

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

**Part Number:** **0785600002**  
**Status:** **Active**  
**Overview:** esatausb\_combo\_receptacles  
**Description:** Combo External Serial ATA and USB Receptacles, Right Angle, Through hole, Top Mount, Sink Type, 1.80mm (.071") Sink Mount Height, Lead free

**Documents:**

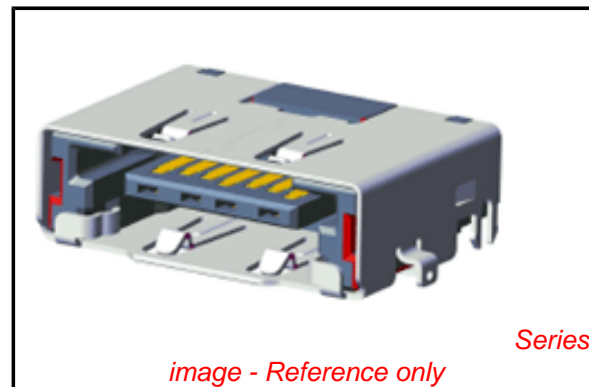
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)  
[Product Specification PS-78560-001 \(PDF\)](#)

**General**

Product Family	I/O Connectors
Series	<u>78560</u>
Application	Wire-to-Board
Comments	Shorter hind Forklocks . 1.80mm (.071") Sink Mount Height . Mounted on recessed PCB . Durability: 1,500 cycles for USB; 2,500 cycles for eSATA
Component Type	Receptacle
Overview	<u>esatausb_combo_receptacles</u>
Product Name	eSATA/USB Combo, External Serial ATA, USB
Type	N/A

**Physical**

Circuits (Loaded)	4, 7
Circuits Detail	eSATA: 7 circuits; USB: 4 circuits
Color - Resin	Black
Durability (mating cycles max)	1,500
Gender	Male
Keying to Mating Part	Yes
Lock to Mating Part	Yes
Material - Metal	Copper Alloy
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Material - Resin	High Temperature Thermoplastic
Number of Rows	2
Orientation	Right Angle
PCB Locator	No
PCB Retention	Yes
PCB Thickness Recommended (in)	0.047 In
PCB Thickness Recommended (mm)	1.20 mm
Packaging Type	Embossed Tape on Reel
Panel Mount	Yes
Pitch - Mating Interface (in)	0.050 In, 0.079 In, 0.098 In
Pitch - Mating Interface (mm)	1.27 mm, 2.00 mm, 2.50 mm
Pitch - Term. Interface (in)	0.050 In, 0.079 In, 0.098 In
Pitch - Term. Interface (mm)	1.27 mm, 2.00 mm, 2.50 mm
Plating min: Mating (µin)	15
Plating min: Mating (µm)	0.38
Plating min: Termination (µin)	100
Plating min: Termination (µm)	2.54
Polarized to Mating Part	Yes
Polarized to PCB	Yes
Ports	1
Temperature Range - Operating	-35°C to +85°C
Termination Interface: Style	Through Hole



