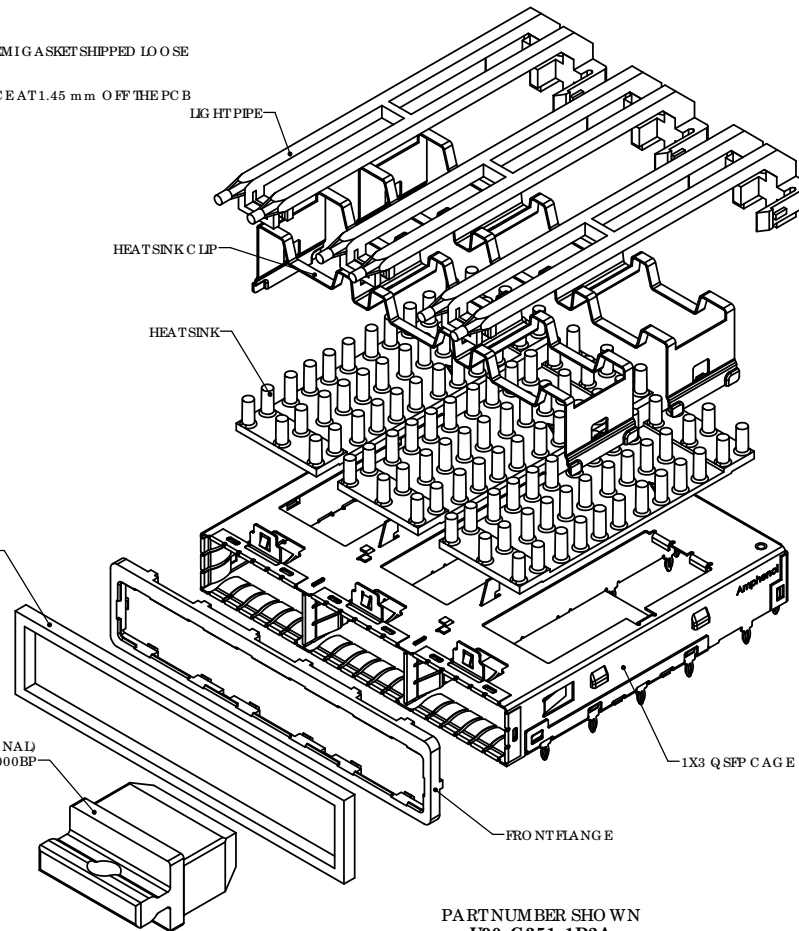
PART NUMBER SHOWN
U90-G351-101A



PART NUMBER SHOWN
U90-G351-107A



PART NUMBER SHOWN
U90-G3D1-101A



BEHIND BEZEL EMIGASKET (OPTIONAL)
P/N: U90-1320-8010-BP

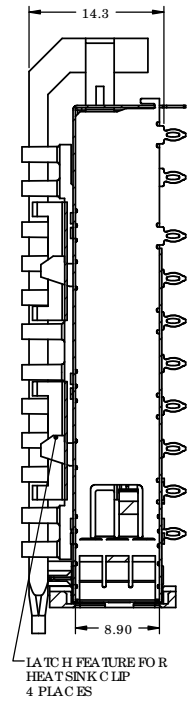
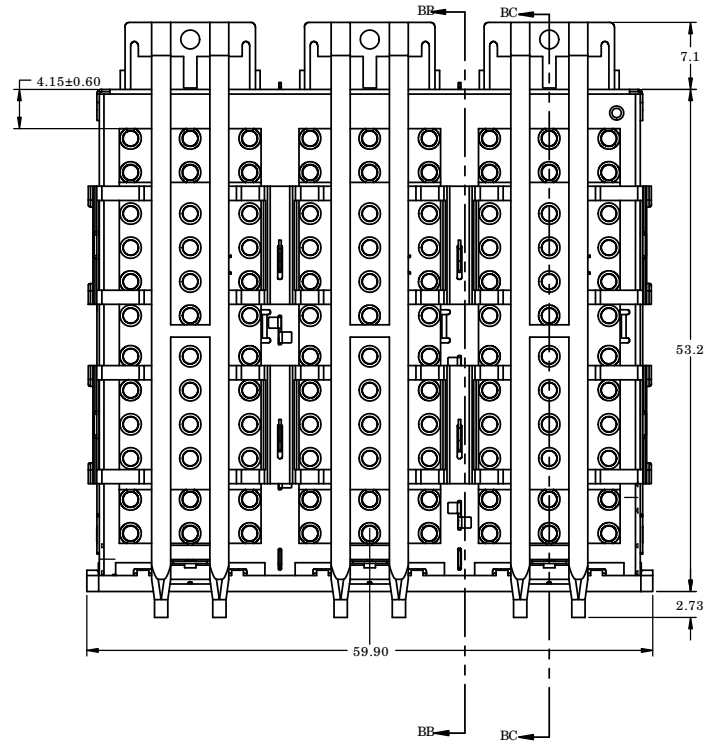
DUST COVER (OPTIONAL)
P/N: U90-1401-8000BP

PART NUMBER SHOWN
U90-G351-1D2A
(EXPLODED VIEW)

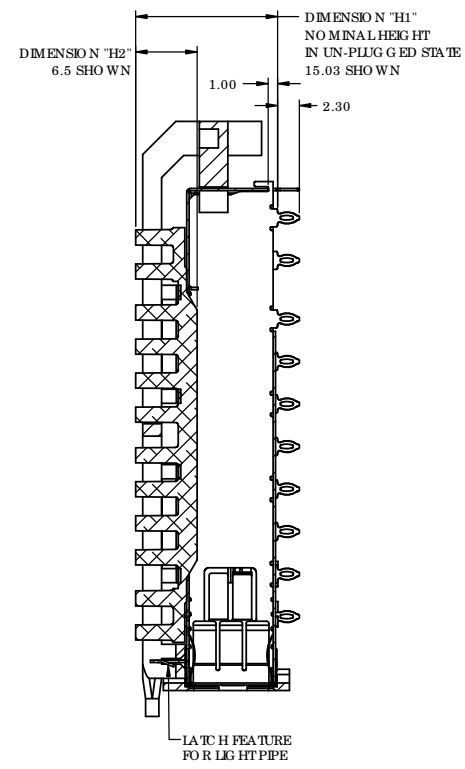
DO NOT SCALE DRAWING
THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION AND SUCH INFORMATION MAY NOT BE DISCLOSED TO OTHERS FOR ANY PURPOSE OR USED FOR MANUFACTURING PURPOSES WITHOUT PERMISSION FROM AMPHENOL CANADA CORP.



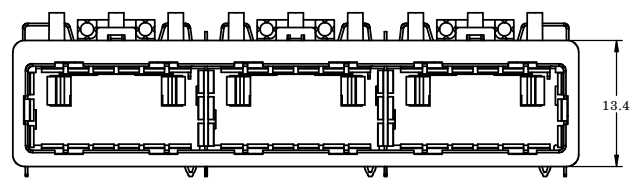
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETER TOLERANCES ARE:		APPROVALS	DATE	Amphenol High Speed Interconnects A Division of Amphenol Corp. www.amphenol-highspeed.com		
DECIMALS	ANGLES	DRAWN	DATE			
.XX ± .10	± 1°	Z.LJ	MAY 23/08	TITLE QSFP 1x3 CAGE BEHIND BEZEL		
.X ± .25		DESIGNED	MAY 23/08			
MATERIAL AND FINISH		CHECKED		WITH HEATSINK, CLIP AND LIGHT PIPE		
		QA APP'D				
REF.		IE APP'D		SIZE	DWG. NO.	REV.
		CODE IDENT. NO.	DWG APP'D	A.GREEN	2:1	P-U90-G3X1-1XXX
			DEC.5.07	SCALE	PROJECT	SHEET
				2:1	PROJECT	1 OF 11



SECTION BB-BB
SCALE 2.5:1



SECTION BC-BC
SCALE 2.5:1



PART NUMBER SHOWN
U90-G351-101A
(WITH ROUND LIGHT PIPE)

NOTES:

- MATERIAL:
 CAGE AND EMI SPRINGS: COPPER ALLOY
 FRONT FLANGE: ZINC DIE CAST
 HEAT SINK CLIP: STEEL ALLOY
 PIN-FIN STYLE HEAT SINK: ALUMINUM
 PIN STYLE HEAT SINK: NICKEL PLATED ALUMINUM
 CAGE PLATING: 3.81µm [100µ"] MIN. NICKEL
 LIGHT PIPE: GELDEXAN, OPTICAL GRADE
- CAGE IS INTENDED FOR USE WITH THE
 QUAD SMALL FORM-FACTOR PLUGGABLE (QSFP)
 TRANSCEIVER SPECIFICATION INF-8438i.

