

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0760480001](#)  
**Status:** **Active**  
**Overview:** [sfp\\_stacked\\_multiport\\_connectors](#)  
**Description:** Small Form-factor Pluggable Plus (SFP+) Stacked 2-by-6 Multi-Port Connector with 4 Lightpipe Ports, EMI Metal Gasket, 240 Circuits, Tin (Sn)/Lead(Pb) Tails

**Documents:**

[3D Model](#) [Product Specification PS-75310-001 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)  
[Application Specification \(PDF\)](#)

**Agency Certification**

CSA LR19980  
 UL E29179

**General**

Product Family I/O Connectors  
 Series [76048](#)  
 Application Module-to-Board  
 Component Type Receptacle  
 Overview [sfp\\_stacked\\_multiport\\_connectors](#)  
 Product Name SFP Plus  
 Type N/A

**Physical**

Boot Color N/A  
 Circuits (Loaded) 240  
 Circuits (maximum) 240  
 Circuits Detail 240  
 Color - Resin Black, Clear (Blue Tint)  
 Durability (mating cycles max) 100  
 Flammability 94V-0  
 Gender Female  
 Keying to Mating Part None  
 Lock to Mating Part Yes  
 Material - Metal High Performance Alloy (HPA)  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin-Lead  
 Material - Resin High Temperature Thermoplastic, Polycarbonate  
 Number of Rows 2  
 Orientation Right Angle  
 PC Tail Length (in) 0.081 In  
 PC Tail Length (mm) 2.07 mm  
 PCB Locator Yes  
 PCB Retention Yes  
 PCB Thickness Recommended (in) 0.062 In  
 PCB Thickness Recommended (mm) 1.57 mm  
 Packaging Type Tray  
 Panel Mount No  
 Pitch - Mating Interface (in) 0.031 In  
 Pitch - Mating Interface (mm) 0.80 mm  
 Pitch - Term. Interface (in) 0.031 In  
 Pitch - Term. Interface (mm) 0.80 mm  
 Plating min: Mating (µin) 30.4  
 Plating min: Mating (µm) 0.76  
 Plating min: Termination (µin) 30.4



image - Reference only

Series

**EU RoHS**

**RoHS Compliant by Exemption**

**REACH SVHC**

Not Reviewed

**Halogen-Free**

**Status**

**Halogen-Free**

**Need more information on product environmental compliance?**

Email [productcompliance@molex.com](mailto:productcompliance@molex.com)  
 For a multiple part number RoHS Certificate of Compliance, [click here](#)

Please visit the [Contact Us](#) section for any non-product compliance questions.

**China RoHS**



**Search Parts in this Series**

[76048Series](#)

**Use With**

[0759510999](#) SFP Dust Plug,

**Application Tooling | FAQ**

*Tooling specifications and manuals are found by selecting the products below. Crimp Height Specifications are then contained in the Application Tooling Specification document.*

**Global**

Description	Product #
SFP Insertion Tool, x 6	<a href="#">20622029925</a>
SFP Stacked Multi-Port Extraction Tool, 2 by 6	<a href="#">0622029950</a>

Plating min: Termination (µm)	0.76
Polarized to Mating Part	Yes
Polarized to PCB	Yes
Ports	12
Surface Mount Compatible (SMC)	No
Temperature Range - Operating	-40°C to +85°C
Termination Interface: Style	Through Hole - Compliant Pin
Waterproof / Dustproof	No

### **Electrical**

Current - Maximum per Contact	0.5A
Grounding to Panel	None
Shield Type	EMI Gasket
Shielded	Yes
Voltage - Maximum	120V AC (RMS)/DC

