

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

**Part Number:** [5016164185](#)  
**Status:** **Active**  
**Description:** 0.30mm (.012") Pitch Easy-On™ Type FPC Connector, 1.10mm (.043") Mated Height, Right Angle, SMT, ZIF, Top Contact Style, 41 Circuits, Lead-free

**Documents:**

[3D Model](#) [Product Specification PS-501616-003 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**General**

Product Family FFC/FPC Connectors  
 Series [501616](#)  
 Product Name Easy-On™

**Physical**

Circuits (Loaded) 41  
 Color - Resin Black, Gray  
 Contact Position Top  
 Durability (mating cycles max) 10  
 Entry Angle 90° Angle  
 Mated Height (in) 0.043 In  
 Mated Height (mm) 1.10 mm  
 Material - Metal Copper Alloy  
 Material - Plating Mating Gold  
 Number of Rows 1  
 Orientation Right Angle  
 PCB Locator No  
 PCB Retention Yes  
 Packaging Type Embossed Tape on Reel  
 Pitch - Mating Interface (in) 0.012 In  
 Pitch - Mating Interface (mm) 0.30 mm  
 Polarized to PCB Yes  
 Stackable No  
 Temperature Range - Operating -40°C to +85°C  
 Termination Interface: Style Surface Mount  
 Wire/Cable Type FPC only

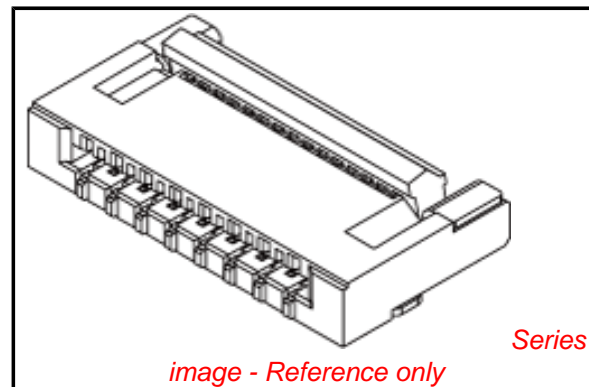
**Electrical**

Current - Maximum per Contact 0.2A  
 Voltage - Maximum 50V AC (RMS)/DC

**Material Info**

**Reference - Drawing Numbers**

Product Specification PS-501616-003, RPS-501616-004, RPS-501616-008, RPS-501616-009  
 Sales Drawing SD-501616-007, SD-501616-008



*image - Reference only*

**EU RoHS**

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

**China RoHS**

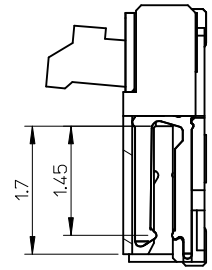
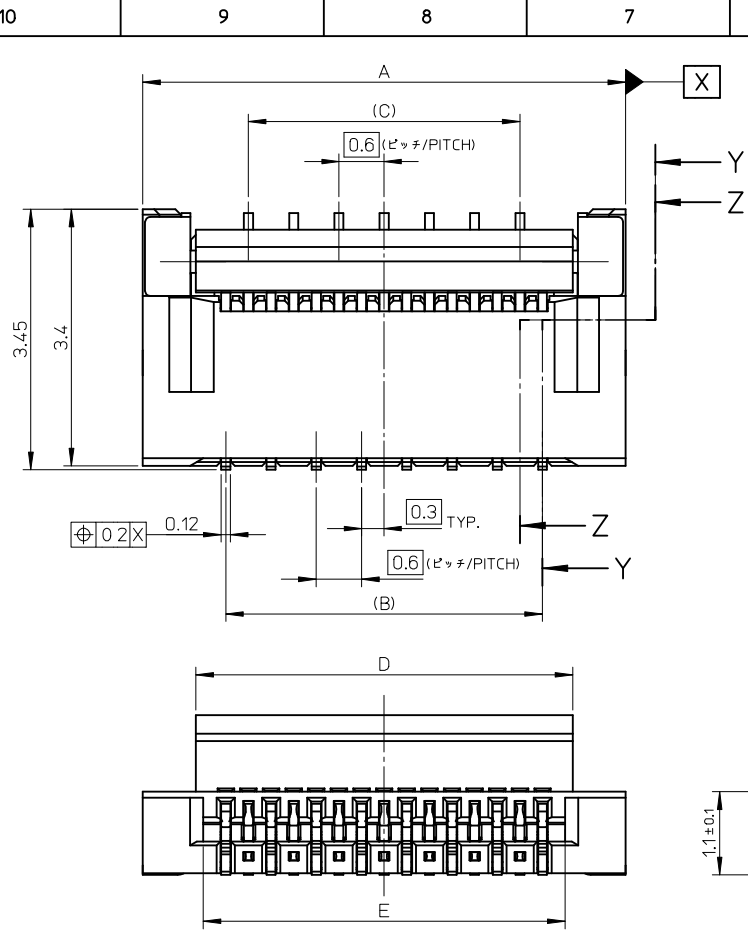


