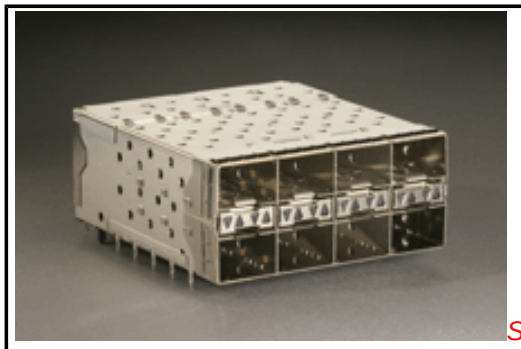
This document was generated on 05/27/2010

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

**Part Number:** 0760465003
**Status:** Active
**Overview:** sfp_stacked_multiport_connectors
**Description:** Small Form-factor Pluggable Plus (SFP+) Stacked 2-by-4 Multi-Port Connector with 2 Outer Lightpipe Ports, EMI Metal Gasket, 160 Circuits, Tin (Sn) Tails



*Series image - Reference only*

**Documents:**

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

## Agency Certification

| | |
|---|---|
| CSA | LR19980 |
| UL | E29179 |

## General

| | |
|---|---|
| Product Family | I/O Connectors |
| Series | 76046 |
| 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) | 160 |
| Circuits (maximum) | 160 |
| Circuits Detail | 160 |
| 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 |
| 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 |

**EU RoHS**
**ELV and RoHS Compliant**
**REACH SVHC**
Not Reviewed
**Halogen-Free Status**
**Halogen-Free**

**China RoHS**

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

Email 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.

**Search Parts in this Series**
76046Series

**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 Stacked Multi-Port Insertion Tool, 2 by 4 | 0622029920 |
| SFP Stacked Multi-Port Extraction Tool, 2 by 4 | 0622029940 |

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

## Electrical

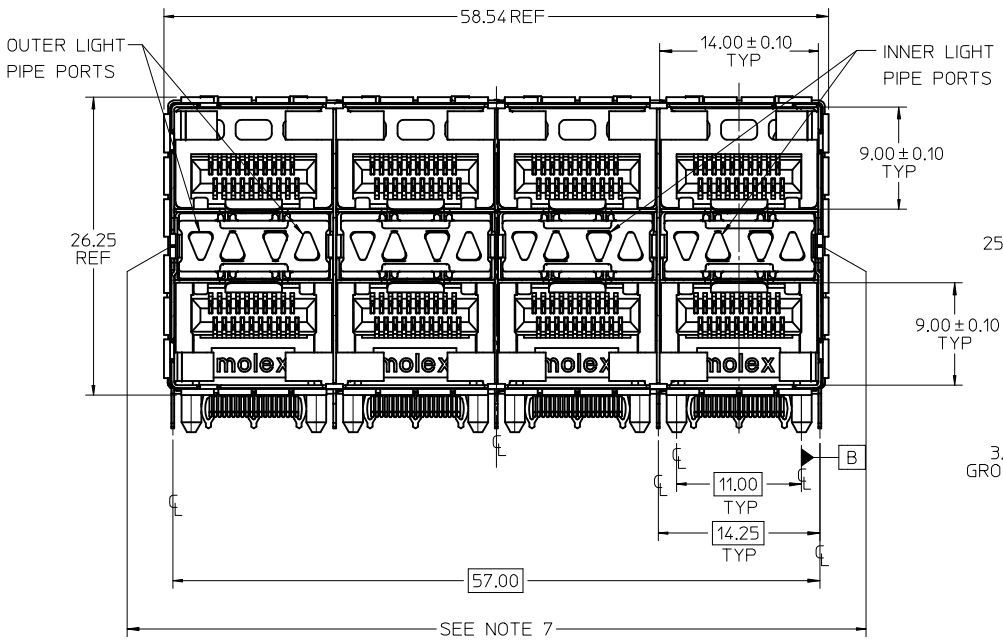
| | |
|---|---|
| Current - Maximum per Contact | 0.5A |
| Grounding to Panel | None |
| Shield Type | EMI Gasket |
| Shielded | Yes |
| Voltage - Maximum | 120V AC (RMS)/DC |