### **Material Info**

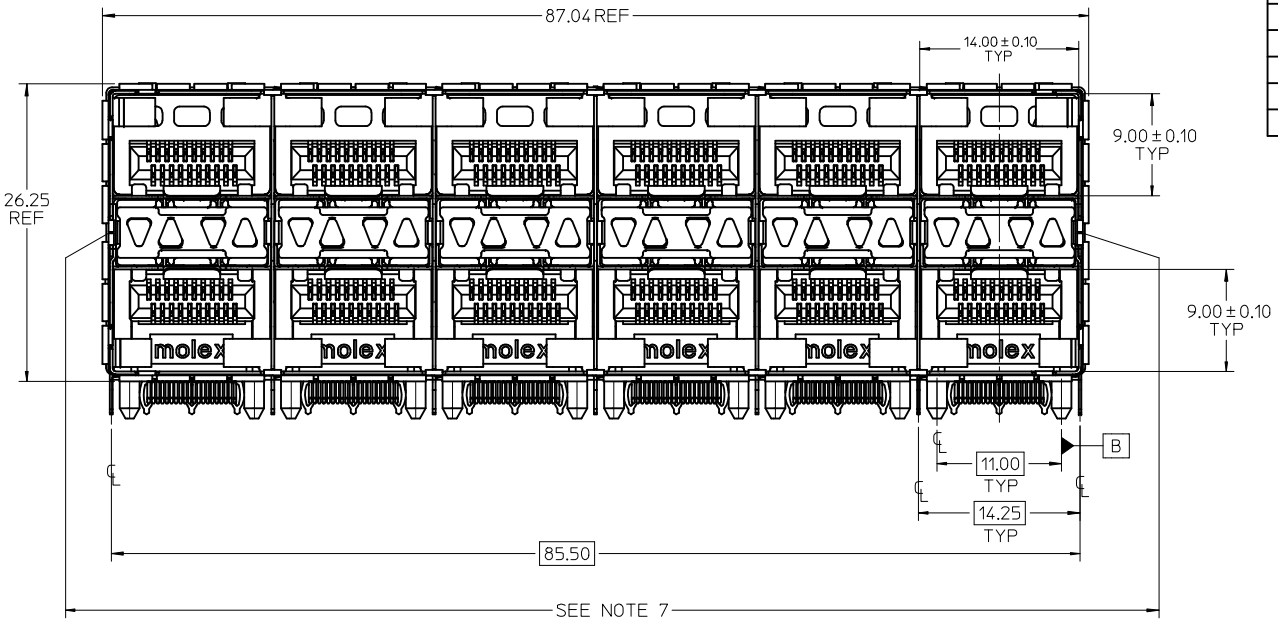
#### **Reference - Drawing Numbers**

Application Specification	AS-76090-001
Packaging Specification	PK-75451-001
Product Specification	PS-75310-001
Sales Drawing	SD-76048-001
Test Summary	TS-75310-001

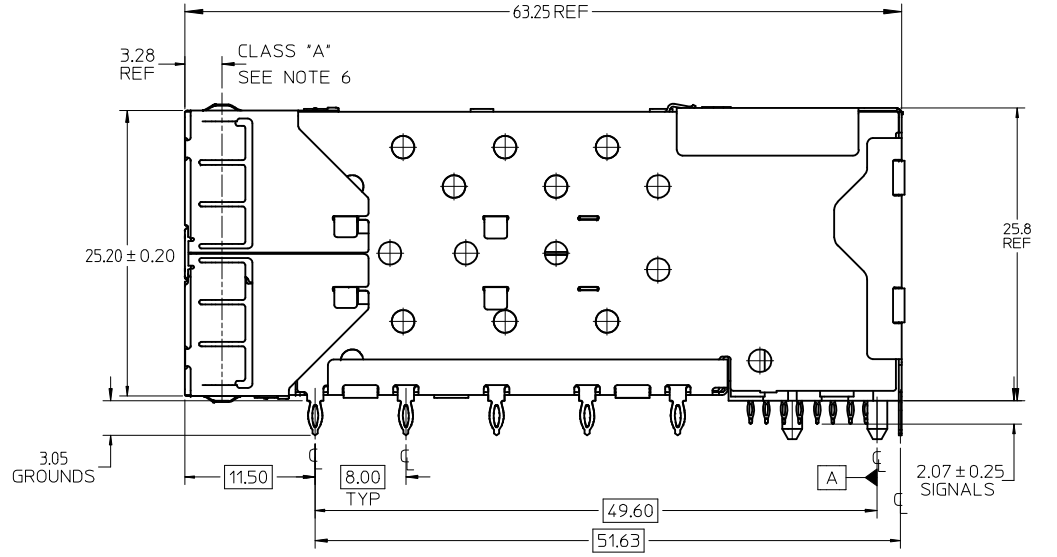
This document was generated on 05/27/2010