**Need more information on product environmental compliance?**

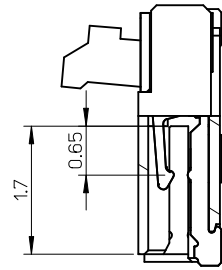
Email [productcompliance@molex.com](mailto:productcompliance@molex.com)  
 For a multiple part number RoHS Certificate of Compliance, [click here](#)

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

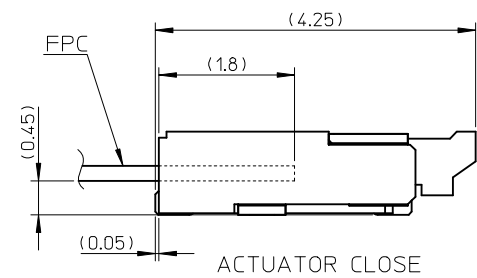
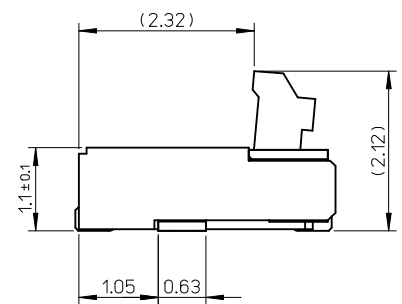
**Search Parts in this Series**  
[501616Series](#)



SECTION Z-Z



SECTION Y-Y



ACTUATOR CLOSE

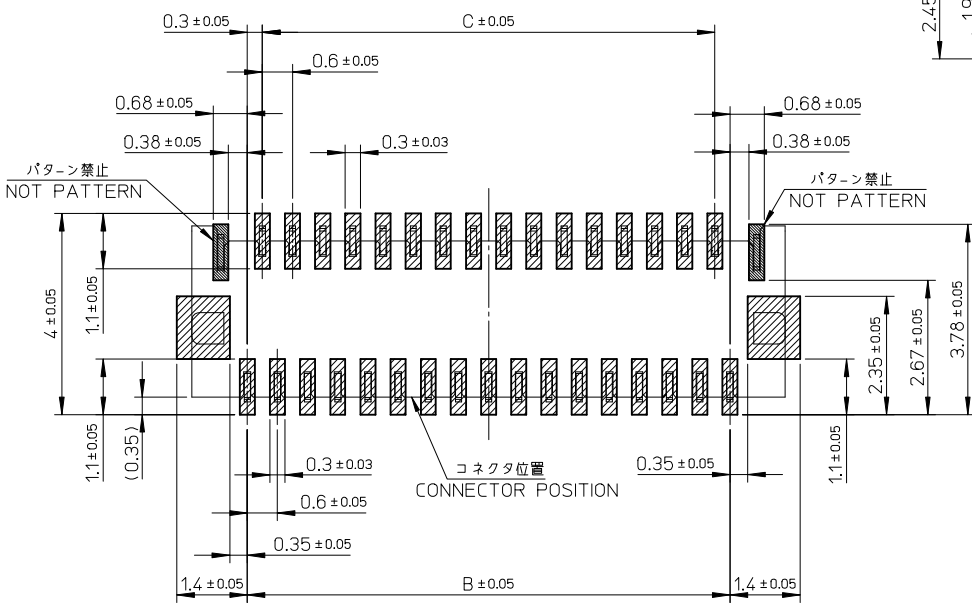
|      |      |      |      |      |                         |             |                      |
|------|------|------|------|------|-------------------------|-------------|----------------------|
| 15.6 | 15.8 | 14.4 | 15.0 | 17.2 | 501616-5185             | 501616-5150 | 51                   |
| 13.8 | 14.0 | 12.6 | 13.2 | 15.4 | 501616-4585             | 501616-4550 | 45                   |
| 12.6 | 12.8 | 11.4 | 12.0 | 14.2 | 501616-4185             | 501616-4150 | 41                   |
| 12.0 | 12.2 | 10.8 | 11.4 | 13.6 | 501616-3985             | 501616-3950 | 39                   |
| 10.8 | 11.0 | 9.6  | 10.2 | 12.4 | 501616-3585             | 501616-3550 | 35                   |
| E    | D    | (C)  | (B)  | A    | EMBOSSED TAPE ORDER No. |             | MATERIAL NO. CIRCUIT |