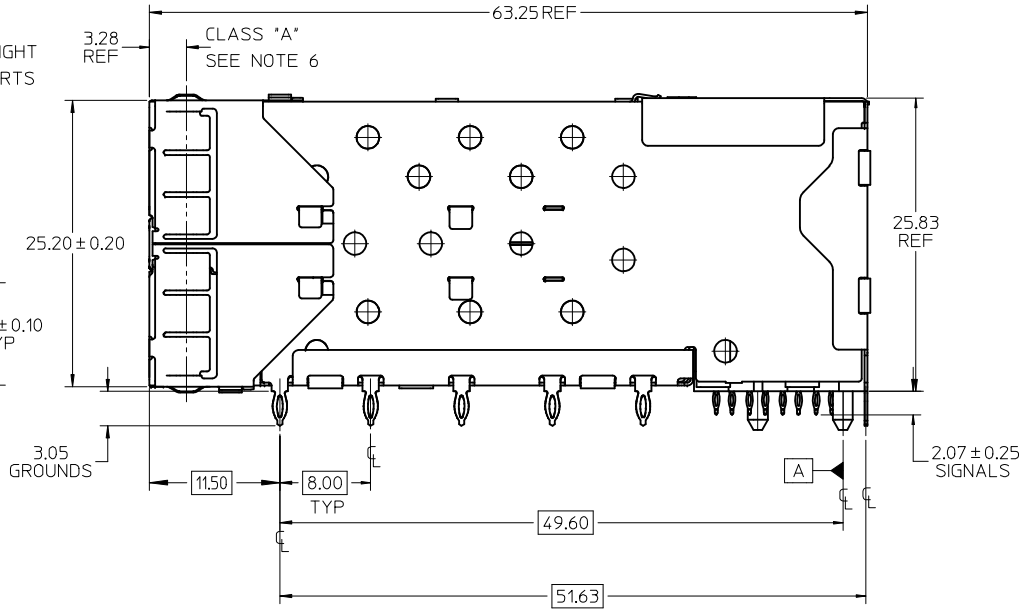
## Material Info

## Reference - Drawing Numbers

| | |
|---|---|
| Application Specification | AS-75310-001 |
| Packaging Specification | PK-75450-001 |
| Product Specification | PS-75310-001 |
| Sales Drawing | SD-76046-001 |
| Test Summary | TS-75310-001 |

| PART NUMBER | DESCRIPTION | VIEW | COMPLIANT TAIL PLATING |
|---|---|---|---|
| 760460001 | 4 LIGHT PORTS | SEE PG 2 | TIN / LEAD |
| 760460002 | INNER 2 PORTS | SEE PG 2 | TIN / LEAD |
| 760460003 | OUTER 2 PORTS | SEE PG 2 | TIN / LEAD |
| 760465001 | 4 LIGHT PORTS | SEE PG 2 | TIN |
| 760465002 | INNER 2 PORTS | SEE PG 2 | TIN |
| 760465003 | OUTER 2 PORTS | SEE PG 2 | TIN |