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PART NUMBER	DESCRIPTION	VIEW	COMPLIANT TAIL PLATING
760480001	4 LIGHT PORTS	SEE PG 2	TIN / LEAD
760480002	INNER 2 PORTS	SEE PG 2	TIN / LEAD
760480003	OUTER 2 PORTS	SEE PG 2	TIN / LEAD
760485001	4 LIGHT PORTS	SEE PG 2	TIN
760485002	INNER 2 PORTS	SEE PG 2	TIN
760485003	OUTER 2 PORTS	SEE PG 2	TIN

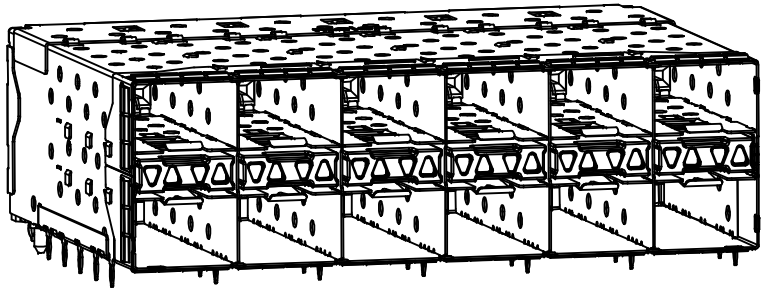


- NOTES:
- MATERIAL:
    - CAGE: NICKEL SILVER, THICKNESS: 0.25mm
    - EMI GASKET: PHOS-BRONZE
    - CONNECTOR HOUSING: GLASS FILLED THERMOPLASTIC, UL: 94 V-0, COLOR: BLACK
    - OVERMOLD TERMINAL HOUSING: GLASS FILLED THERMOPLASTIC, UL: 94 V-0, COLOR: BLACK
    - TERMINALS: BRASS
    - LIGHT PIPE: POLYCARBONATE UL 94 V-0, COLOR CLEAR
    - LIGHT PIPE HOUSING: ZINC
  - FINISH
    - TERMINALS:
      - CONTACT AREA: 0.76 MICRONS MIN. HARD GOLD OVER 1.27 MICRONS MIN. NICKEL.
      - COMPLIANT TAIL - TIN/LEAD OPTION: 0.76 - 1.52 MICRONS 90/10 TIN/LEAD OVER 0.76 - 1.52 MICRONS NICKEL
      - COMPLIANT TAIL - TIN OPTION: 0.76 - 1.52 MICRONS TIN OVER 0.76 - 1.52 MICRONS NICKEL
    - EMI GASKET: 2.54 MICRONS NICKEL OVERALL
    - LIGHT PIPE HOUSING: 150 MICRONS NICKEL OVER 150 MICRONS COPPER
  - REFER TO PS-75310-001 PRODUCT SPEC FOR ALL ELECTRICAL, MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS.
  - LIGHT PIPE PAD LAYOUT IS FOR 0805 LOW-PROFILE LED PACKAGE FOR OTHER RECOMMENDED LAYOUTS REFER TO MOLEX'S REPORT TS-75310-001.
  - REFER TO PK-75451-001 FOR ALL PACKAGING SPECIFICATIONS.
  - ALL EXTERIOR SURFACES TO BE CLASS 'B' SURFACES EXCEPT THE UNDER SIDE OF THE CAGE WHERE THE PCB WOULD BE LOCATED AND AS NOTED. THE SURFACES TO CONFORM TO THE MOLEX COSMETIC DOC PS-45499-002.
  - THE OVERALL CAGE WIDTH AT THE VERTICAL CENTER OF THE FRONT EDGE WILL FALL WITHIN THIS DIMENSION: 86.30+/-0.30 MM. THIS PORTION OF THE CAGE WILL FLEX INWARD AS THE CAGE IS BEING INSERTED INTO THE BEZEL OPENING.