DIMENSION "H1" SHOWN IN UN-PLUGGED STATE		
PART NUMBER	DIM. "H1"	DIM. "H2"
U90-G351-1XXX	15.03	6.50
U90-G361-1XXX	12.37	4.20
U90-G371-1XXX	22.03	13.50
U90-G3D1-1XXX	15.03	6.50
U90-G3E1-1XXX	12.37	4.20
U90-G3F1-1XXX	22.03	13.50
U90-G3K1-1XXX	18.03	9.50



UNLESS OTHERWISE SPECIFIED
 DIMENSIONS ARE IN MILLIMETER
 TOLERANCES ARE:

DECIMALS ANGLES
 .XX ±.10 ± 1°
 X ±.25

MATERIAL AND FINISH

REF.

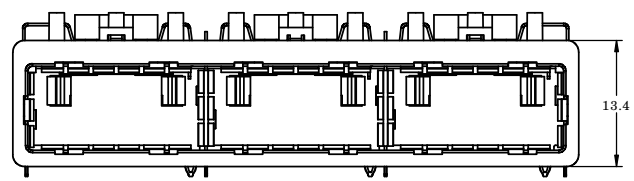
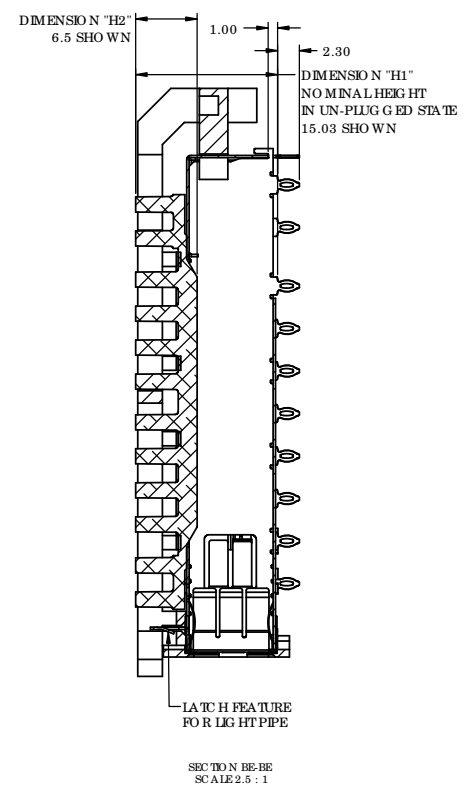
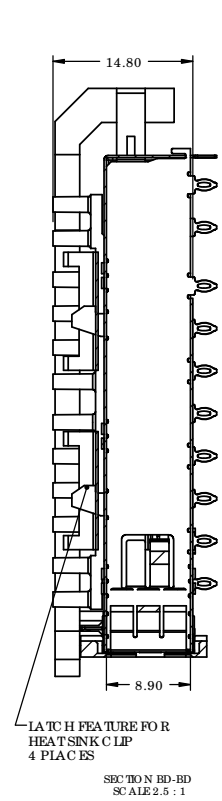
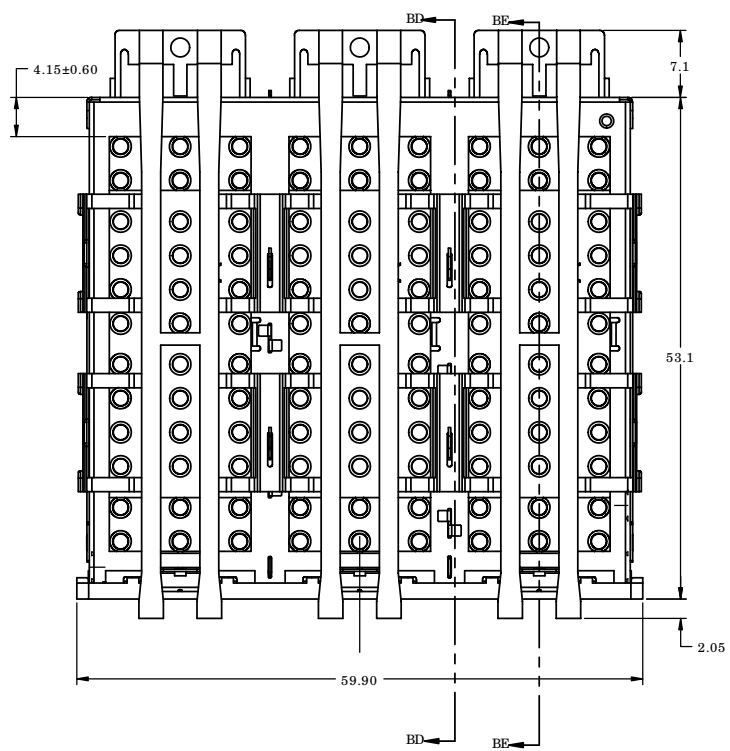
CODE IDENT. NO.

APPROVALS	DATE
DRAWN Z.LJ	MAY 23/08
DESIGNED ZLJ	MAY 23/08
CHECKED	
QA APP'D	
IE APP'D	
DWG APP'D A.GREEN	DEC.5.07

Amphenol High Speed Interconnects
 A Division of Amphenol Corp. www.amphenol-highspeed.com

TITLE
**QSFP 1x3 CAGE
 BEHIND BEZEL
 WITH HEATSINK, CLIP AND LIGHT PIPE**

SIZE C	DWG. NO. P-U90-G3X1-1XXX	REV. Y
SCALE 2:1	PROJECT PROJECT	SHEET 2 OF 11



PART NUMBER SHOWN
U90-G351-103A
(WITH SQUARE LIGHT PIPE)

NOTES:

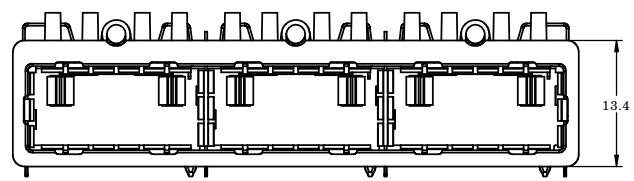
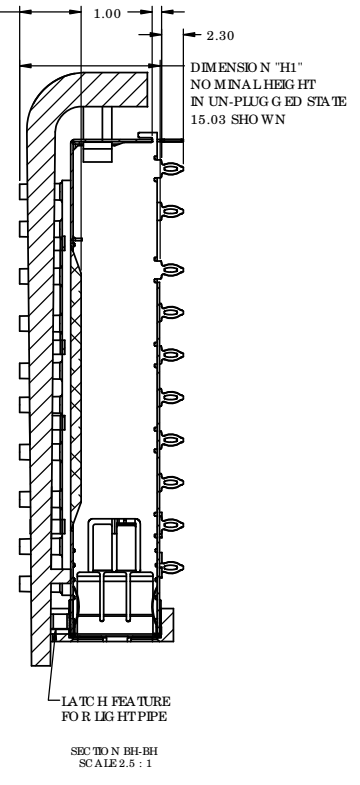
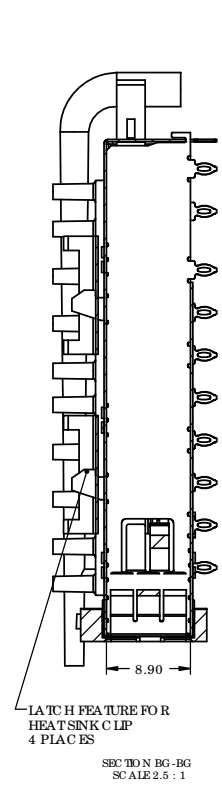
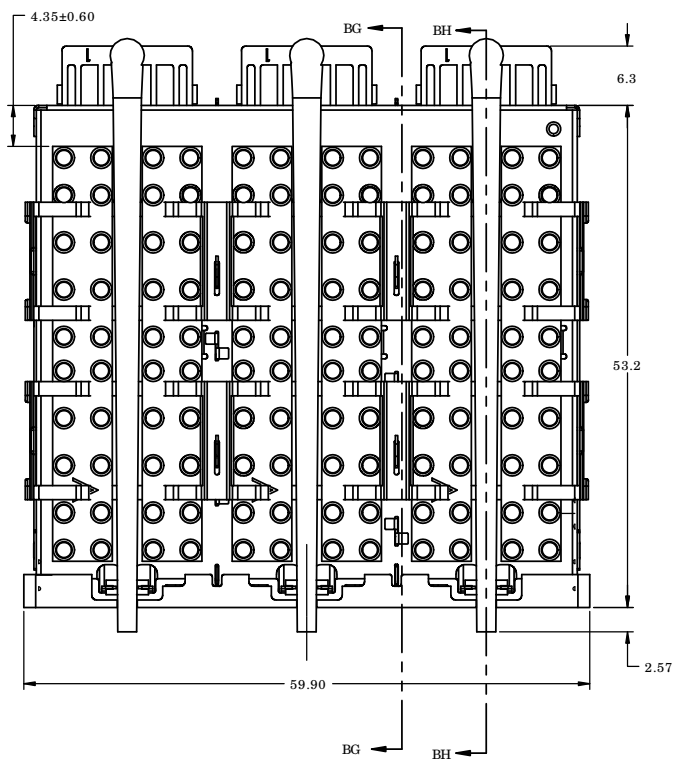
- MATERIAL:**
 CAGE AND EMI SPRINGS: COPPER ALLOY
 FRONT FLANGE: ZINC DIE CAST
 HEAT SINK CLIP: STEEL ALLOY
 PIN-FIN STYLE HEAT SINK: ALUMINUM
 PIN STYLE HEAT SINK: NICKEL PLATED ALUMINUM
 CAGE PLATING: 3.81µm [100µ"] MIN. NICKEL
 LIGHT PIPE: GELAXAN, OPTICAL GRADE
- CAGE IS INTENDED FOR USE WITH THE QUAD SMALL FORM-FACTOR PLUGGABLE (QSFP) TRANSCEIVER SPECIFICATION INF-8438i.

DIMENSION "H1" SHOWN IN UN-PLUGGED STATE		
PART NUMBER	DIM. "H1"	DIM. "H2"
U90-G351-1XXX	15.03	6.50
U90-G361-1XXX	12.37	4.20
U90-G371-1XXX	22.03	13.50
U90-G3D1-1XXX	15.03	6.50
U90-G3E1-1XXX	12.37	4.20
U90-G3F1-1XXX	22.03	13.50
U90-G3K1-1XXX	18.03	9.50



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETER TOLERANCES ARE:		APPROVALS	DATE
DECIMALS	ANGLES	DRAWN	MAY 23/08
.XX ±.10	± 1°	DESIGNED	MAY 23/08
.X ±.25		CHECKED	
MATERIAL AND FINISH		QA APP'D	
REF.		IE APP'D	
CODE IDENT. NO.		DWG APP'D	DEC.5.07
		A.GREEN	

Amphenol High Speed Interconnects A Division of Amphenol Corp. www.amphenol-highspeed.com		
TITLE QSFP 1x3 CAGE BEHIND BEZEL WITH HEATSINK, CLIP AND LIGHT PIPE		
SIZE	DWG. NO.	REV. Y
C	P-U90-G3X1-1XXX	
SCALE	PROJECT	SHEET
2:1	PROJECT	3 OF 11



PART NUMBER SHOWN
U90-G351-107A
 (WITH SINGLE BARREL
 ROUND LIGHT PIPE)

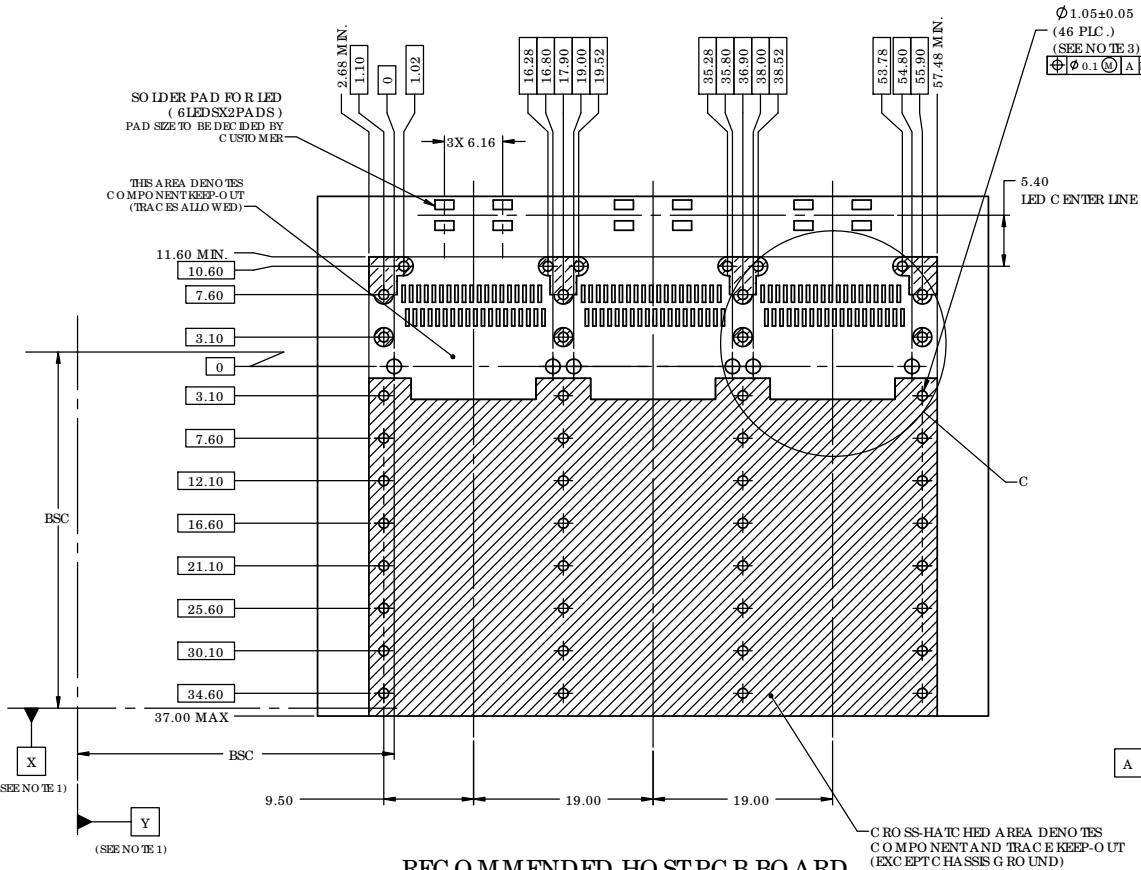
NOTES:

- MATERIAL:**
 CAGE AND EMI SPRINGS: COPPER ALLOY
 FRONT FLANGE: ZINC DIE CAST
 HEAT SINK CLIP: STEEL ALLOY
 PIN-FIN STYLE HEAT SINK: ALUMINUM
 PIN STYLE HEAT SINK: NICKEL PLATED ALUMINUM
 CAGE PLATING: 3.81µm [100µ"] MIN. NICKEL
 LIGHT PIPE: GELEXAN, OPTICAL GRADE
- CAGE IS INTENDED FOR USE WITH THE
 QUAD SMALL FORM-FACTOR PLUGGABLE (QSFP)
 TRANSCEIVER SPECIFICATION INF-8438i.