NOTES:
1. MATERIAL:
   CAGE: NICKEL SILVER, THICKNESS: 0.25mm
   EMI GASKET: PHOS-BRONZE
   CONNECTOR HOUSING: GLASS FILLED HIGH TEMP PLASTIC, 94 V-0
   COLOR: BLACK
   OVERMOLDED TERMINAL HOUSING: GLASS FILLED HIGH TEMP PLASTIC, 94 V-0, COLOR: BLACK
   TERMINALS: TIN BRASS
   LIGHT PIPES: POLYCARBONITE, 94 V-0, COLOR: CLEAR
   LIGHT PIPE HOUSING: ZINC
2. FINISH:
   LIGHT PIPE HOUSING: 150 MICRONS NICKEL OVER 150 MICRONS COPPER
   TERMINALS: CONTACT AREA: 0.76 MICROS MIN. HARD GOLD OVER 1.27 MICRONS 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
3. REFER TO PS-75310-001 PRODUCT SPEC FOR ALL ELECTRICAL, MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS.
4. LIGHT PIPE PAD LAYOUT IS FOR 0805 LOW-PROFILE LED PACKAGE, FOR OTHER RECOMMENDED LAYOUTS REFER TO MOLEX'S REPORT TS-75310-001.
5. REFER TO PK-75450-001 FOR ALL PACKAGING SPECIFICATIONS.
6. ALL EXTERIOR SURFACES TO BE CLASS "B" SURFACE 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.
7. THE OVERALL CAGE WIDTH AT THE VERTICAL CENTER OF THE FRONT EDGE WILL FALL WITHIN THIS DIMENSION: 57.80+/-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 2009/01/07
EC NO: UCP2009-1582 2009/01/09
DRWN:MSIBARRA CHKD:BBARKER APPR:SMILLER 2009/01/12
DESCRIPTION
REV D

QUALITY SYMBOLS
▼=0
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

| | mm | INCH |
|---|---|---|
| 4 PLACES | ± --- | ± --- |
| 3 PLACES | ± --- | ± --- |
| 2 PLACES | ± 0.13 | ± --- |
| 1 PLACE | ± 0.25 | ± --- |
| ANGULAR ± 5 ° | | |

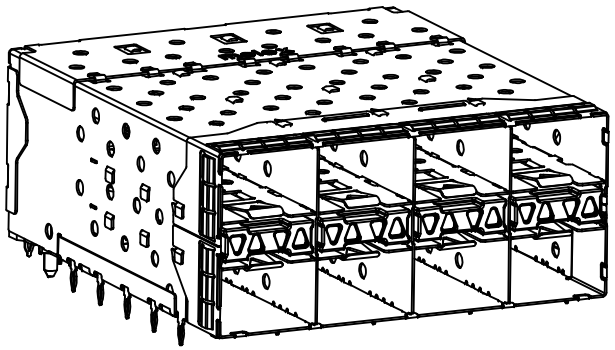
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: 3:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

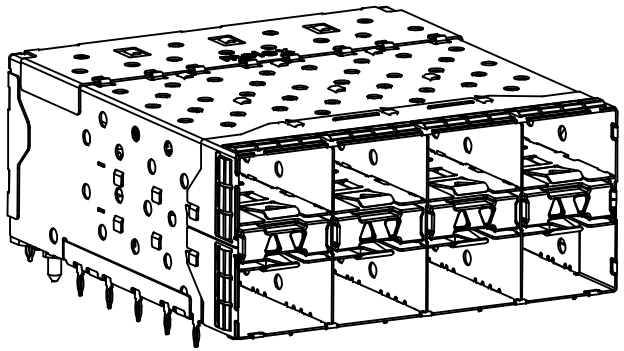
| | | DATE |
|---|---|---|
| DRAWN BY | MSANDBERG | 1-26-2006 |
| CHECKED BY | JLONG | 1-26-2006 |
| APPROVED BY | RNELSON | 1-26-2006 |

TITLE: STACKED SFP+ 2X4 ASS'Y WITH METAL EMI GASKET AND LIGHTPIPES
MOLEX INCORPORATED
MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SD-76046-001
SHEET NO.: 1 OF 4
SIZE: C