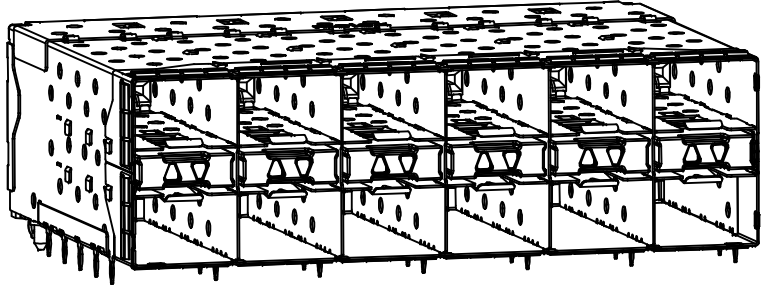


ADD NOTE 7/KEEPOUT'S EC NO: UCP2009-1582 DRWN:MS BARRA 2009/01/07 CHKD:BBARKER 2009/01/09 APPR:SMILLER 2009/01/12	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE <b>MM ONLY</b>		SCALE 3:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
		4 PLACES ± --- ± ---	3 PLACES ± --- ± ---	2 PLACES ± 0.13 ± ---	1 PLACE ± 0.25 ± ---	DRAWN BY MSANDBERG	DATE 09/28/2006	TITLE <b>STACKED SFP+ 2X6 ASSY WITH METAL EMI GASKET AND LIGHTPIPES</b>			
		ANGULAR ± 5 °				CHECKED BY JLONG	DATE 09/28/2006	APPROVED BY KREGNIER			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				MATERIAL NO. SEE TABLE	DATE 09/28/2006	MOLEX INCORPORATED		DOCUMENT NO. SD-76048-001	SHEET NO. 1 OF 4

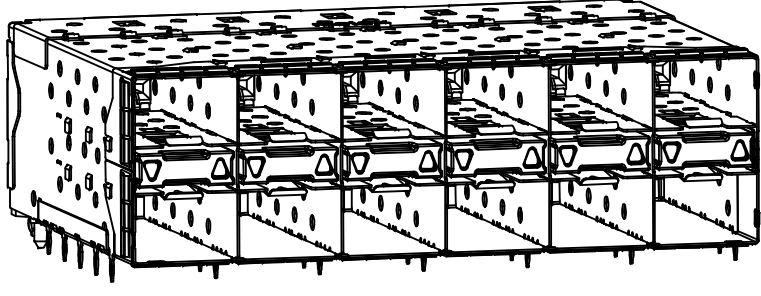
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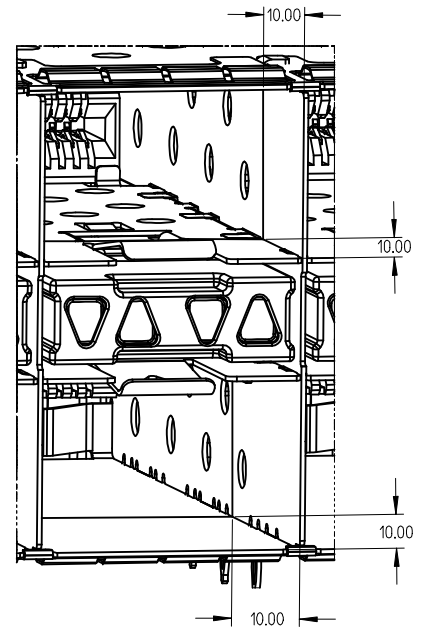
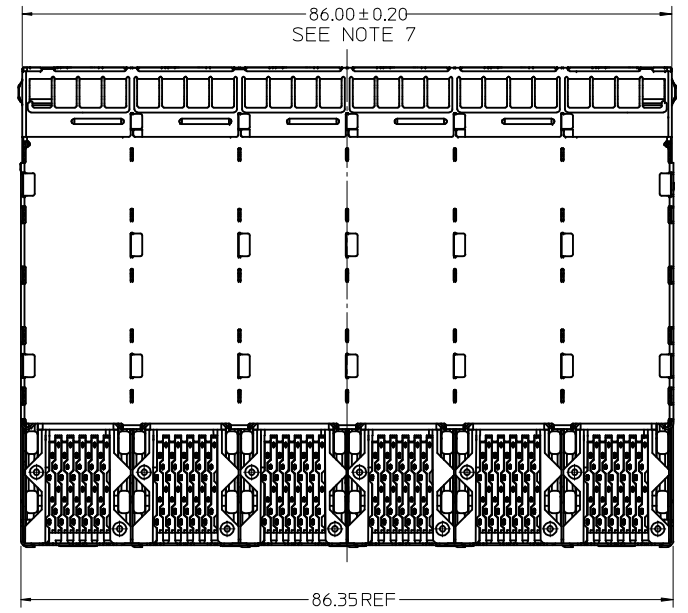
760480001 AND 760485001  
WITH INNER AND OUTER LIGHT PIPES