DIMENSION "H1" SHOWN IN UN-PLUGGED STATE		
PART NUMBER	DIM. "H1"	DIM. "H2"
U90-G351-1XXX	15.03	6.50
U90-G361-1XXX	12.37	4.20
U90-G371-1XXX	22.03	13.50
U90-G3D1-1XXX	15.03	6.50
U90-G3E1-1XXX	12.37	4.20
U90-G3F1-1XXX	22.03	13.50
U90-G3K1-1XXX	18.03	9.50

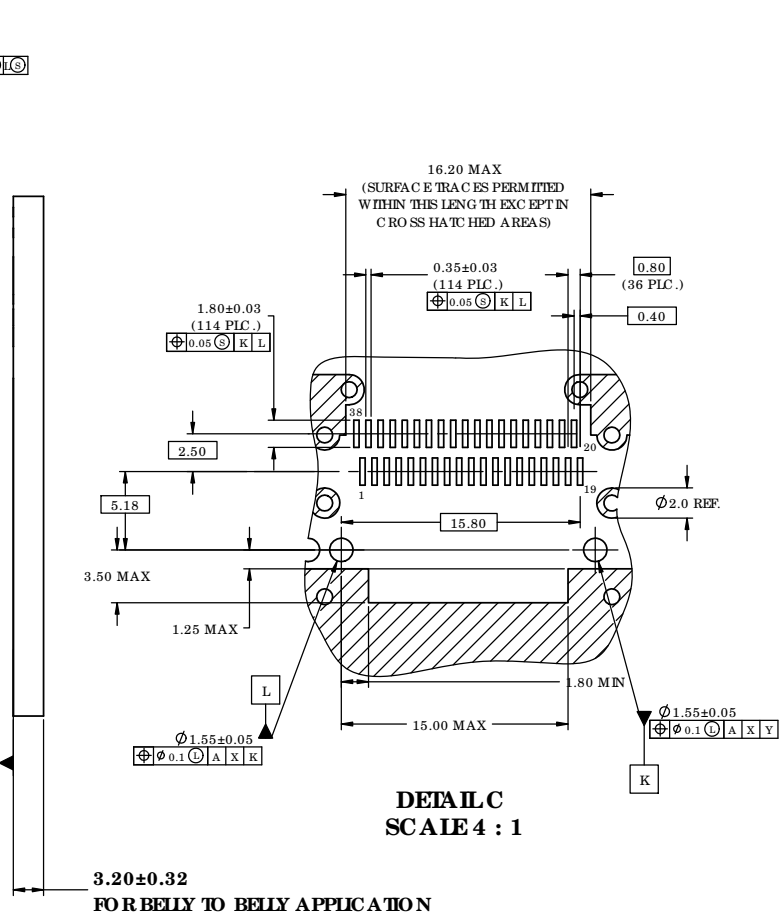


UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETER TOLERANCES ARE:		APPROVALS	DATE	Amphenol High Speed Interconnects A Division of Amphenol Corp. www.amphenol-highspeed.com
DECIMALS .XX ±.10 .X ±.25	ANGLES ± 1°	DRAWN ZLJ	MAY 23/08	
MATERIAL AND FINISH	REF.	DESIGNED ZLJ	MAY 23/08	TITLE QSFP 1x3 CAGE BEHIND BEZEL WITH HEATSINK, CLIP AND LIGHT PIPE
		CHECKED		
	CODE IDENT. NO.	QA APP'D		SIZE C
		IE APP'D		DWG. NO. P-U90-G3X1-1XXX
		DWG APP'D A.GREEN	DEC.5.07	SCALE 2:1
				PROJECT PROJECT
				SHEET 4 OF 11



**RECOMMENDED HOST PCB BOARD
BEHIND BEZEL BELLY TO BELLY LAYOUT
FOR DOUBLE BARREL LIGHT PIPE
(COMPONENT SIDE OF BOARD)**

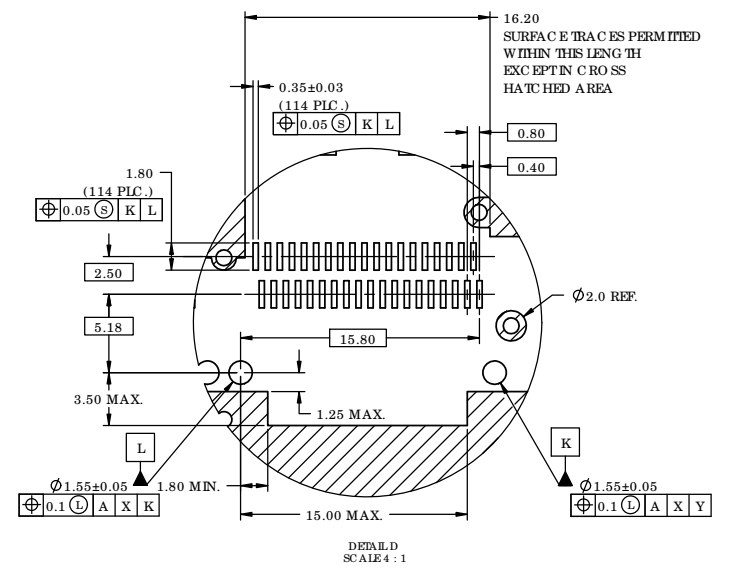
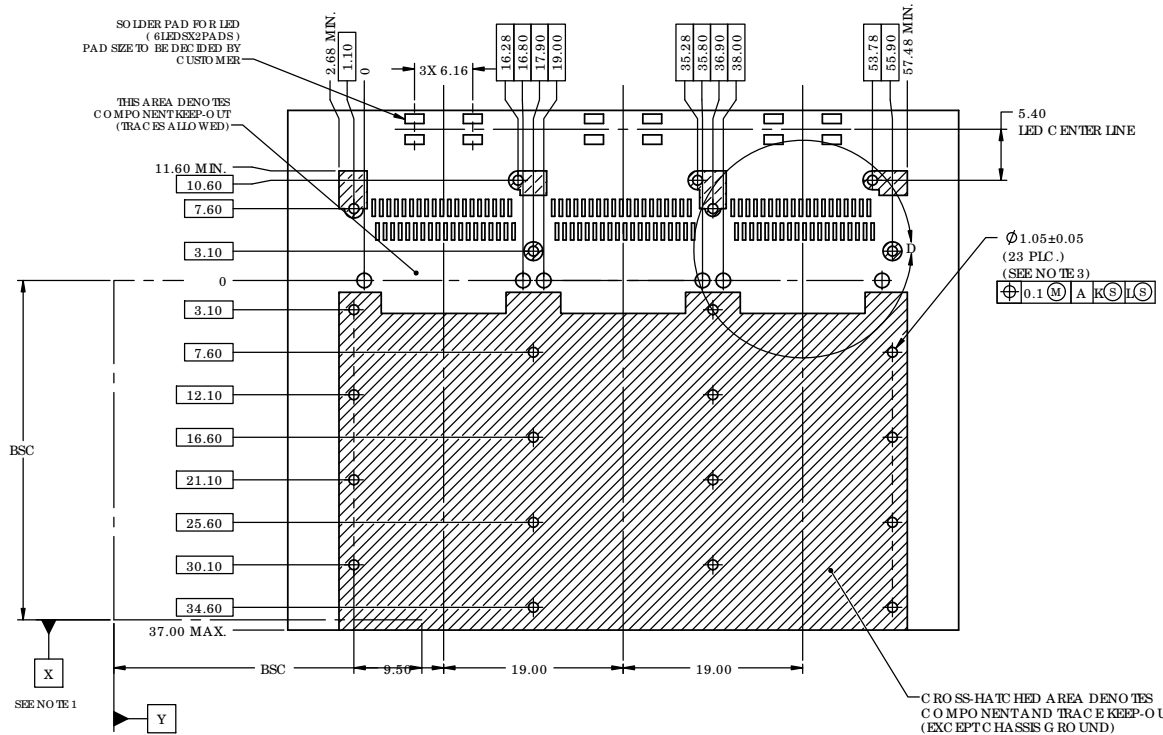
- NOTES:
1. DATUM X AND Y ESTABLISHED BY CUSTOMER'S FUDUCIAL
 2. LOCATION OF EDGE OF PCB IS APPLICATION SPECIFIC.
 3. FINISHED HOLE SIZE.