*image - Reference only*

*Series*

**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**

78560Series

**Mates With**

External Serial ATA Cable Assembly or USB Type A Cable Assembly

**Electrical**

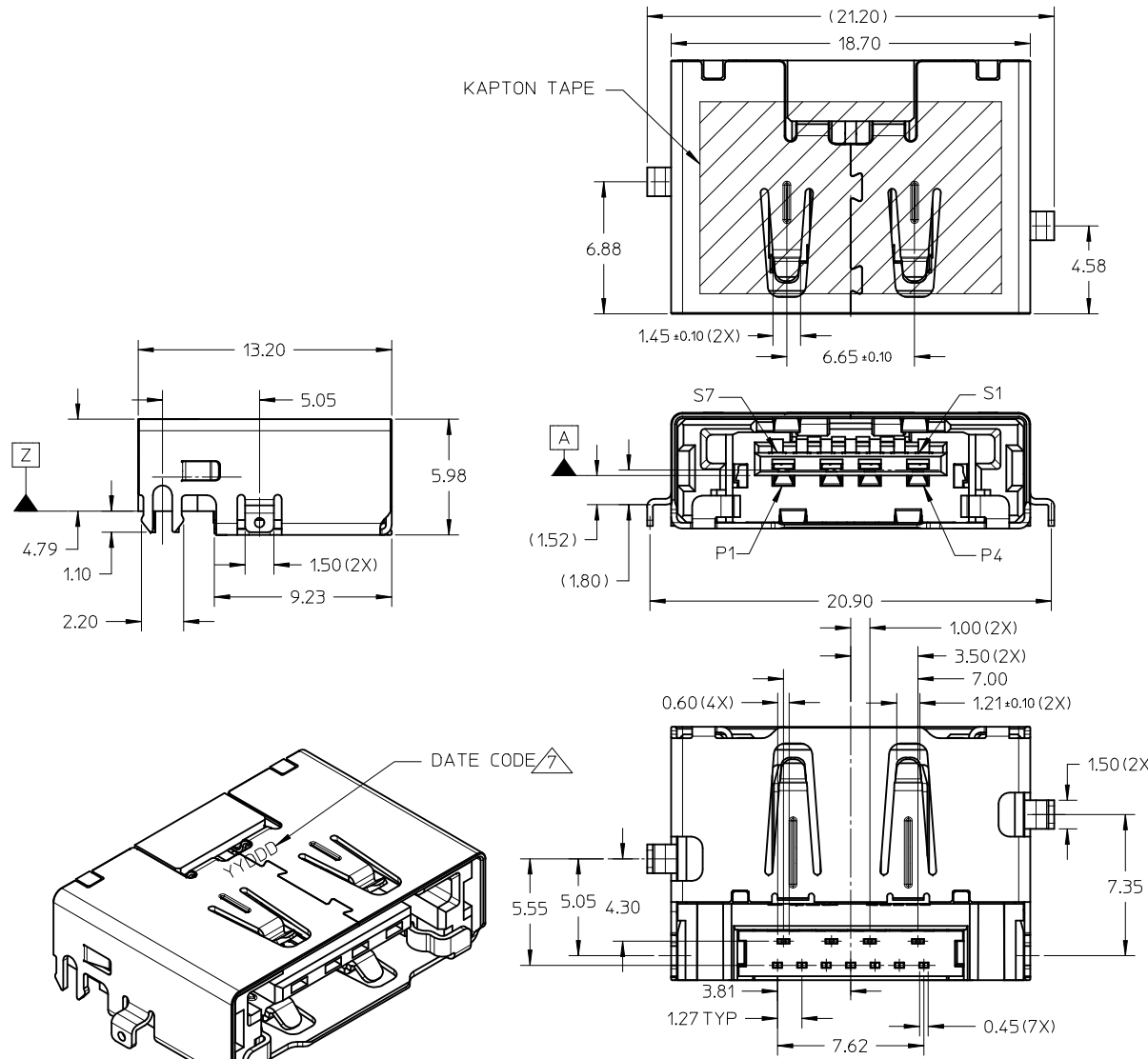
Current - Maximum per Contact	1.5A
Grounding to Panel	Yes
Shield Type	Full Shield
Shielded	Yes
Voltage - Maximum	15V DC

**Material Info****Reference - Drawing Numbers**

Product Specification	PS-78560-001
Sales Drawing	SD-78560-001

This document was generated on 05/20/2010

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NOTES:  
 1. MATERIAL:  
 HOUSING: HIGH TEMPERATURE THERMOPLASTIC, GLASS FILLED, BLACK, UL94V-0.  
 BASEPLATE: HIGH TEMPERATURE THERMOPLASTIC, GLASS FILLED, BLACK, UL94V-0.  
 TERMINAL: COPPER ALLOY.  
 METAL SHELL: STAINLESS STEEL.  
 2. PLATING FINISHES  
 TERMINAL: SEE TABLE  
 METAL SHELL PLATING: 127µm MIN SOLDERABLE NICKEL PLATING.  
 3. PRODUCT SPECIFICATION: PS-78560-001  
 4. PACKAGE SPECIFICATION: PK-78560-001  
 5. MATES WITH TYPICAL ESATA AND USB COMPLIANT CABLES  
 6. PRODUCT COMPLIANT TO Rohs DIRECTIVE 2002/95/EC AND ELV DIRECTIVE 2000/53/EC.  
 △ DATE CODE: YYDD, 'YY' REPRESENTS YEAR, 'DDD' REPRESENTS DAY.