部品構成

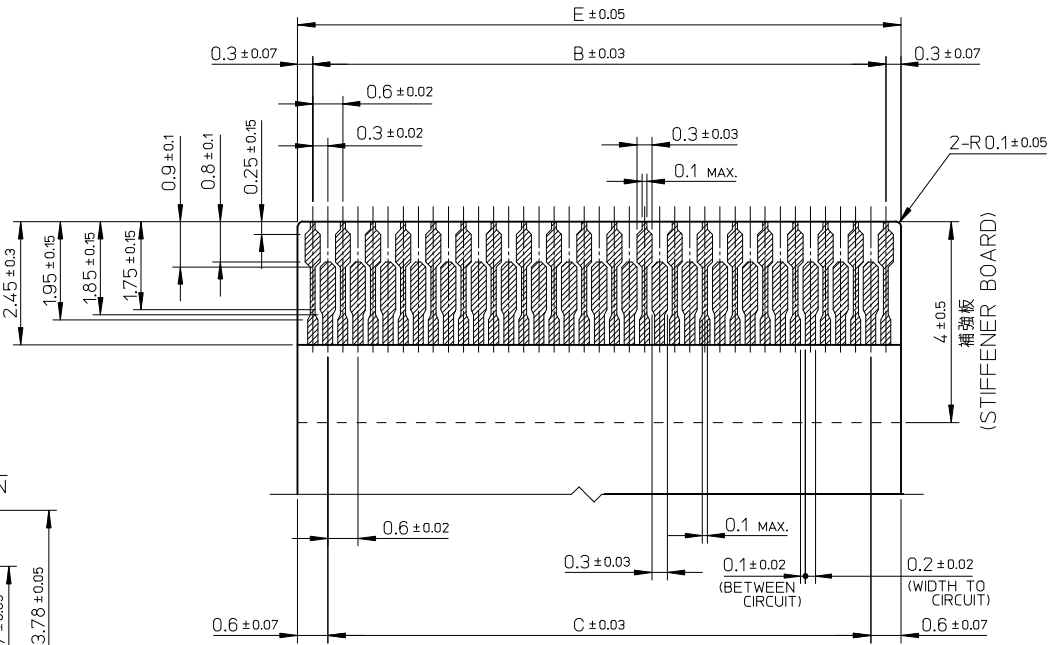
- ハウジング・・・材質：耐熱性樹脂 黒色 UL94V-0  
HOUSING MATERIAL:HEAT RESISTANT POLYMER BLACK UL94-V0
- 奇数ターミナル・・・材質：銅合金  
ODD TERMINAL MATERIAL :COPPER ALLOY  
処理：ニッケル下地部分金メッキ（接触部及びテール部）  
FINISH :PARTLY GOLD(CONTACT,TAIL) OVER NICKEL PLATING
- 偶数ターミナル・・・材質：銅合金  
EVEN TERMINAL MATERIAL:COPPER ALLOY  
処理：ニッケル下地部分金メッキ（接触部及びテール部）  
FINISH :PARTLY GOLD(CONTACT,TAIL) OVER NICKEL PLATING
- アクチュエータ・・・材質：耐熱性樹脂 灰色 UL94V-0  
ACTUATOR MATERIAL :HEAT RESISTANT POLYMER GRAY UL94-V0
- ネイル・・・材質：銅合金  
NAIL MATERIAL:COPPER ALLOY  
処理：ニッケル下地すずめっき  
FINISH :TIN OVER NICKEL PLATING