**DETAIL C
SCALE 4 : 1**



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETER TOLERANCES ARE: DECIMALS .XX ±.10 .X ±.25 ANGLES ± 1°		APPROVALS	DATE	Amphenol High Speed Interconnects A Division of Amphenol Corp. www.amphenol-highspeed.com	
MATERIAL AND FINISH		DRAWN Z.LJ	MAY 23/08		
REF.		DESIGNED Z.LJ	MAY 23/08	TITLE QSFP 1x3 CAGE BEHIND BEZEL WITH HEATSINK, CLIP AND LIGHT PIPE	
CODE IDENT. NO.		CHECKED			
		QA APP'D		SIZE C	DWG. NO. P-U90-G3X1-1XXX
		IE APP'D		SCALE 5:2	PROJECT PROJECT
		DWG APP'D A.GREEN	DEC.5.07	SHEET 5 OF 11	REV. Y

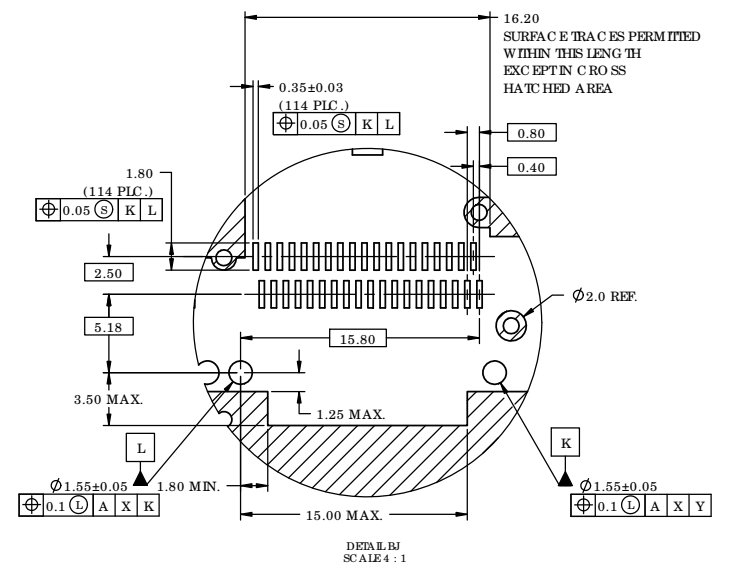
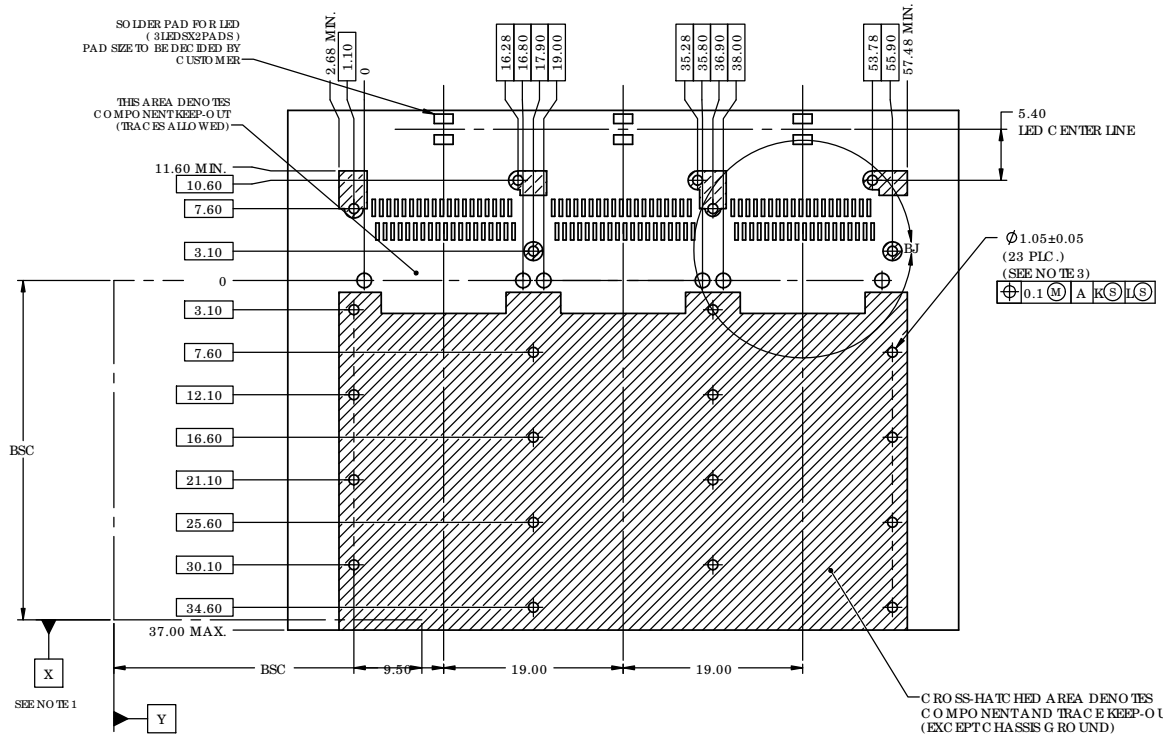


**RECOMMENDED HO ST PCB BOARD
 SINGLE LEVEL MOUNTING LAYOUT
 FOR DOUBLE BARREL LIGHT PIPE
 (COMPONENT SIDE OF BOARD)**

- NOTES:
1. DATUM X AND Y ESTABLISHED BY CUSTOMER'S FUDUCIAL
 2. LOCATION OF EDGE OF PCB IS APPLICATION SPECIFIC.
 3. FINISHED HOLE SIZE.



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETER TOLERANCES ARE: DECIMALS .XX ± .10 .X ± .25 ANGLES ± 1°		APPROVALS	DATE	Amphenol High Speed Interconnects A Division of Amphenol Corp. www.amphenol-highspeed.com	
MATERIAL AND FINISH		DRAWN Z.LJ	MAY 23/08		
REF.		DESIGNED Z.LJ	MAY 23/08	TITLE QSFP 1x3 CAGE BEHIND BEZEL WITH HEATSINK, CLIP AND LIGHT PIPE	
CODE IDENT. NO.		CHECKED			
		QA APP'D		SIZE C	DWG. NO. P-U90-G3X1-1XXX
		IE APP'D		SCALE 2:1	PROJECT PROJECT
		DWG APP'D A.GREEN	DEC.5.07	SHEET 6 OF 11	REV. Y

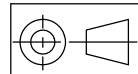


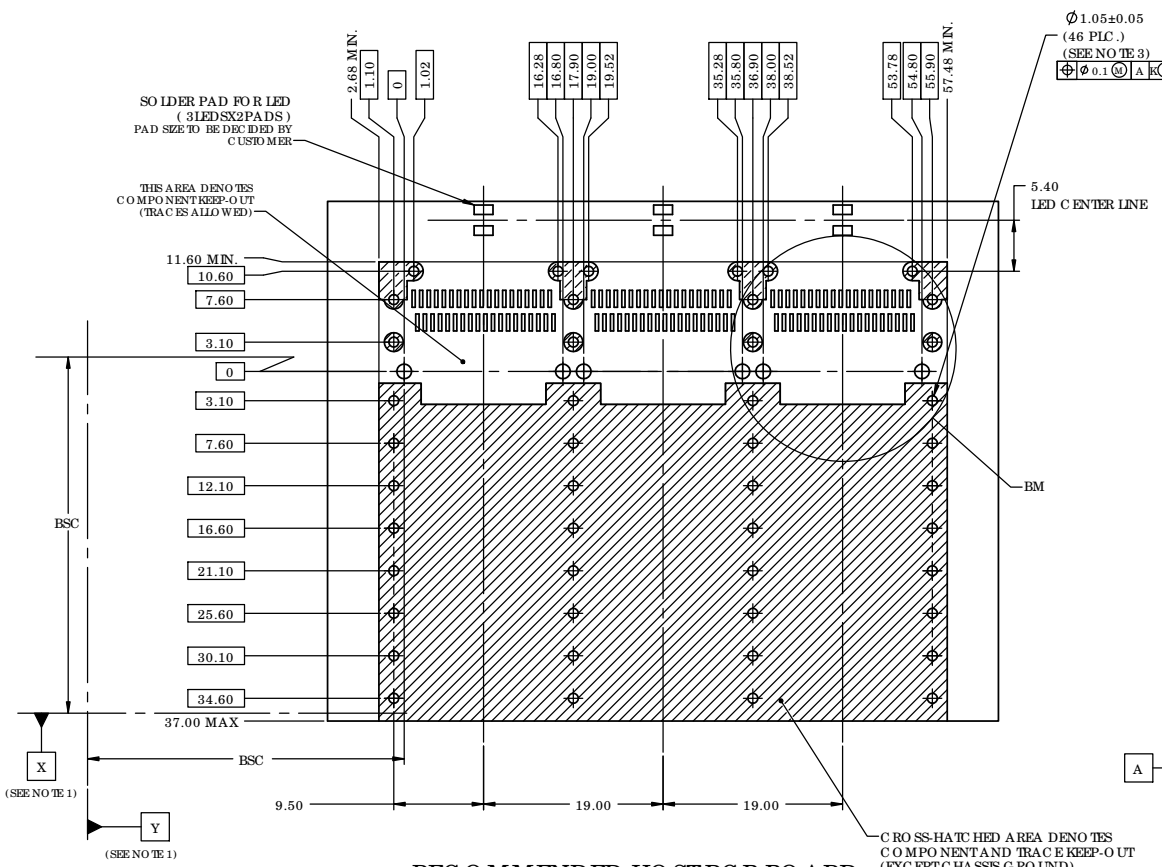
**RECOMMENDED HO ST PCB BOARD
 SINGLE LEVEL MOUNTING LAYOUT
 FOR SINGLE BARREL LIGHT PIPE
 (COMPONENT SIDE OF BOARD)**