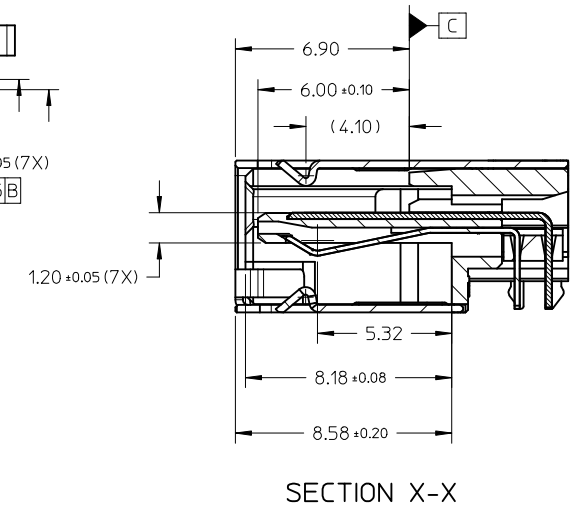
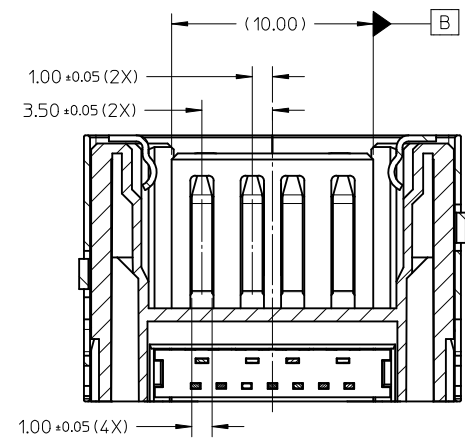
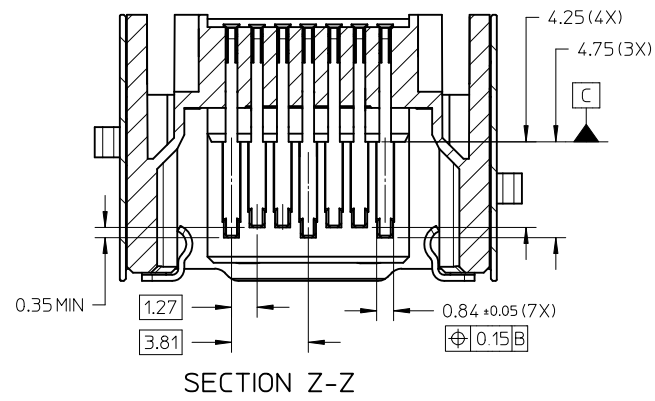
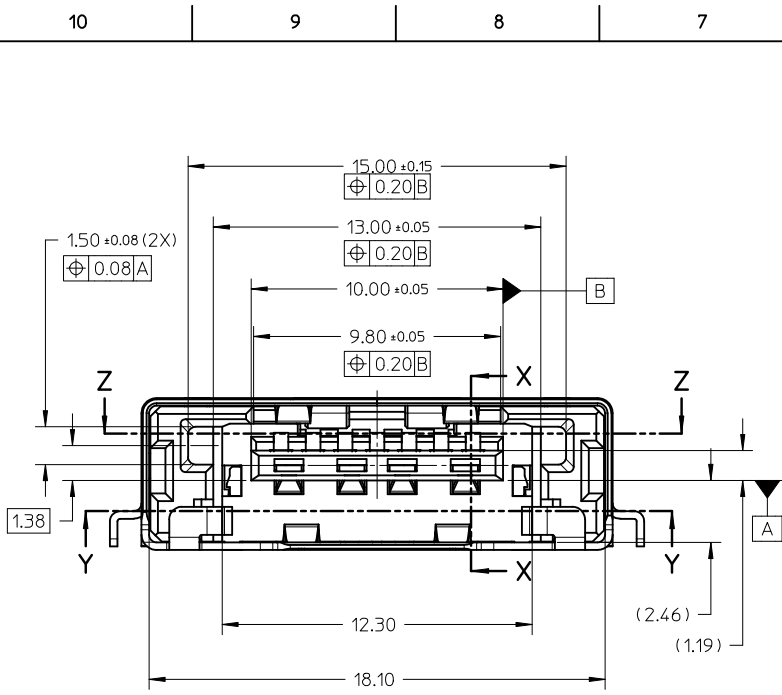
PIN ASSIGNMENT