760480002 AND 760485002  
WITH INNER LIGHT PIPES

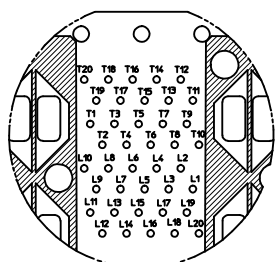


760480003 AND 760485003  
WITH OUTER LIGHT PIPES

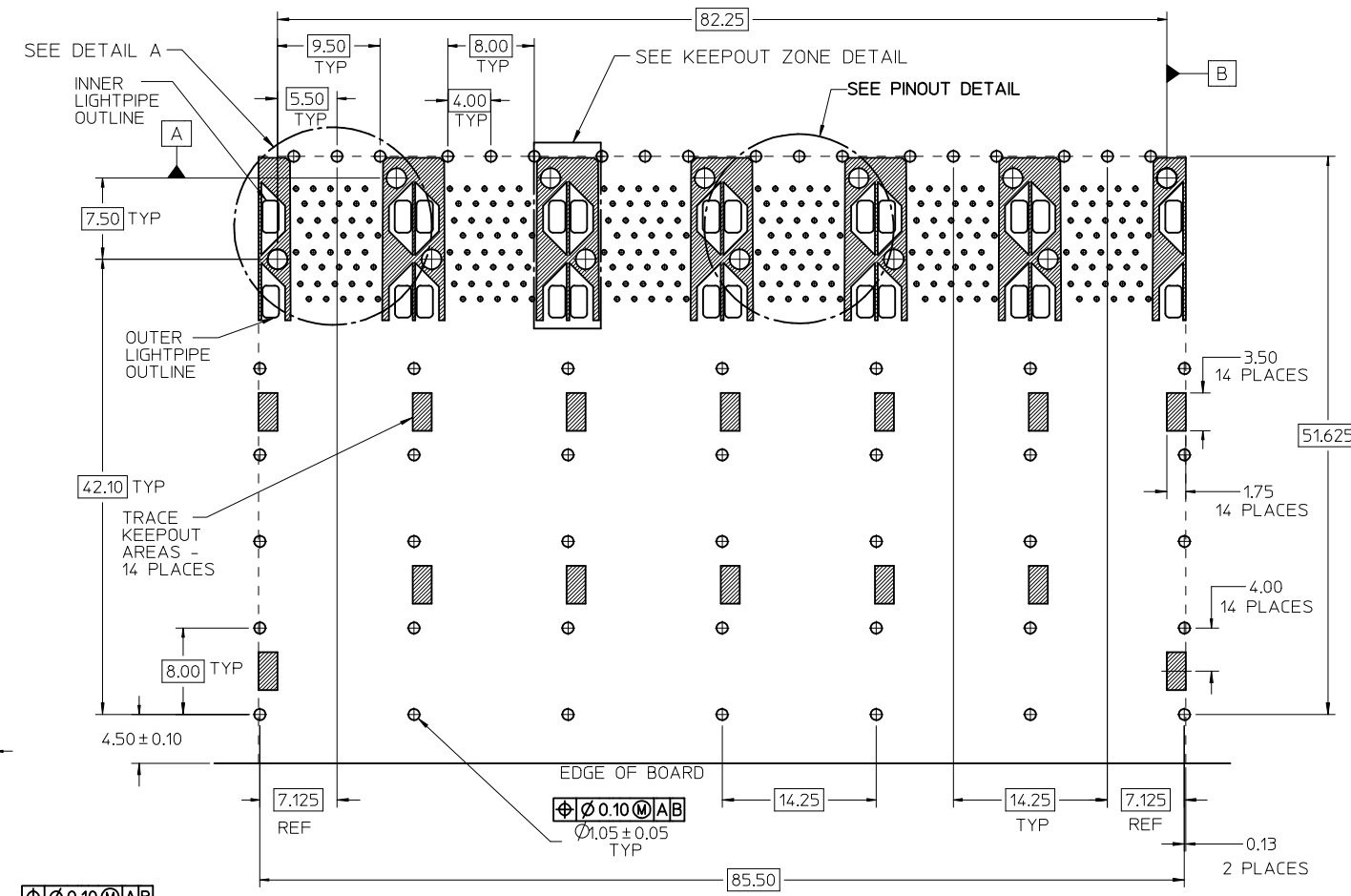


10.00MM AREA SETBACK IN CAGE IS TO BE FREE OF ANY HOLES, DIMPLES, SEAMS OR ANY OTHER FEATURE. (4 SIDES PER PORT)

SEE SHEET 1 EC NO: UCP2009-1582 2009/01/07 DRWINHIS BARRA 2009/01/09 CHKD:BBARKER 2009/01/09 APPR:SMILLER 2009/01/12	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES ±</td> <td>---</td> <td>± ---</td> </tr> <tr> <td>3 PLACES ±</td> <td>---</td> <td>± ---</td> </tr> <tr> <td>2 PLACES ±</td> <td>0.13</td> <td>± ---</td> </tr> <tr> <td>1 PLACE ±</td> <td>0.25</td> <td>± ---</td> </tr> <tr> <td colspan="3">ANGULAR ± 5 °</td> </tr> </table>		mm	INCH	4 PLACES ±	---	± ---	3 PLACES ±	---	± ---	2 PLACES ±	0.13	± ---	1 PLACE ±	0.25	± ---	ANGULAR ± 5 °			DIMENSION STYLE <b>MM ONLY</b> DRAWN BY DATE MSANDBERG 09/28/2006 CHECKED BY DATE JLONG 09/28/2006 APPROVED BY DATE KREGNIER 09/28/2006 MATERIAL NO.	SCALE <b>2:1</b> DESIGN UNITS <b>METRIC</b> THIRD ANGLE PROJECTION	TITLE <b>STACKED SFP+ 2X6 ASSY WITH METAL EMI GASKET AND LIGHTPIPES</b> <b>MOLEX INCORPORATED</b> DOCUMENT NO. <b>SD-76048-001</b>	SHEET NO. <b>2 OF 4</b>
		mm	INCH																					
	4 PLACES ±	---	± ---																					
	3 PLACES ±	---	± ---																					
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ANGULAR ± 5 °																								
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SIZE <b>SEE TABLE</b>	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																						