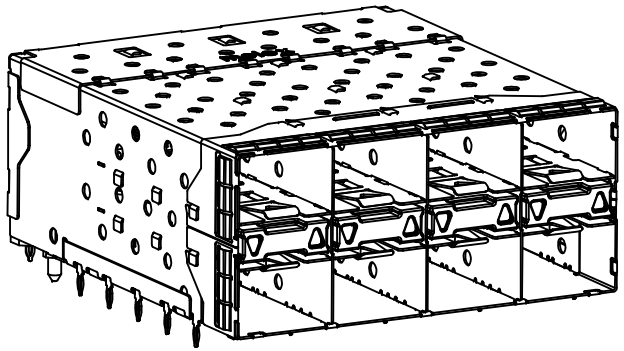
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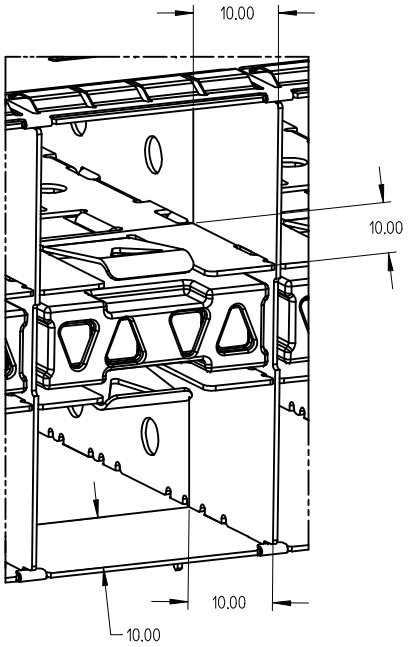
760460001 AND 760465001
WITH INNER AND OUTER LIGHT PIPES



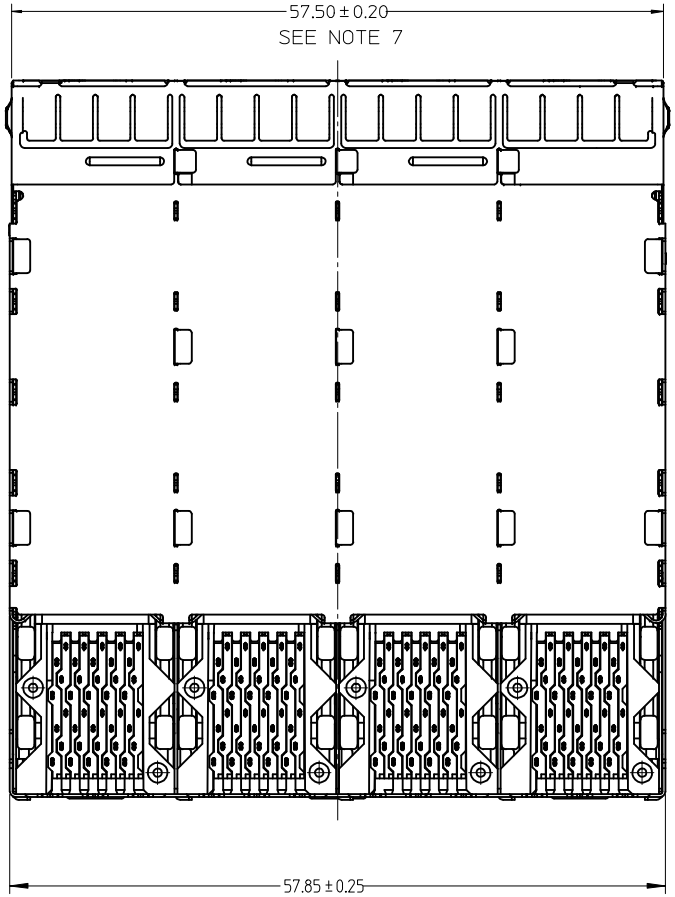
760460002 AND 760465002
WITH INNER LIGHT PIPES



760460003 AND 760465003
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 MODULE PORT)




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

QUALITY SYMBOLS
▼=0
▽=0

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
SCALE: 3:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: MSANDBERG DATE: 1-26-2006
CHECKED BY: JLONG DATE: 1-26-2006
APPROVED BY: RNELSON DATE: 1-26-2006

