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**Part Number:** [0879450002](#)  
**Status:** **Active**  
**Description:** 1.27mm (.050") Signal Pitch, 0.80mm (.031") SCSI Pitch, 1.27mm (.050") Power Pitch  
SAS Receptacle, Right Angle, Surface Mount, "Z" Height of 7.07mm (.278"), with  
Straight Solder Tab, 29 Circuits, Lead free

**Documents:**

|                               |                                                          |
|-------------------------------|----------------------------------------------------------|
| <a href="#">3D Model</a>      | <a href="#">Product Specification PS-87945-034 (PDF)</a> |
| <a href="#">Drawing (PDF)</a> | <a href="#">RoHS Certificate of Compliance (PDF)</a>     |

**Agency Certification**

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

**General**

|                |                                                                                 |
|----------------|---------------------------------------------------------------------------------|
| Product Family | I/O Connectors                                                                  |
| Series         | <a href="#">87945</a>                                                           |
| Application    | Board-to-Board                                                                  |
| Comments       | Solder Tab (Blade) hold-down, no pick and place cap "Z" Height - 7.07mm (.278") |
| Component Type | Receptacle                                                                      |
| Product Name   | SAS                                                                             |
| Type           | N/A                                                                             |

**Physical**

|                                |                            |
|--------------------------------|----------------------------|
| Boot Color                     | N/A                        |
| Circuits (Loaded)              | 29                         |
| Circuits (maximum)             | 29                         |
| Circuits Detail                | Signal 7, SCSI 7, Power 15 |
| Color - Resin                  | Black                      |
| Durability (mating cycles max) | 500                        |
| Flammability                   | 94V-0                      |
| Gender                         | Female                     |
| Keying to Mating Part          | Yes                        |
| Lock to Mating Part            | None                       |
| Material - Metal               | Phosphor Bronze            |
| Material - Plating Mating      | Gold                       |
| Material - Plating Termination | Tin                        |
| Number of Rows                 | 2                          |
| Orientation                    | Right Angle                |
| PCB Locator                    | Yes                        |
| PCB Retention                  | Yes                        |
| PCB Thickness Recommended (in) | 0.062 In                   |
| PCB Thickness Recommended (mm) | 1.60 mm                    |
| Packaging Type                 | Tray                       |
| Panel Mount                    | Yes                        |
| Pitch - Mating Interface (in)  | 0.031 In, 0.050 In         |
| Pitch - Mating Interface (mm)  | 0.80 mm, 1.27 mm           |
| Pitch - Term. Interface (in)   | 0.031 In, 0.050 In         |
| Pitch - Term. Interface (mm)   | 0.80 mm, 1.27 mm           |
| Plating min: Mating (µin)      | 30                         |
| Plating min: Mating (µm)       | 0.76                       |
| Plating min: Termination (µin) | 102                        |
| Plating min: Termination (µm)  | 2.54                       |
| Polarized to Mating Part       | Yes                        |
| Polarized to PCB               | Yes                        |

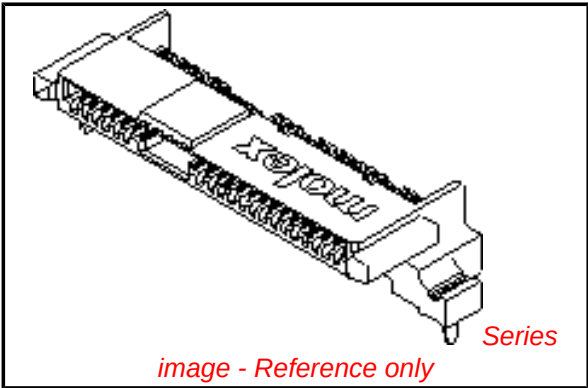


image - Reference only

**EU RoHS**

**ELV and RoHS  
Compliant**

**REACH SVHC**

Not Reviewed

**Halogen-Free**

**Status**

**Not Reviewed**

**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**

[87945Series](#)