|   |  |                        |                            |                        |                    |   |                        |  |
|---|--|------------------------|----------------------------|------------------------|--------------------|---|------------------------|--|
| REVISED<br>EC NO: J2009-1320<br>DRWN:MTAKAHASHI 03/2008/11/21<br>CHKD:THARUYAMA 2008/11/21<br>APPR:NIKIITA 2008/11/21 | GENERAL TOLERANCES (UNLESS SPECIFIED)                |                        | DIMENSION STYLE<br>MM ONLY |                        | SCALE<br>15:1      | DESIGN UNITS<br>METRIC                                  | THIRD ANGLE PROJECTION |  |
|   | 10 UNDER ±0.2  | 10 OVER 30 UNDER ±0.25 | 30 OVER ±0.3               | DRAWN BY<br>K.SATO     | DATE<br>2007/01/26 | TITLE<br>0.3 FPC CONN. E/O H=1.1 HSG ASSY LONG ACTUATOR |                        |  |
|   | ANGULAR ±3 °   |                        |                            | CHECKED BY<br>H.HIRATA | DATE<br>2007/01/26 | MOLEX INCORPORATED                                      |                        |  |
|   | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |                        |                            | APPROVED BY<br>M.SASAO | DATE<br>2007/01/26 | DOCUMENT NO.<br>SD-501616-007                           | SHEET NO.<br>1 OF 2    |  |

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION



参考基板レイアウト (マウント面)  
P.C. BOARD PATTERN DIM.(REF.)



適合FPC推奨寸法  
仕上がり厚さ : 0.2±0.03  
APPLY FPC  
RECOMMENDED DIM.  
THICKNESS : 0.2±0.03

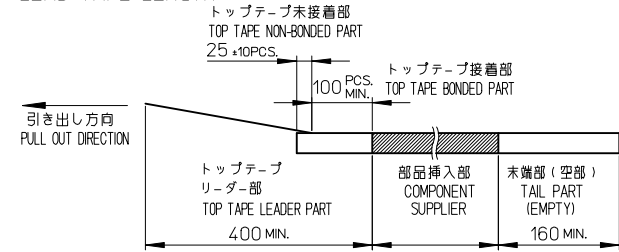
|      |      |      |                           |              |         |
|------|------|------|---------------------------|--------------|---------|
| 15.6 | 14.4 | 15.0 | 501616-5185               | 501616-5150  | 51      |
| 13.8 | 12.6 | 13.2 | 501616-4585               | 501616-4550  | 45      |
| 12.6 | 11.4 | 12.0 | 501616-4185               | 501616-4150  | 41      |
| 12.0 | 10.8 | 11.4 | 501616-3985               | 501616-3950  | 39      |
| 10.8 | 9.6  | 10.2 | 501616-3585               | 501616-3550  | 35      |
| E    | C    | B    | EMBOSSD TAPE<br>ORDER No. | MATERIAL NO. | CIRCUIT |

- 注記
- 基板実装前にアクチュエータを操作しないで下さい。  
PLEASE DO NOT OPERATE THE ACTUATOR BEFORE MOUNTING.  
必ず基板に実装し、FPCを挿入してからアクチュエータを操作して下さい。  
PLEASE OPERATE THE ACTUATOR AFTER MOUNTING ON THE SUBSTRATE, AND MATING FPC.
  - ELV及びRoHS適合品  
ELV AND RoHS COMPLIANT

|   |             |   |       |                            |                    |   |                        |                        |  |
|---|-------------|---|-------|----------------------------|--------------------|---|------------------------|------------------------|--|
| REVISED<br>EC NO: J2009-1320<br>DRAWN: TAKAHASHI 03 2008/11/24<br>CHKD: THARUYAMA 2008/11/24<br>APPR: NUKITA 2008/11/24 | DESCRIPTION | GENERAL TOLERANCES (UNLESS SPECIFIED)                                   |       | DIMENSION STYLE<br>MM ONLY |                    | SCALE<br>10:1   | DESIGN UNITS<br>METRIC | THIRD ANGLE PROJECTION |  |
|   |             | 10 UNDER  | ±0.2  | DRAWN BY<br>K. SATO        | DATE<br>2007/01/26 | TITLE<br>0.3 FPC CONN. E/O H=1.1<br>HSG ASSY LONG ACTUATOR  |                        |                        |  |
|   |             | 10 OVER 30 UNDER  | ±0.25 | CHECKED BY<br>H. HIRATA    | DATE<br>2007/01/26 | MOLEX MOLEX INCORPORATED<br>DOCUMENT NO. SD-501616-007<br>SHEET NO. 2 OF 2  |                        |                        |  |
|   |             | 30 OVER   | ±0.3  | APPROVED BY<br>M. SASAO    | DATE<br>2007/01/26 |   |                        |                        |  |
|   |             | ANGULAR ±3 °<br>DRAFT WHERE APPLICABLE<br>MUST REMAIN WITHIN DIMENSIONS |       | MATERIAL NO.<br>SEE CHART  |                    | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                        |                        |  |