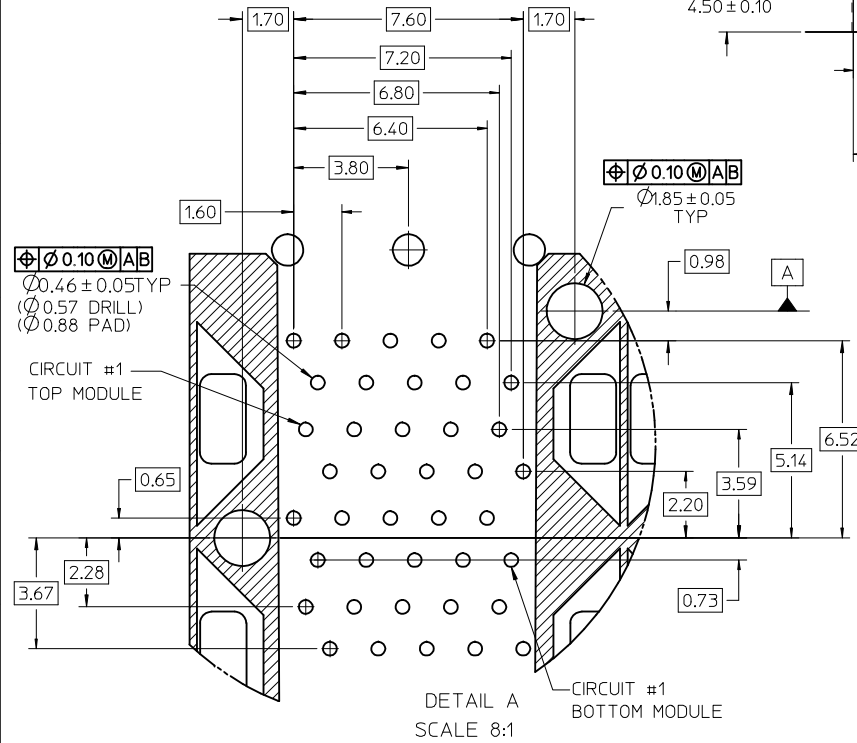


CONNECTOR PIN-OUT DETAIL  
COMPONENT SIDE OF BOARD



RECOMMENDED PCB LAYOUT - COMPONENT SIDE  
RECOMMENDED PCB THICKNESS - 2.63 MM (.093 INCH)

THE ENTIRE AREA OF THE CONNECTOR FOOTPRINT  
TO BE CONSIDERED THE KEEP OUT AREA FOR COMPONENTS  
(OTHER THAN LIGHT PIPE LED'S)  
THIS AREA IS INDICATED BY THE DASHED LINE



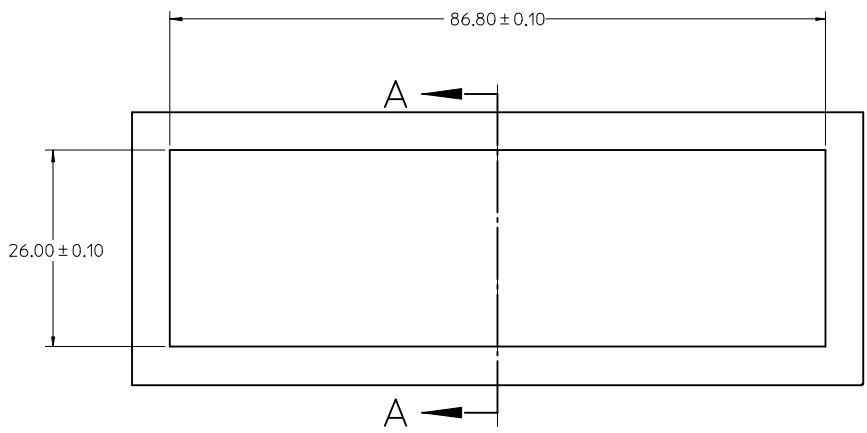
DETAIL A  
SCALE 8:1

REV	DESCRIPTION	QUALITY SYMBOLS
1	ADD KEEP OUT ZONES	▽=0
2	EC NO: UCP2009-1582	▽=0
3	DRWN:MS BARRA 2009/01/07	
4	CHKD:BBARKER 2009/01/09	
5	APPR:SMILLER 2009/01/12	

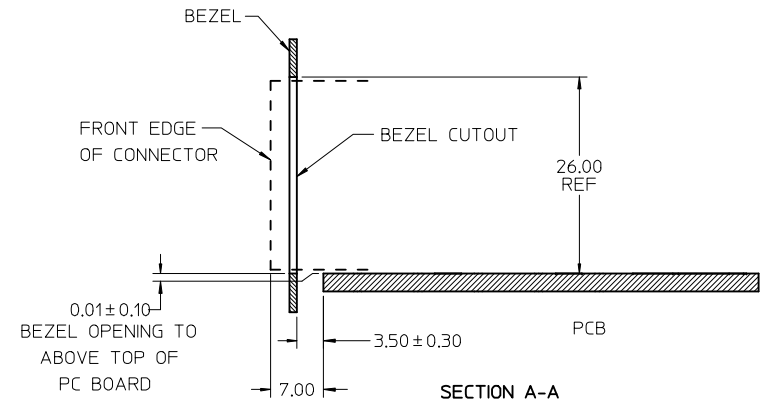
GENERAL TOLERANCES (UNLESS SPECIFIED)	
	mm INCH
4 PLACES ±	---
3 PLACES ±	---
2 PLACES ±	0.13
1 PLACE ±	0.25
ANGULAR ± 5 °	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