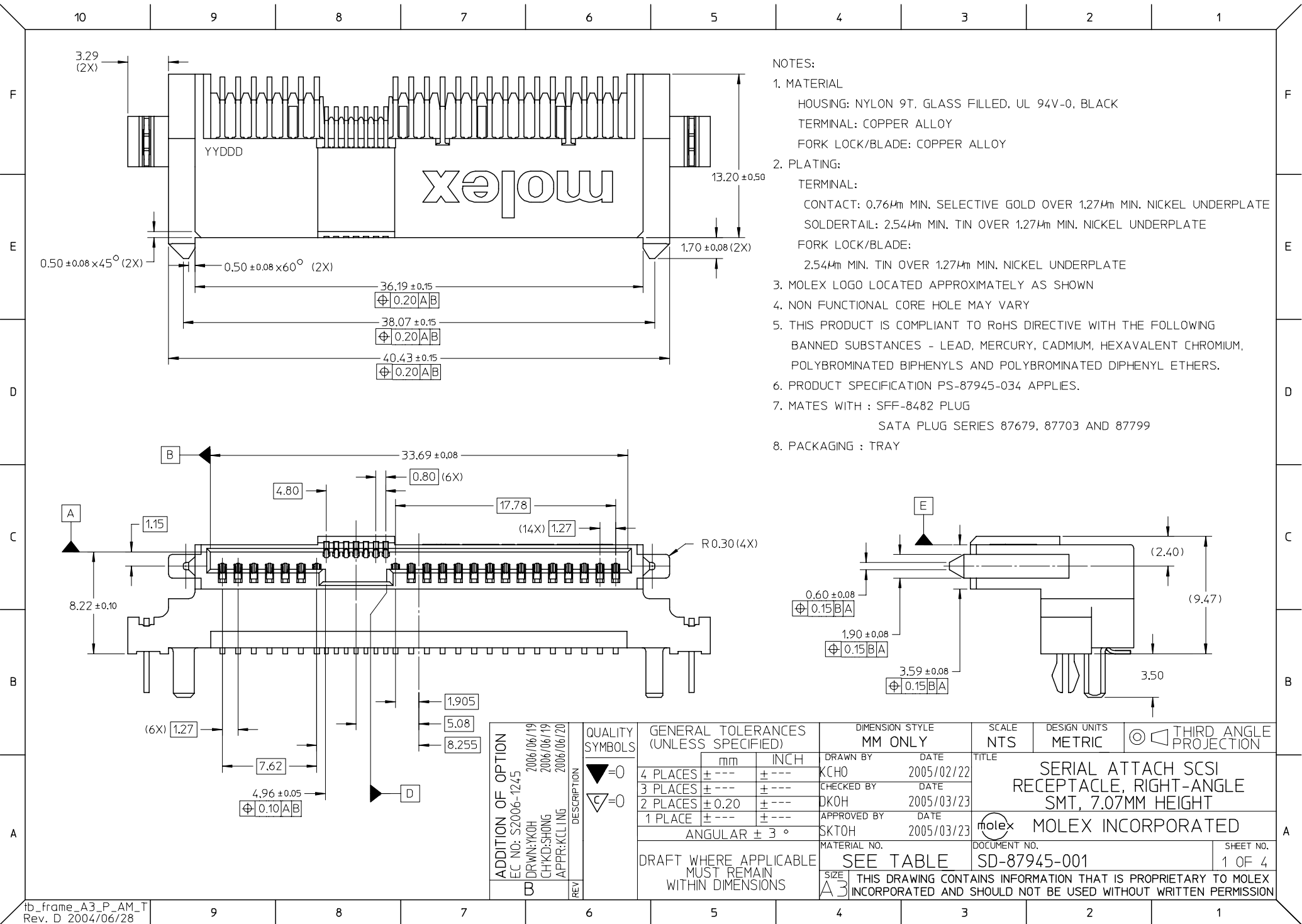
**Mates With**

[87679](#) , [87799](#) , [87703](#) , SFF 8482 Hard  
Disk Drive and Backplane Plug

|                                                |                           |
|------------------------------------------------|---------------------------|
| Surface Mount Compatible (SMC)                 | N/A                       |
| Temperature Range - Operating                  | 0°C to +55°C              |
| Termination Interface: Style                   | Surface Mount             |
| Waterproof / Dustproof                         | No                        |
| Wire Size AWG                                  | N/A                       |
| <b>Electrical</b>                              |                           |
| Current - Maximum per Contact                  | 1.5A                      |
| Shielded                                       | No                        |
| Voltage - Maximum                              | 30V                       |
| <b>Solder Process Data</b>                     |                           |
| Duration at Max. Process Temperature (seconds) | 10                        |
| Lead-free Process Capability                   | Reflow Capable (SMT only) |
| Max. Cycles at Max. Process Temperature        | 1                         |
| Process Temperature max. C                     | 260                       |
| <b>Material Info</b>                           |                           |
| <b>Reference - Drawing Numbers</b>             |                           |
| Product Specification                          | PS-87945-034              |
| Sales Drawing                                  | SD-87945-001              |