- NOTES:
1. DATUM X AND Y ESTABLISHED BY CUSTOMER'S FUDUCIAL
 2. LOCATION OF EDGE OF PCB IS APPLICATION SPECIFIC.
 3. FINISHED HOLE SIZE.

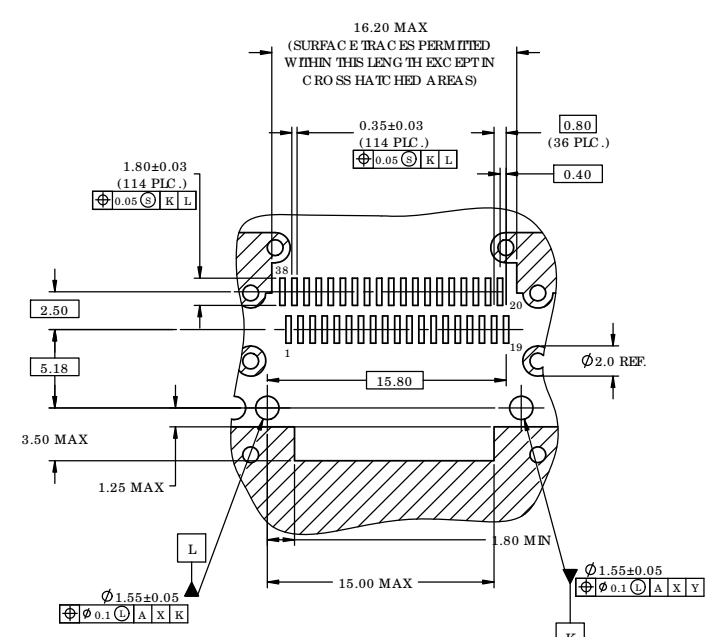


UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETER TOLERANCES ARE: DECIMALS .XX ±.10 .X ±.25 ANGLES ± 1°		APPROVALS	DATE	Amphenol High Speed Interconnects A Division of Amphenol Corp. www.amphenol-highspeed.com	
MATERIAL AND FINISH		DRAWN Z.LJ	MAY 23/08		
REF.		DESIGNED Z.LJ	MAY 23/08	TITLE QSFP 1x3 CAGE BEHIND BEZEL WITH HEATSINK, CLIP AND LIGHT PIPE	
CODE IDENT. NO.		CHECKED		SIZE C	DWG. NO. P-U90-G3X1-1XXX
		QA APP'D		SCALE 2:1	PROJECT PROJECT
		IE APP'D			REVISION Y
		DWG APP'D A.GREEN	DEC.5.07		SHEET 7 OF 11





$\varnothing 1.05 \pm 0.05$
(46 PLG.)
(SEE NOTE 3)
 $\varnothing \varnothing 0.1 \text{ (A) K (L) (S)}$



**DETAIL BM
SCALE 4 : 1**

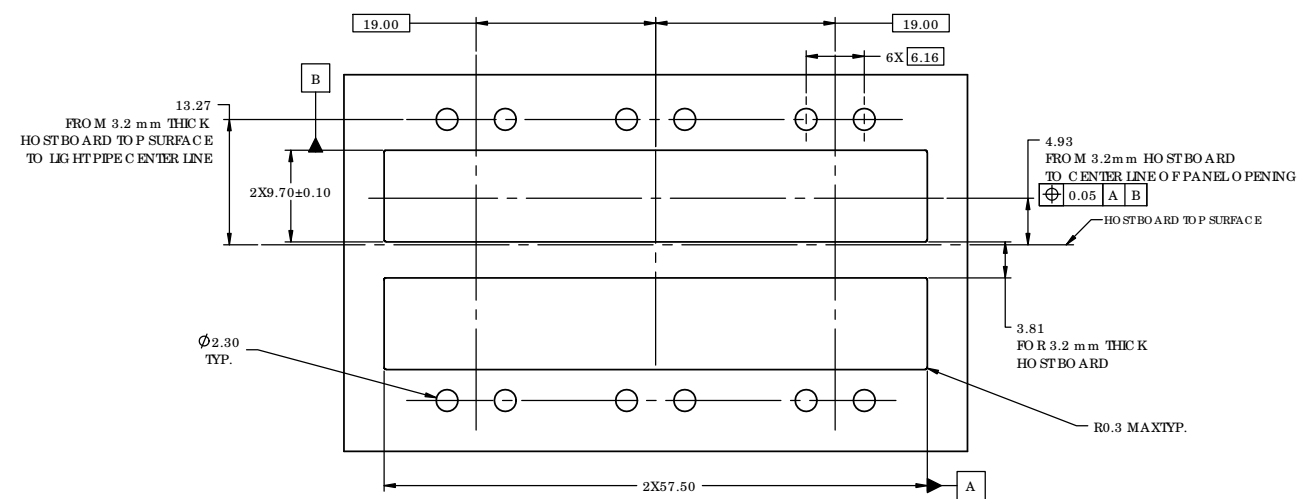
**3.20 ± 0.32
FOR BELLY TO BELLY APPLICATION**

**RECOMMENDED HO ST PCB BOARD
BEHIND BEZEL BELLY TO BELLY LAYOUT
FOR SINGLE BARREL LIGHT PIPE
(COMPONENT SIDE OF BOARD)**

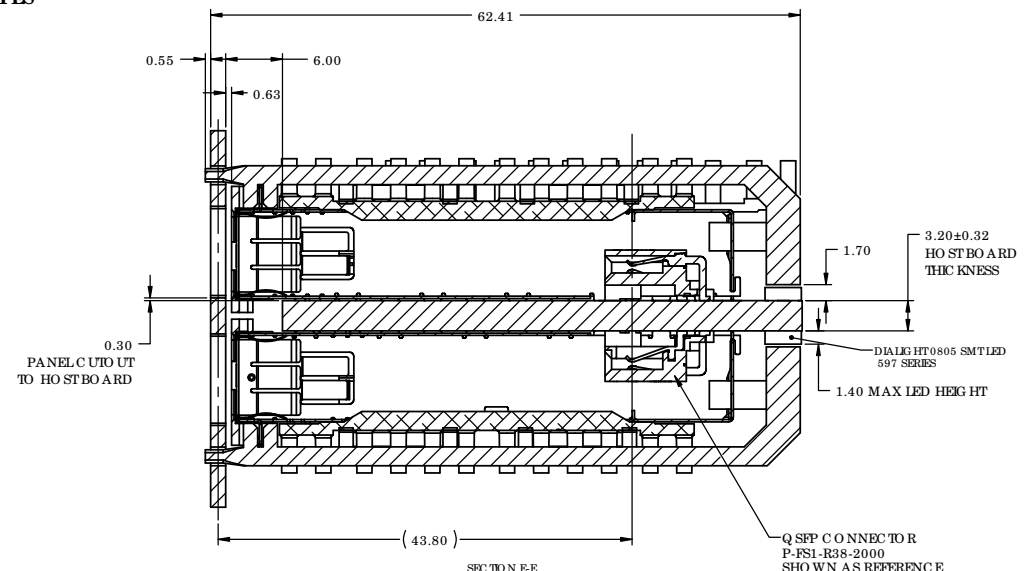
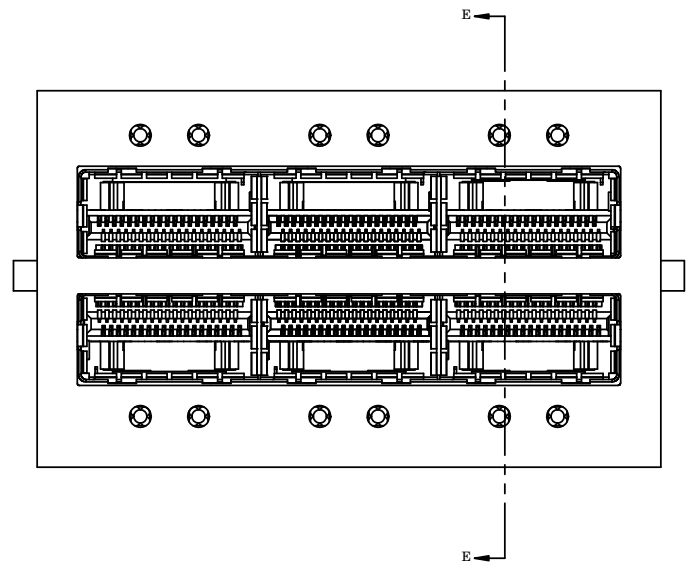
- NOTES:
1. DATUM X AND Y ESTABLISHED BY CUSTOMER'S FUDUCIAL
 2. LOCATION OF EDGE OF PCB IS APPLICATION SPECIFIC.
 3. FINISHED HOLE SIZE.