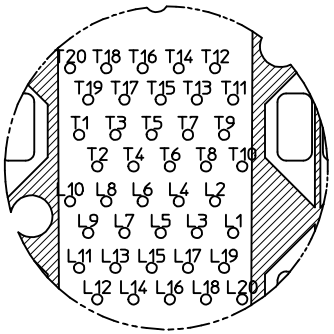
TITLE: STACKED SFP+ 2X4 ASS'Y WITH METAL EMI GASKET AND LIGHTPIPES

molex MOLEX INCORPORATED

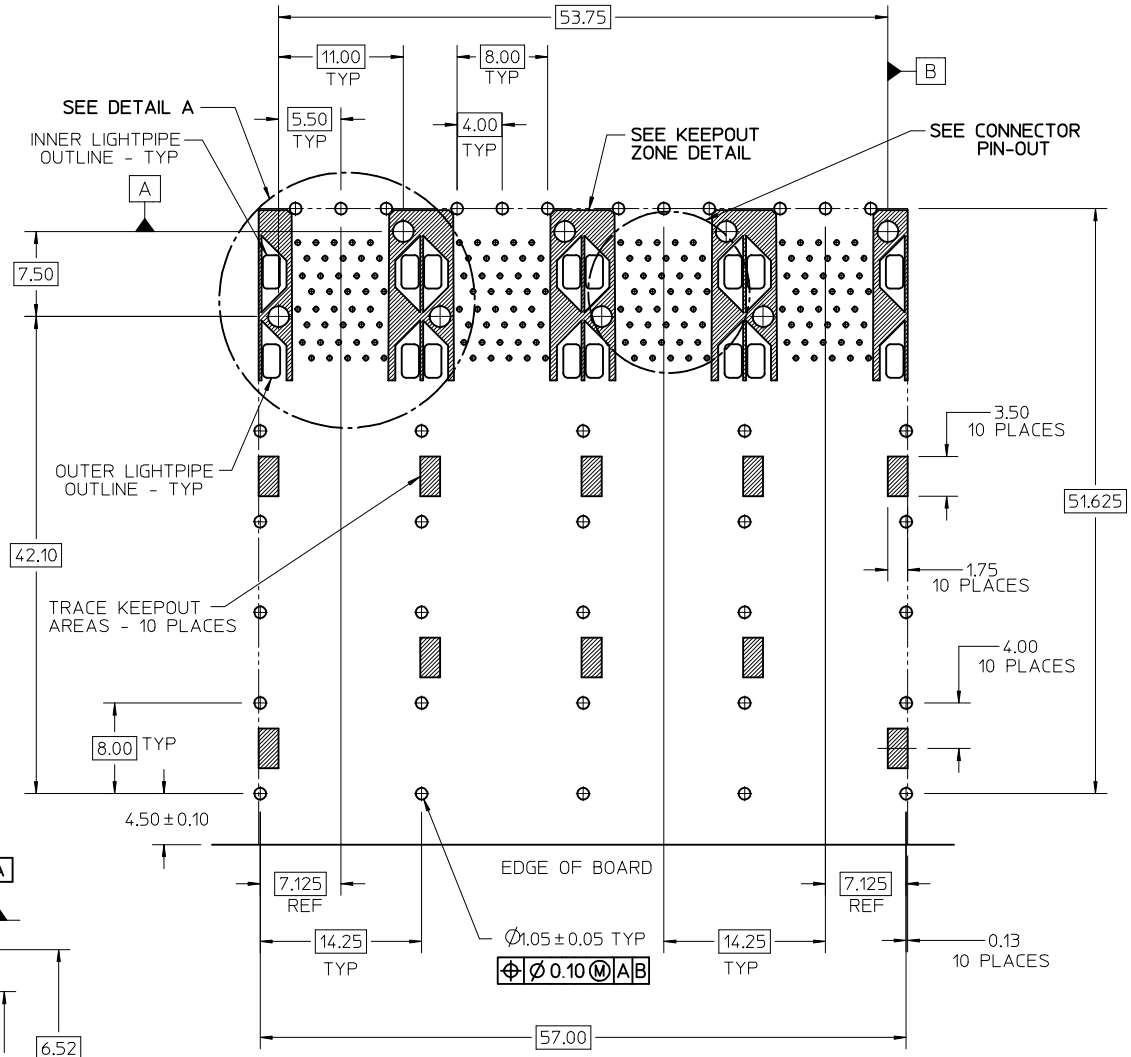
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DOCUMENT NO.: SD-76046-001
SHEET NO.: 2 OF 4