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NOTES:

1. MATERIAL

HOUSING: NYLON 9T, GLASS FILLED, UL 94V-0, BLACK

TERMINAL: COPPER ALLOY

FORK LOCK/BLADE: COPPER ALLOY

2. PLATING:

TERMINAL:

CONTACT: 0.76µm MIN. SELECTIVE GOLD OVER 1.27µm MIN. NICKEL UNDERPLATE

SOLDERTAIL: 2.54µm MIN. TIN OVER 1.27µm MIN. NICKEL UNDERPLATE

FORK LOCK/BLADE:

2.54µm MIN. TIN OVER 1.27µm MIN. NICKEL UNDERPLATE

3. MOLEX LOGO LOCATED APPROXIMATELY AS SHOWN

4. NON FUNCTIONAL CORE HOLE MAY VARY

5. THIS PRODUCT IS COMPLIANT TO RoHS DIRECTIVE WITH THE FOLLOWING BANNED SUBSTANCES - LEAD, MERCURY, CADMIUM, HEXAVALENT CHROMIUM, POLYBROMINATED BIPHENYLS AND POLYBROMINATED DIPHENYL ETHERS.

6. PRODUCT SPECIFICATION PS-87945-034 APPLIES.

7. MATES WITH : SFF-8482 PLUG

SATA PLUG SERIES 87679, 87703 AND 87799

8. PACKAGING : TRAY

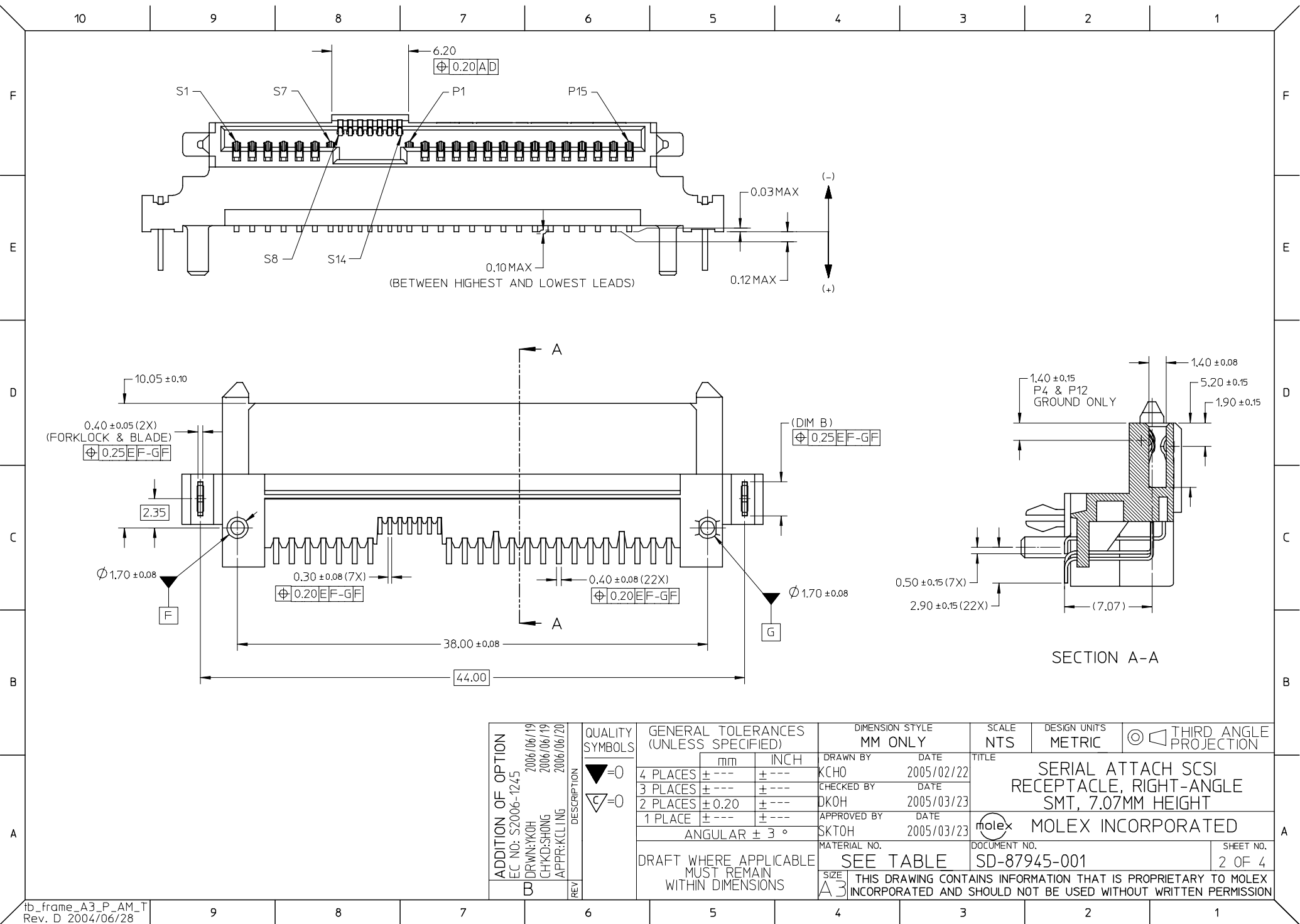
| ADDITION OF OPTION |             |
|--------------------|-------------|
| EC NO: S2006-1245  | 2006/06/19  |
| DRWN:YKH           | 2006/06/19  |
| CHKD:SHONG         | 2006/06/19  |
| APPR:KCLING        | 2006/06/20  |
| REV                | DESCRIPTION |
| B                  |             |