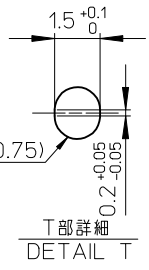
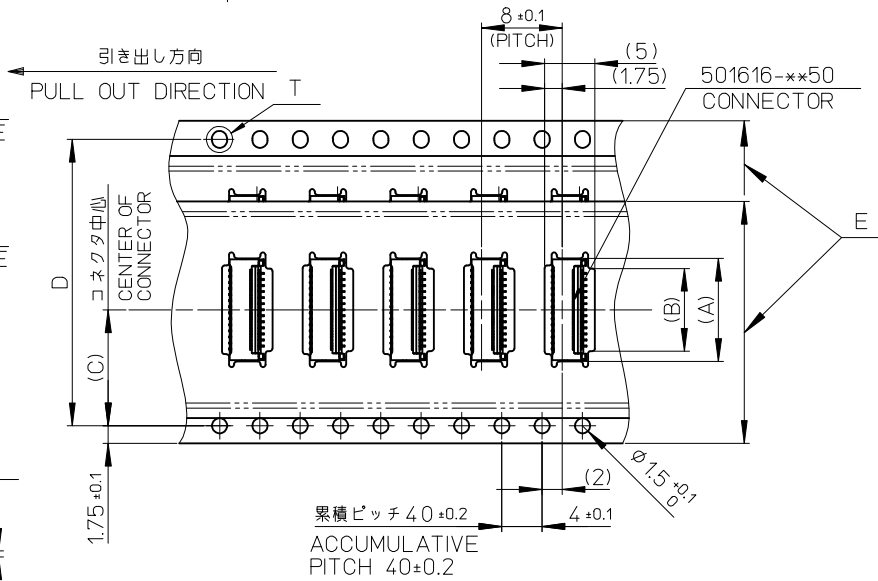
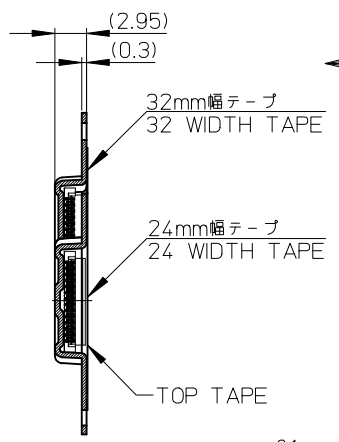
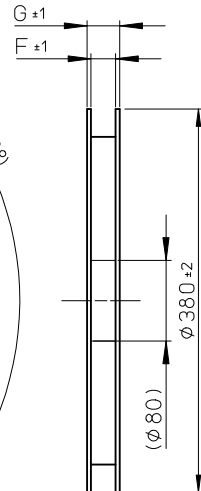
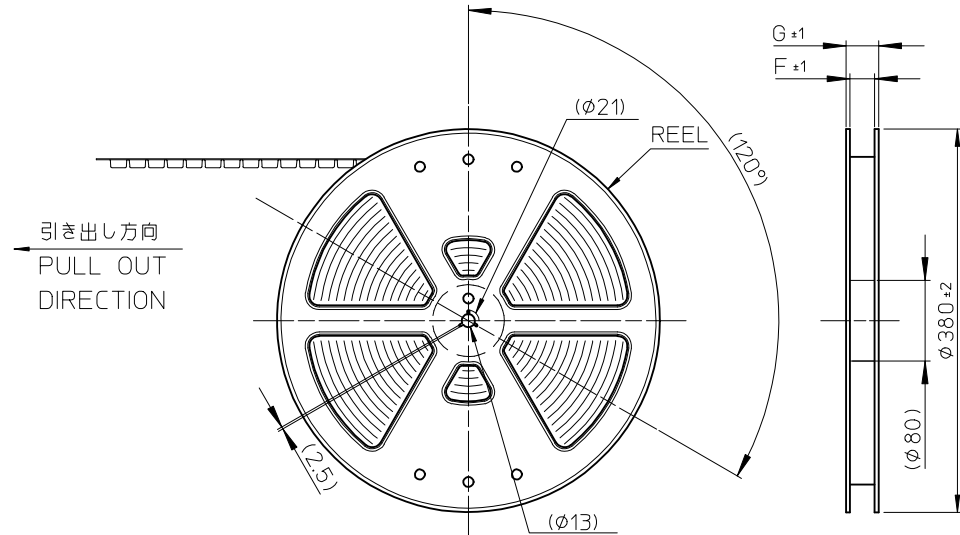
NOTES