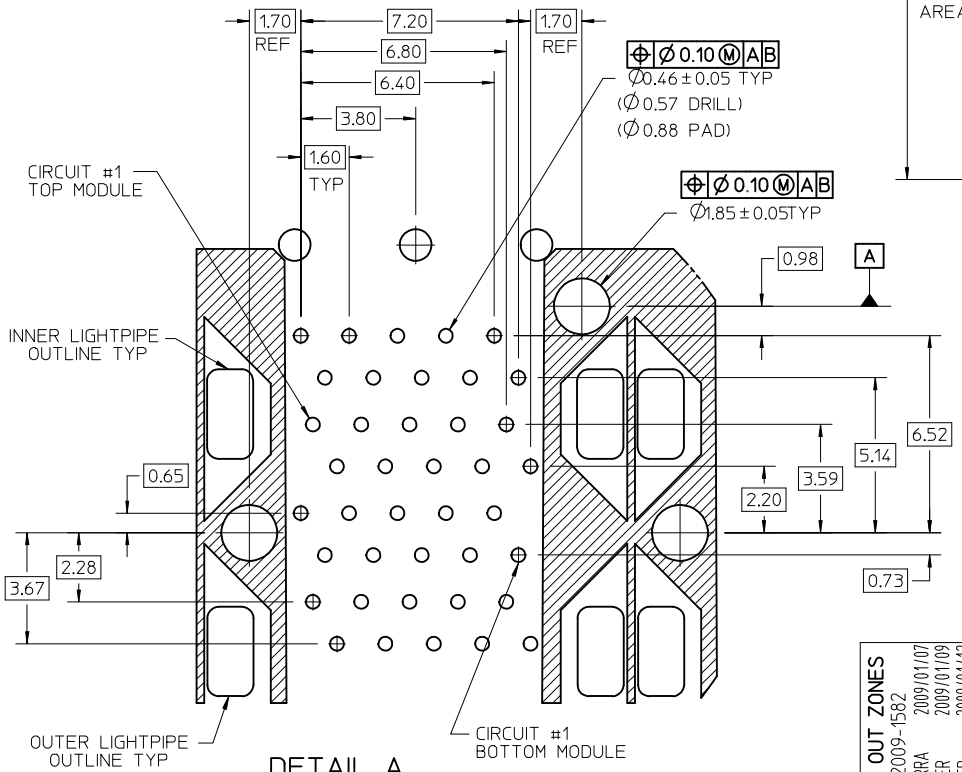
SIZE C

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CONNECTOR PIN-OUT
COMPONENT SIDE OF BOARD




DETAIL A
SCALE 8:1

RECOMMENDED PCB LAYOUT - COMPONENT SIDE
RECOMMENDED PCB THICKNESS - 2.36 MM (.093 INCH)

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

ADD KEEP OUT ZONES
EC NO: UCP2009-1582 2009/01/07
DRWN:MSIBARRA 2009/01/09
CH'KD:BBARKER 2009/01/12
APPR:SMILLER
DESCRIPTION
D
REV