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETER TOLERANCES ARE:		APPROVALS	DATE	Amphenol High Speed Interconnects A Division of Amphenol Corp. www.amphenol-highspeed.com	
DECIMALS	ANGLES	DRAWN Z.LJ	MAY 23/08		
.XX ± .10	± 1°	DESIGNED Z.LJ	MAY 23/08	TITLE QSFP 1x3 CAGE BEHIND BEZEL WITH HEATSINK, CLIP AND LIGHT PIPE	
MATERIAL AND FINISH		CHECKED		SIZE C	DWG. NO. P-U90-G3X1-1XXX
REF.		QA APP'D		SCALE 5:2	PROJECT PROJECT
CODE IDENT. NO.		IE APP'D		REVISIONS 8 OF 11	
		DWG APP'D A.GREEN	DEC.5.07		



**PANEL CUT OUT FOR BEHIND BEZEL
 BELLY TO BELLY OPTION
 WITH ROUND LIGHT PIPES**



0.30
 PANEL CUT OUT
 TO HO ST BOARD

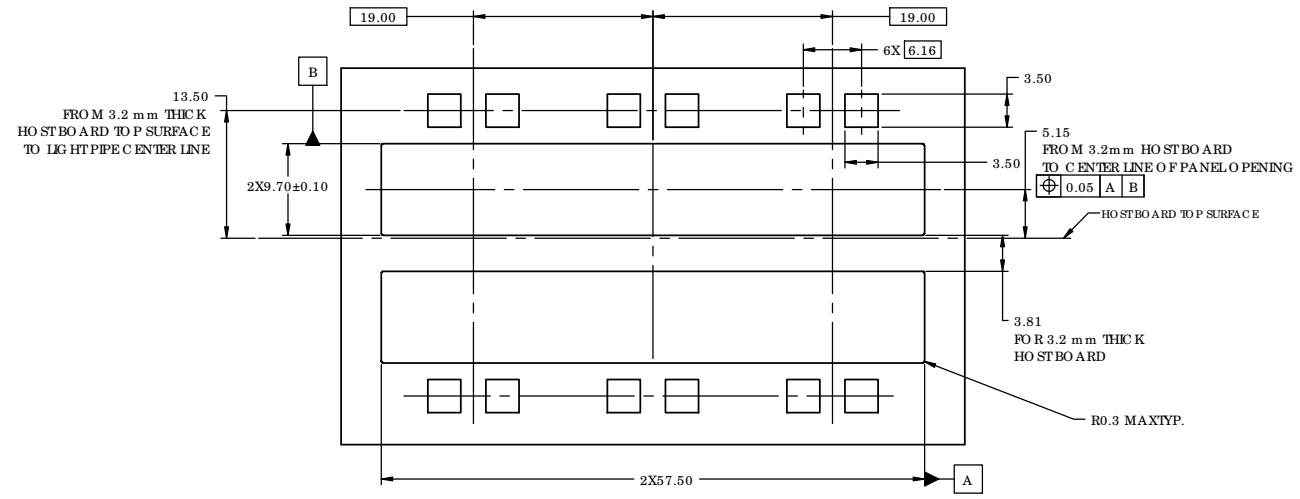
SECTION E-E
 SCALE 2.5 : 1

**PART NUMBER SHOWN
 U90-G351-101A
 (WITH ROUND LIGHT PIPE)**

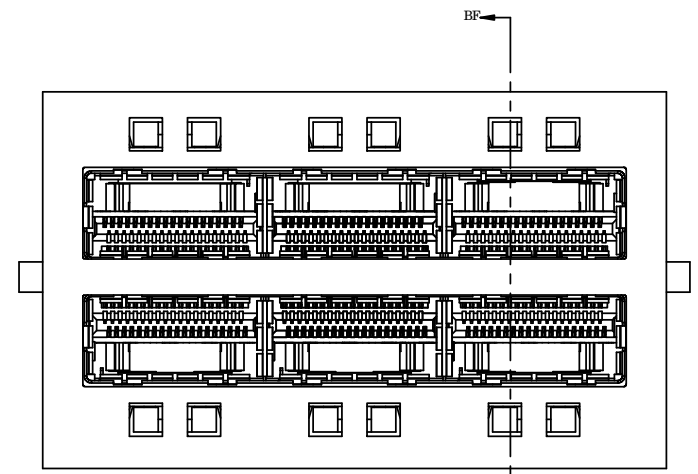


UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETER TOLERANCES ARE:		APPROVALS	DATE	Amphenol High Speed Interconnects A Division of Amphenol Corp. www.amphenol-highspeed.com	
DECIMALS	ANGLES	DRAWN Z.LJ	MAY 23/08		
.XX ±.10	± 1°	DESIGNED ZLJ	MAY 23/08	TITLE QSFP 1x3 CAGE BEHIND BEZEL WITH HEATSINK, CLIP AND LIGHT PIPE	
.X ±.25		CHECKED		SIZE C	DWG. NO. P-U90-G3X1-1XXX
MATERIAL AND FINISH		QA APP'D		SCALE 1:1	PROJECT PROJECT
REF.		IE APP'D		PROJECT	SHEET 9 OF 11
CODE IDENT. NO.		DWG APP'D A.GREEN	DEC.5.07		

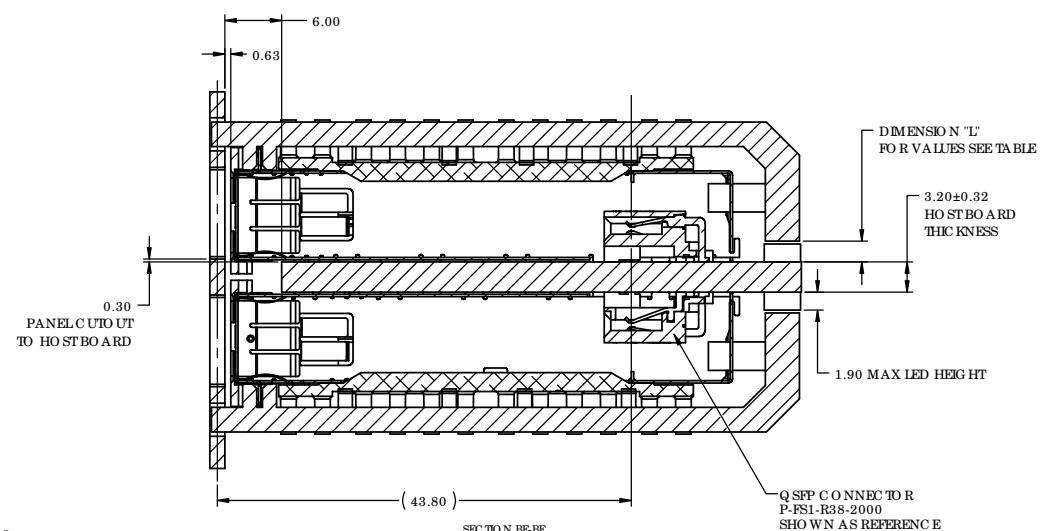
DO NOT SCALE DRAWING
 THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION AND SUCH INFORMATION MAY NOT BE DISCLOSED TO OTHERS FOR ANY PURPOSE OR USED FOR MANUFACTURING PURPOSES WITHOUT PERMISSION FROM AMPHENOL CANADA CORP.