DIMENSION STYLE	
MM ONLY	
DRAWN BY	DATE
MSANDBERG	09/28/2006
CHECKED BY	DATE
JLONG	09/28/2006
APPROVED BY	DATE
KREGNIER	09/28/2006
MATERIAL NO.	
SEE TABLE	
SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

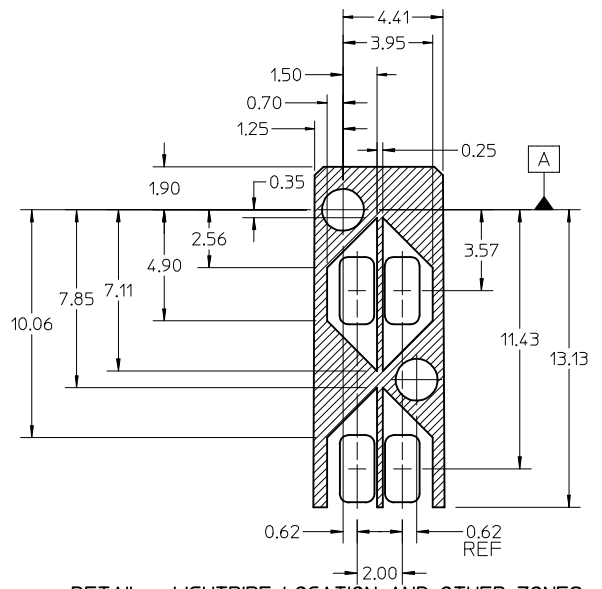
SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
3:1	METRIC	
TITLE		
STACKED SFP+ 2X6 ASSY WITH METAL EMI GASKET AND LIGHTPIPES		
MOLEX INCORPORATED		
DOCUMENT NO.	SHEET NO.	
SD-76048-001	3 OF 4	



BEZEL CUTOUT CENTER SPACING DETAIL  
BEZEL THICKNESS 0.8 - 2.6



SECTION A-A



DETAIL - LIGHTPIPE LOCATION AND OTHER ZONES  
SCALE 6:1

THE HATCHED AREA IN THIS VIEW INDICATES ZONES THAT ARE OCCUPIED BY THE PLASTIC HOUSING THAT SEATS AGAINST THE PCB AND BY THE VERTICAL METAL CAGE WALL THAT STOPS JUST SHORT OF THE PCB

SEE SHEET 1	EC NO: UCP2009-1582	2009/01/07
	DRWN:MSI:BARRA	2009/01/07
	CHKD:BBARKER	2009/01/09
	APPR:SMILLER	2009/01/12
	REV	DESCRIPTION

QUALITY SYMBOLS	▽=0
	▽=0
GENERAL TOLERANCES (UNLESS SPECIFIED)	mm
	INCH
	4 PLACES ± --- ± ---
	3 PLACES ± --- ± ---
ANGULAR ± 5 °	2 PLACES ± 0.13 ± ---
	1 PLACE ± 0.25 ± ---
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
MM ONLY		2:1	METRIC	
DRAWN BY	DATE	TITLE		
MSANDBERG	09/28/2006	STACKED SFP+ 2X6 ASSY WITH METAL EMI GASKET AND LIGHTPIPES		
CHECKED BY	DATE	APPROVED BY		
JLONG	09/28/2006	KREGNIER		
APPROVED BY		DATE	MATERIAL NO.	
KREGNIER		09/28/2006	SEE TABLE	
MATERIAL NO.		DOCUMENT NO.	SHEET NO.	
SEE TABLE		SD-76048-001	4 OF 4	

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