USB		ESATA	
NAME	TYPE	NAME	TYPE
P1	VBUS	S1	GND
P2	D-	S2	A+
P3	D+	S3	A-
P4	GND	S4	GND
		S5	B-
		S6	B+
		S7	GND

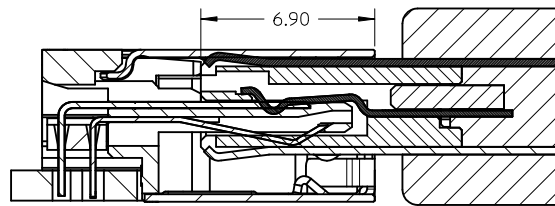
PLATING SPECIFICATION

PART NAME	CONTACT MATING AREA	SOLDERTAIL AREA
78560-0001	GOLD (0.76µm MIN.)	TIN (2.54µm MIN.)
	OVER NICKEL (1.27µm MIN.) PLATING	
78560-0002	GOLD (0.38µm MIN.)	TIN (2.54µm MIN.)
	OVER NICKEL (1.27µm MIN.) PLATING	

ADD DATE CODE EC NO: S2010-0875 DRW:KHLIM CHKD:CGOH APPR:BOKOK	2010/04/19 2010/04/29 2010/05/03	DESCRIPTION F <sub>A</sub> =0 F <sub>C</sub> =0 F <sub>P</sub> =0	QUALITY SYMBOLS		GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
			4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.25 ± --- 1 PLACE ± --- ± ---		mm INCH	DRAWN BY KHLIM	DATE 2009/10/09	TITLE ESATA AND USB COMBO TOP MOUNT/ SINK TYPE 1.80MM HEIGHT						
			ANGULAR ± 3 °		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		CHECKED BY CGOH	DATE 2009/12/01	MOLEX INCORPORATED					
			A3		REV	SEE TABLE		APPROVED BY BOKOK	DATE 2010/04/30	MATERIAL NO.	DOCUMENT NO. SD-78560-001	SHEET NO. 1 OF 4		

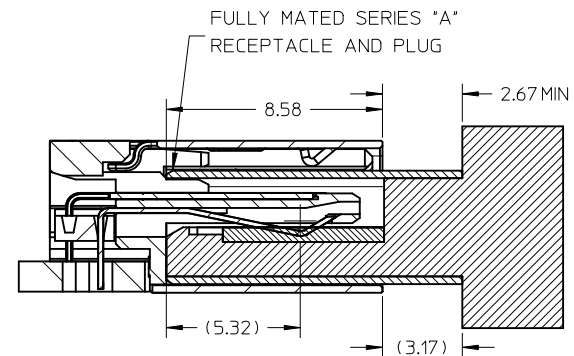


ADD DATE CODE EC NO: S2010-0875 DRW:KHLIM CHKD:CGOH APPR:BOKOK	DESCRIPTION 2010/04/19 2010/04/29 2010/05/03	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION			
		$\nabla_A = 0$ $\nabla_C = 0$ $\nabla_B = 0$	mm	INCH	MM ONLY		NTS	METRIC				
			4 PLACES	± ---	± ---	DRAWN BY	DATE	TITLE				
			3 PLACES	± ---	± ---	KHLIM	2009/10/09	ESATA AND USB COMBO TOP MOUNT/ SINK TYPE 1.80MM HEIGHT				
	2 PLACES	± 0.25	± ---	CHECKED BY	DATE	MOLEX INCORPORATED						
	1 PLACE	± ---	± ---	CGOH	2009/12/01	MATERIAL NO. DOCUMENT NO. SHEET NO.						
				APPROVED BY	DATE	SD-78560-001 2 OF 4						
				BOKOK	2010/04/30	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						
						SEE TABLE						
						SIZE A3						
						DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS						