**PANEL CUTOUT FOR
BEHIND BEZEL
BELLY TO BELLY OPTION
WITH LIGHT PIPES**



**PART NUMBER SHOWN
U90-G351-103A
(WITH SQUARE LIGHT PIPE)**

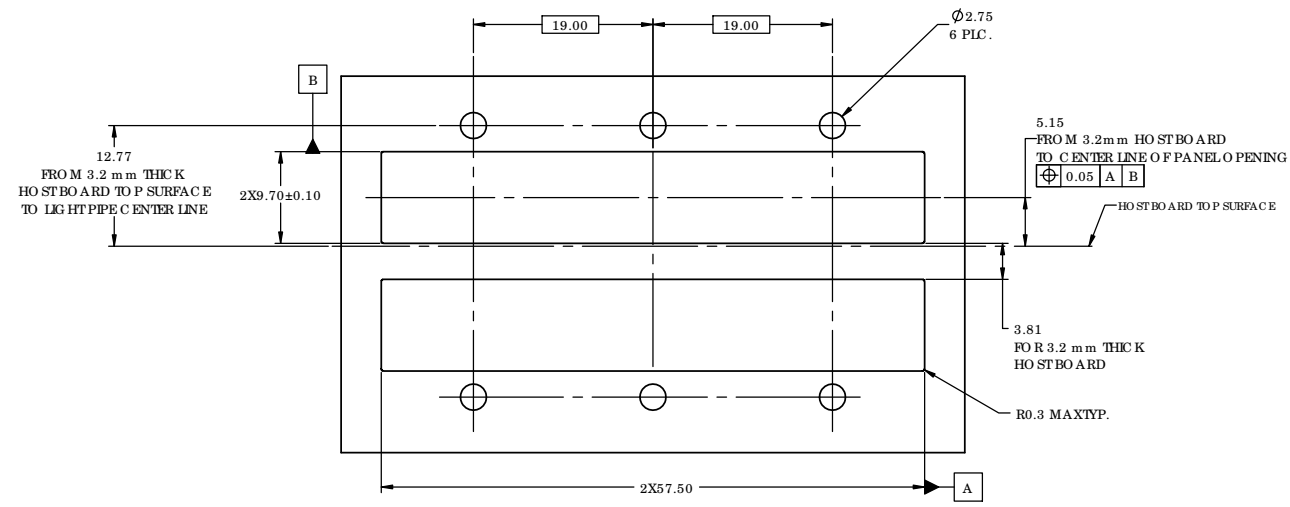


PART NUMBER	DIMENSION "L"
U90-G 3X1-1X3X	2.20
U90-G 3X1-1XBX	1.45

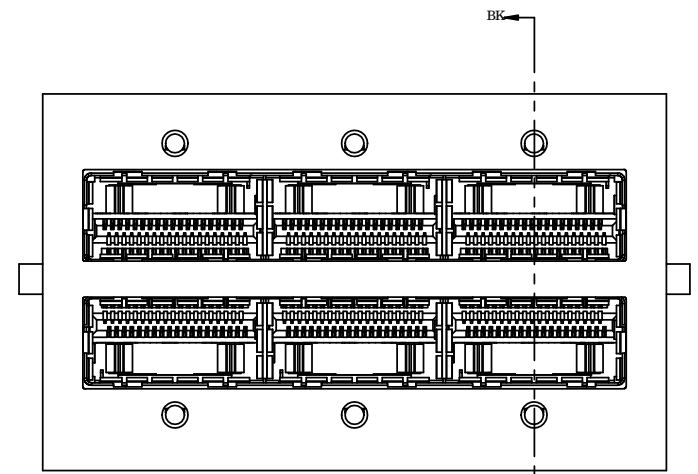


UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETER TOLERANCES ARE:		APPROVALS	DATE
DECIMALS	ANGLES	DRAWN Z.LJ	MAY 23/08
.XX ±.10	± 1°	DESIGNED Z.LJ	MAY 23/08
.X ±.25		CHECKED	
MATERIAL AND FINISH		QA APP'D	
		IE APP'D	
REF.		DWG APP'D	DEC.5.07
CODE IDENT. NO.		A.GREEN	

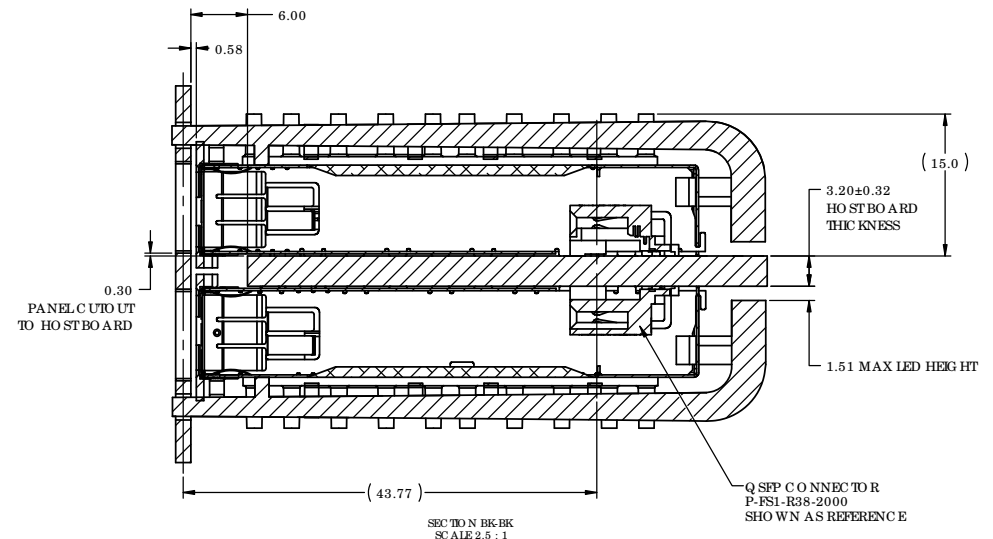
Amphenol High Speed Interconnects A Division of Amphenol Corp. www.amphenol-highspeed.com			
TITLE QSFP 1x3 CAGE BEHIND BEZEL WITH HEATSINK, CLIP AND LIGHT PIPE			
SIZE C	DWG. NO. P-U90-G3X1-1XXX	REV. Y	
SCALE 1:1	PROJECT PROJECT	SHEET 10 OF 11	



**PANEL CUT OUT FOR
BEHIND BEZEL
BELLY TO BELLY OPTION
WITH LIGHT PIPES**



**PART NUMBER SHOWN
U90-G351-107A
(WITH SINGLE BARREL ROUND LIGHT PIPE)**



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETER TOLERANCES ARE:		APPROVALS	DATE	Amphenol High Speed Interconnects A Division of Amphenol Corp. www.amphenol-highspeed.com	
DECIMALS	ANGLES	DRAWN Z.LJ	MAY 23/08		
.XX ± .10	± 1°	DESIGNED ZLJ	MAY 23/08	TITLE QSFP 1x3 CAGE BEHIND BEZEL WITH HEATSINK, CLIP AND LIGHT PIPE	
.X ± .25		CHECKED		SIZE C	DWG. NO. P-U90-G3X1-1XXX
MATERIAL AND FINISH		QA APP'D		SCALE 1:1	PROJECT PROJECT
REF.		IE APP'D		PROJECT	SHEET 11 OF 11
CODE IDENT. NO.		DWG APP'D A.GREEN	DEC.5.07	PROJECT	

DO NOT SCALE DRAWING
THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION AND SUCH INFORMATION MAY NOT BE DISCLOSED TO OTHERS FOR ANY PURPOSE OR USED FOR MANUFACTURING PURPOSES WITHOUT PERMISSION FROM AMPHENOL CANADA CORP.