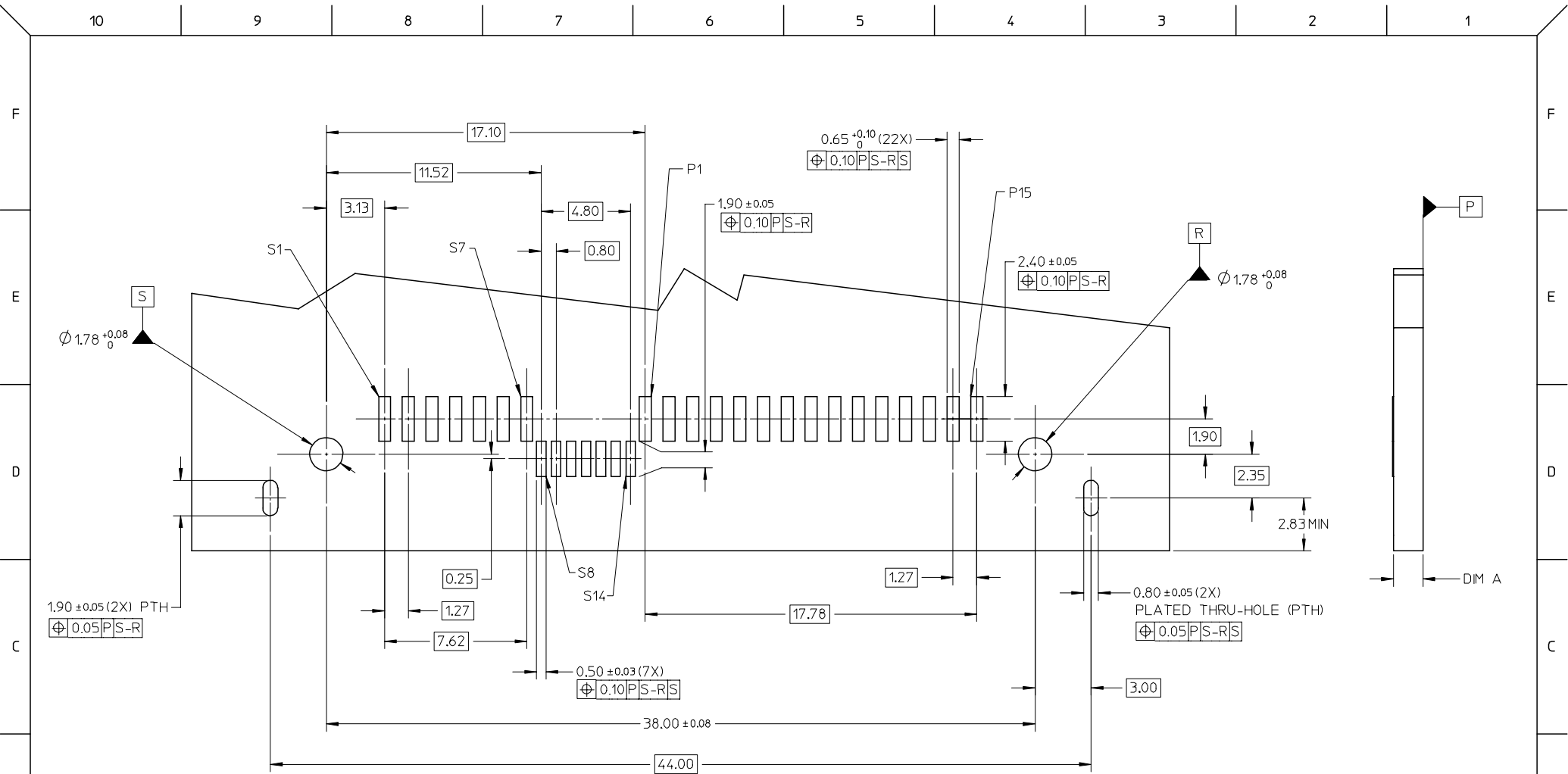
| QUALITY SYMBOLS |
|-----------------|
| ▽=0             |
| ▽=0             |