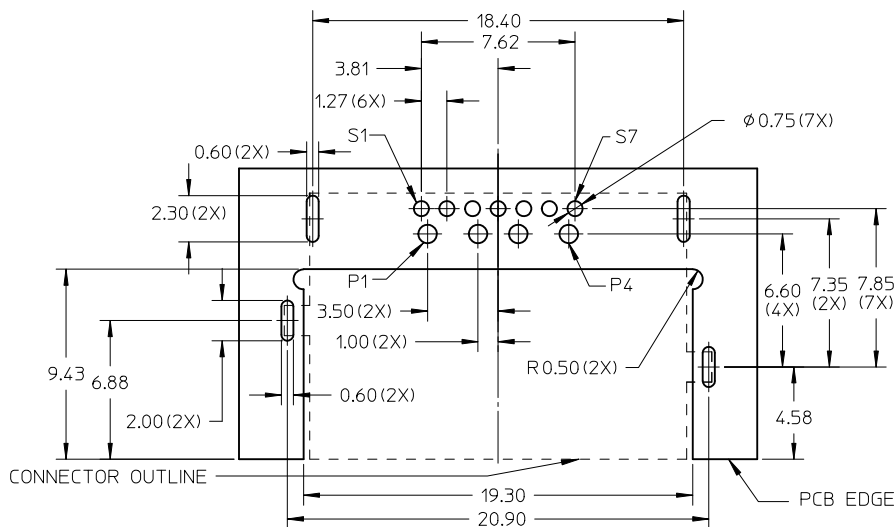
MATING WITH ESATA CABLE

SECTION W-W



MATING WITH USB CABLE

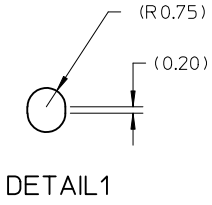
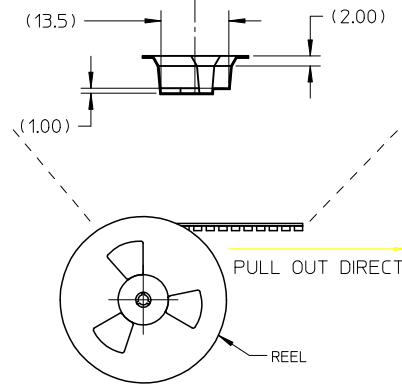
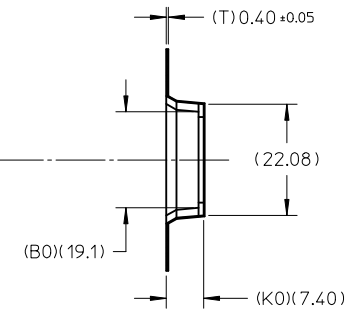
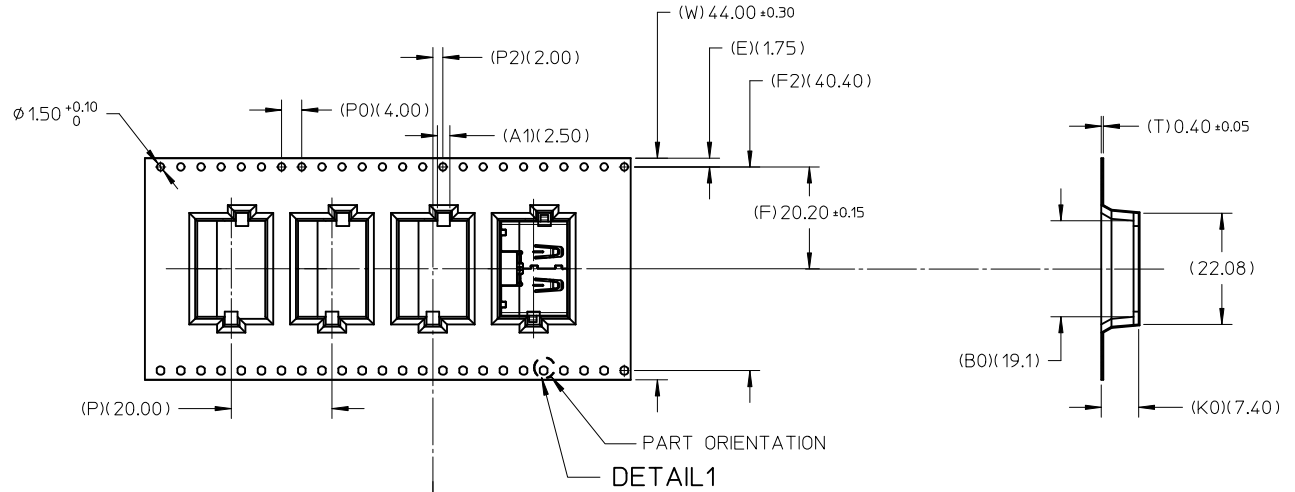
SECTION U-U