- 製品 (501616-\*\*50) の詳細寸法については、図面 SD-501616-007 をご参照下さい。  
IN THE PACKAGE, PART NO. 501616-\*\*50 DETAILED DIMENSIONS, REFER TO SALES DRAWING NO. SD-501616-007.
- 梱包数量 : 3000個/リール  
NUMBER OF CONNECTORS : 3000 PCS/REEL
- リードテープ長さ  
LEAD TAPE LENGTH



- 材料  
キャリアテープ : ポリスチレン (PS)  
トップテープ : PET, PE, PEF  
リール : ポリスチレン (PS) <リサイクル材を含む>  
MATERIAL  
CARRIER TAPE : POLYSTYRENE (PS)  
TOP TAPE : PET, PE, PEF  
REEL : POLYSTYRENE (PS) <RECYCLE MATERIAL CONTAINED>
- ELV及びRoHS適合品  
ELV AND RoHS COMPLIANT

|      |      |        |      |      |      |      |                 |           |
|------|------|--------|------|------|------|------|-----------------|-----------|
| 37.4 | 33.4 | 32±0.3 | 28.4 | 14.2 | 15.4 | 17.4 | 501616-5185     | 51        |
|      |      |        |      |      | 13.6 | 15.6 | 501616-4585     | 45        |
| 29.4 | 25.4 | 24±0.3 | ++   | 11.5 | 12.4 | 14.4 | 501616-4185     | 41        |
|      |      |        |      |      | 11.8 | 13.8 | 501616-3985     | 39        |
|      |      |        |      |      | 10.6 | 12.6 | 501616-3585     | 35        |
| G    | F    | E      | D    | C    | B    | A    | EMBOSSD PACKAGE | 極数        |
|      |      |        |      |      |      |      | オーダー番号          | ORDER No. |
|      |      |        |      |      |      |      |                 | CIRCUIT   |



エンボステープ内の製品の向き  
DIRECTION OF CONNECTOR IN  
EMBOSSD TAPE

累積ピッチ 40±0.2  
ACCUMULATIVE  
PITCH 40±0.2

|         |                     |                 |  |
|---------|---------------------|-----------------|--|
| REVISED | EC NO. : J2009-1784 | 2009/01/26      | GENERAL TOLERANCES<br>(UNLESS SPECIFIED)                   |
|         | DRWN:MKAWABATA      | 2009/01/26      | 10 UNDER ± ---   |
|         | CHKD:HSHINOYAMA     | 2009/01/26      | 10 OVER 30 UNDER ± ---                                     |
|         | APPR:HSHINOYAMA     | 2009/01/26      | 30 OVER ± ---  |
| REV     | DESCRIPTION         | ANGULAR ± --- ° | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |

|  |                    |   |                        |                           |
|--|--------------------|---|------------------------|---------------------------|
| DIMENSION STYLE<br>MM ONLY   |                    | SCALE<br>---  | DESIGN UNITS<br>METRIC | THIRD ANGLE<br>PROJECTION |
| DRAWN BY<br>K. SATO  | DATE<br>2007/05/14 | TITLE<br>0.3 FPC CONN. H=1.1<br>EMBSTP PKG (LONG-ACT) |                        |                           |
| CHECKED BY<br>H. HIRATA  | DATE<br>2007/05/14 | MOLEX INCORPORATED                                    |                        |                           |
| APPROVED BY<br>M. SASAO  | DATE<br>2007/05/14 | DOCUMENT NO.<br>SD-501616-008                         | SHEET NO.<br>1 OF 1    |                           |
| SIZE A3 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                    |   |                        |                           |