| GENERAL TOLERANCES (UNLESS SPECIFIED)                |        |
|------------------------------------------------------|--------|
|                                                      |        |
| 4 PLACES                                             | ± ---  |
| 3 PLACES                                             | ± ---  |
| 2 PLACES                                             | ± 0.20 |
| 1 PLACE                                              | ± ---  |
| ANGULAR ± 3 °                                        |        |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |        |

| DIMENSION STYLE MM ONLY |            |
|-------------------------|------------|
| DRAWN BY                | DATE       |
| KCHO                    | 2005/02/22 |
| CHECKED BY              | DATE       |
| DKOH                    | 2005/03/23 |
| APPROVED BY             | DATE       |
| SKTOH                   | 2005/03/23 |
| MATERIAL NO.            |            |
| SEE TABLE               |            |
| SIZE                    | A3         |

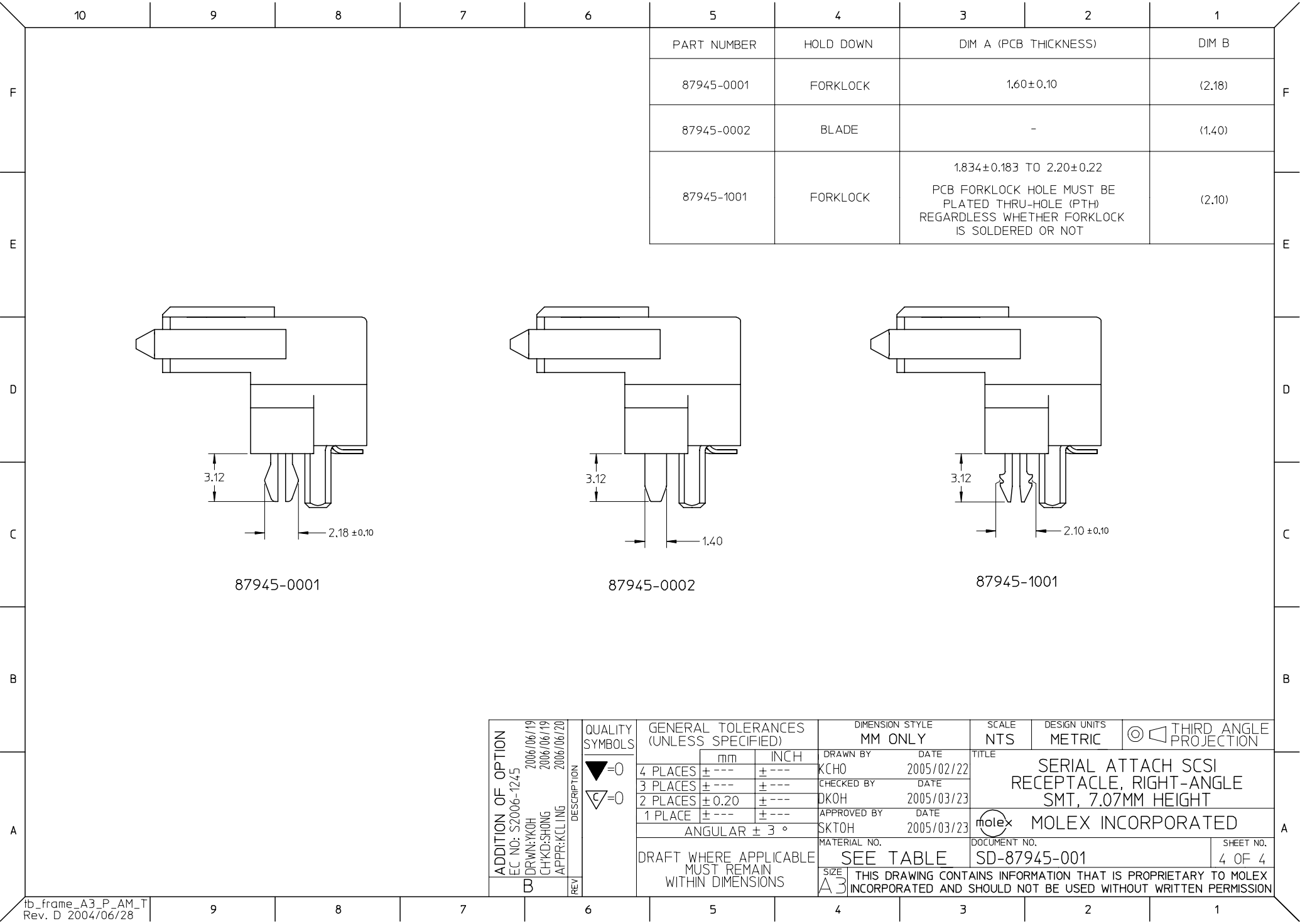
|                                                                                               |              |             |           |
|-----------------------------------------------------------------------------------------------|--------------|-------------|-----------|
| SCALE                                                                                         | DESIGN UNITS | THIRD ANGLE |           |
| NTS                                                                                           | METRIC       | PROJECTION  |           |
| TITLE                                                                                         |              |             |           |
| SERIAL ATTACH SCSI<br>RECEPTACLE, RIGHT-ANGLE<br>SMT, 7.07MM HEIGHT                           |              |             |           |
| MOLEX INCORPORATED                                                                            |              |             |           |
| DOCUMENT NO.                                                                                  |              |             | SHEET NO. |
| SD-87945-001                                                                                  |              |             | 1 OF 4    |
| ALL INFORMATION THAT IS PROPRIETARY TO MOLEX<br>SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |              |             |           |