QUALITY SYMBOLS
▼=0
▽=0

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| 3 PLACES | ± --- | ± --- |
| 2 PLACES | ± 0.13 | ± --- |
| 1 PLACE | ± 0.25 | ± --- |
| ANGULAR ± 5 ° | | |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

| | | |
|---|---|---|
| DIMENSION STYLE | SCALE | DESIGN UNITS |
| MM ONLY | 3:1 | METRIC |

THIRD ANGLE PROJECTION

| | |
|---|---|
| DRAWN BY | DATE |
| MSANDBERG | 1-26-2006 |
| CHECKED BY | DATE |
| JLONG | 1-26-2006 |
| APPROVED BY | DATE |
| RNELSON | 1-26-2006 |

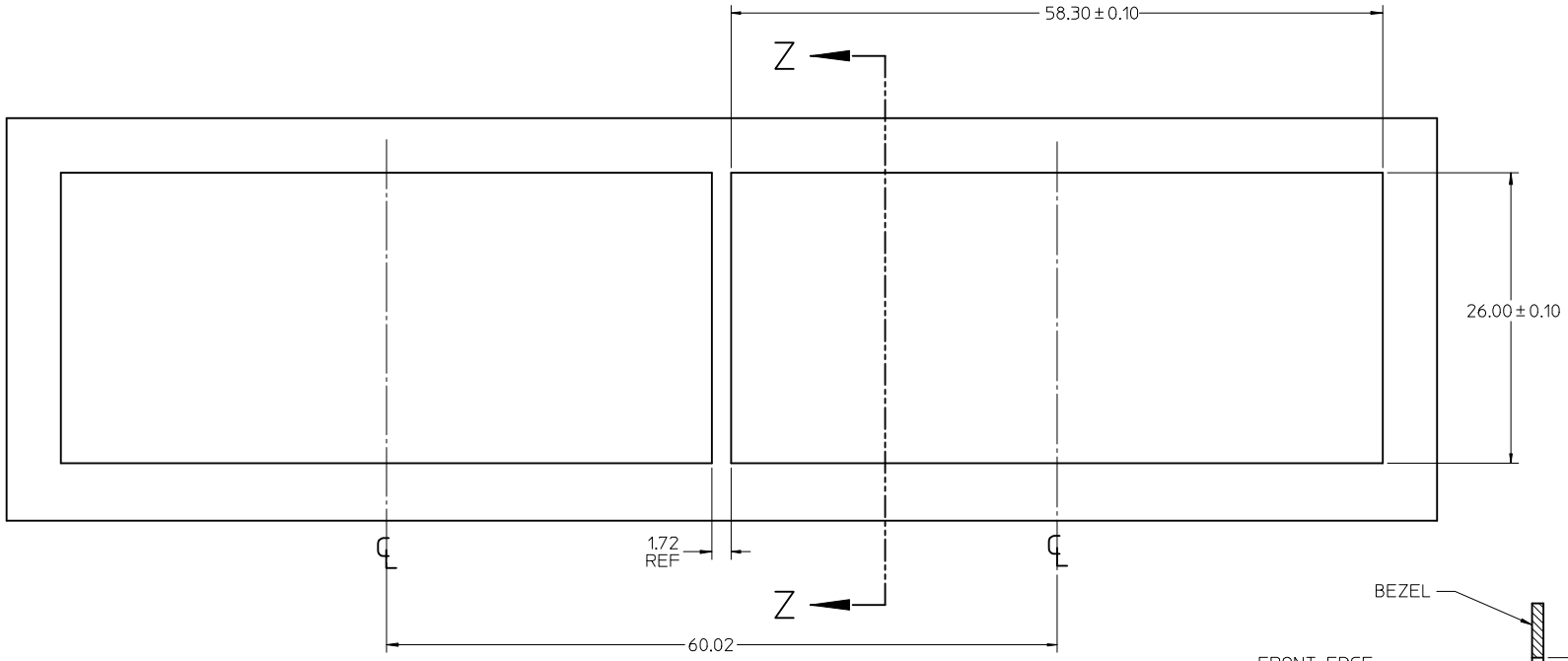
TITLE
STACKED SFP+ 2X4 ASS'Y WITH METAL EMI GASKET AND LIGHTPIPES

MOLEX INCORPORATED

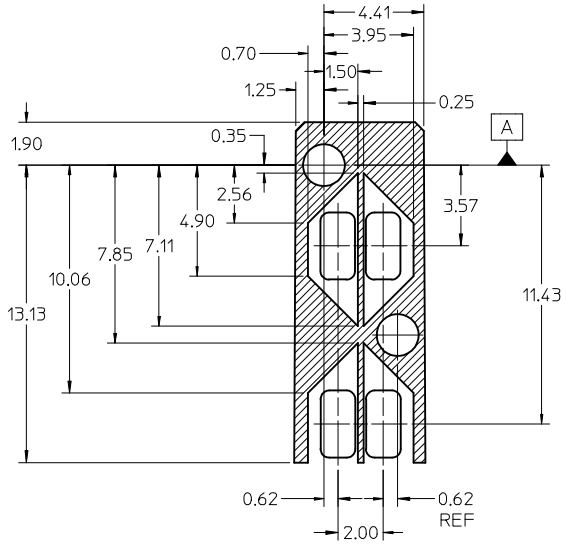
| | | |
|---|---|---|
| MATERIAL NO. | DOCUMENT NO. | SHEET NO. |
| SEE TABLE | SD-76046-001 | 3 OF 4 |

SIZE C

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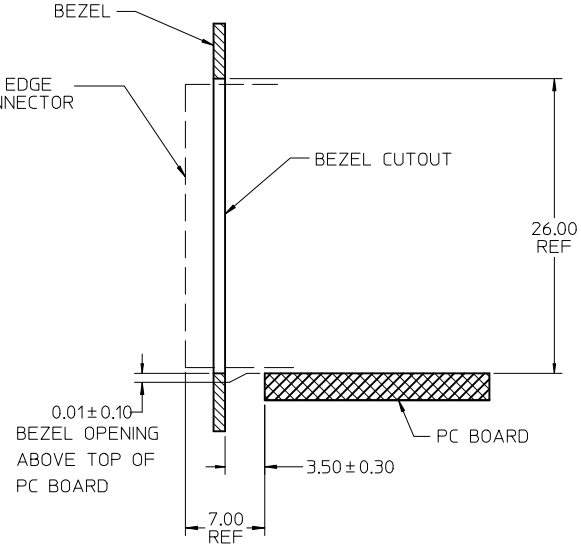



BEZEL CUTOUT CENTER SPACING DETAIL
BEZEL THICKNESS 0.8-2.6




DETAIL - LIGHTPIPE LOCATION AND OTHER ZONES
SCALE 8:1

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




SECTION Z-Z
SCALE 3:1

SEE SHEET 1
EC NO: UCP2009-1582 2009/01/07
DRWN:MSIBARRA 2009/01/09
CH'KD:BBARKER 2009/01/12
APPR:SMILLER DESCRIPTION
D REV

QUALITY SYMBOLS
▼=0
Ⓒ▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

| | mm | INCH |
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| 3 PLACES | ± --- | ± --- |
| 2 PLACES | ± 0.13 | ± --- |
| 1 PLACE | ± 0.25 | ± --- |
| ANGULAR ± 5 ° | | |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: 3:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

| | | DATE |
|---|---|---|
| DRAWN BY | MSANDBERG | 1-26-2006 |
| CHECKED BY | JLONG | 1-26-2006 |
| APPROVED BY | RNELSON | 1-26-2006 |

TITLE: STACKED SFP+ 2X4 ASS'Y WITH METAL EMI GASKET AND LIGHTPIPES

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MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SD-76046-001
SHEET NO.: 4 OF 4
SIZE: C

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