RECOMMENDED PCB LAYOUT

|                                                                                       |     |                                                       |                                    |                                                            |  |                            |  |                                                                                                                                  |                                                                              |                           |  |  |                          |
|---------------------------------------------------------------------------------------|-----|-------------------------------------------------------|------------------------------------|------------------------------------------------------------|--|----------------------------|--|----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|---------------------------|--|--|--------------------------|
| ADDITION OF OPTION<br>EC NO: S2006-1245<br>DRWN:YKH<br>CHKD:SHONG<br>APPR:KCLING<br>B | REV | DESCRIPTION<br>2006/06/19<br>2006/06/19<br>2006/06/20 | QUALITY SYMBOLS<br><br>▽=0<br>▽C=0 | GENERAL TOLERANCES (UNLESS SPECIFIED)                      |  | DIMENSION STYLE<br>MM ONLY |  | SCALE<br>NTS                                                                                                                     | DESIGN UNITS<br>METRIC                                                       | THIRD ANGLE<br>PROJECTION |  |  |                          |
|                                                                                       |     |                                                       |                                    |                                                            |  | DRAWN BY<br>KCHO           |  | DATE<br>2005/02/22                                                                                                               | TITLE<br>SERIAL ATTACH SCSI<br>RECEPTACLE, RIGHT-ANGLE<br>SMT, 7.07MM HEIGHT |                           |  |  |                          |
|                                                                                       |     |                                                       |                                    |                                                            |  | CHECKED BY<br>DKOH         |  | DATE<br>2005/03/23                                                                                                               |                                                                              |                           |  |  |                          |
|                                                                                       |     |                                                       |                                    |                                                            |  | APPROVED BY<br>SKTOH       |  | DATE<br>2005/03/23                                                                                                               |                                                                              |                           |  |  | MOLEX MOLEX INCORPORATED |
|                                                                                       |     |                                                       |                                    | ANGULAR ± 3 °                                              |  | MATERIAL NO.               |  | DOCUMENT NO.<br>SD-87945-001                                                                                                     |                                                                              | SHEET NO.<br>3 OF 4       |  |  |                          |
|                                                                                       |     |                                                       |                                    | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |  | SEE TABLE                  |  | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                                                                              |                           |  |  |                          |
|                                                                                       |     |                                                       |                                    |                                                            |  | SIZE<br>A3                 |  |                                                                                                                                  |                                                                              |                           |  |  |                          |
|                                                                                       |     |                                                       |                                    |                                                            |  |                            |  |                                                                                                                                  |                                                                              |                           |  |  |                          |



F

E

D

C

B

A

F

E

D

C

B

A