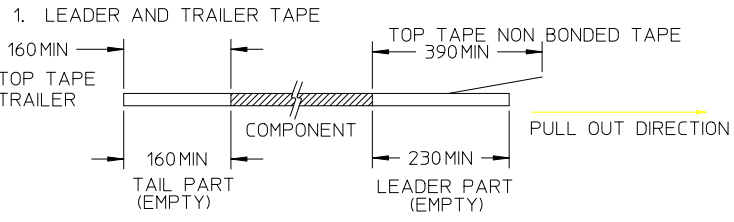
RECOMMEND PCB LAYOUT T=1.20  
PCB TOLERANCE : ±0.05

<b>ADD DATE CODE</b> EC NO: S2010-0875 DRW:KHLIM CHKD:CGOH APPR:BOKOK	<b>REV</b> 2010/04/19 2010/04/29 2010/05/03	<b>DESCRIPTION</b> F <sub>A</sub> =0 F <sub>C</sub> =0 F <sub>P</sub> =0	<b>QUALITY SYMBOLS</b>		<b>GENERAL TOLERANCES (UNLESS SPECIFIED)</b>		<b>DIMENSION STYLE</b> MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
					DRAWN BY KHLIM	DATE 2009/10/09	TITLE ESATA AND USB COMBO TOP MOUNT/ SINK TYPE 1.80MM HEIGHT					
					CHECKED BY CGOH	DATE 2009/12/01	APPROVED BY BOKOK		DATE 2010/04/30	MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-78560-001	SHEET NO. 3 OF 4
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		ANGULAR ± 3 °		SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

CUSTOMER PULLOUT DIRECTION



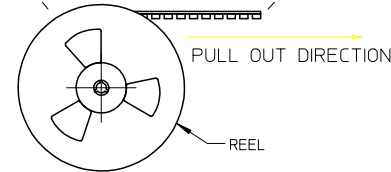
NOTES:



2. PEELING OFF FORCE OF THE TOP TAPE: 10-130gf MAX.  
(PEELING DIRECTION AS SHOWN IN FOLLOWING FIGURE)



- 3. PACKAGING QTY: 400 PCS/REEL
- 4. PACKAGING STANDARD IS AS PER EIA-481.
- 5. MATERIAL: POLYSTYRENE. ANTISTATIC.
- 6. COLOR: BLACK



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		$F_A=0$ $F_C=0$ $F_P=0$	mm    INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.25 ± --- 1 PLACE ± --- ± --- ANGULAR ± 3 °	MM ONLY	NTS	METRIC	
			DRAWN BY: KHLIM    DATE: 2009/10/09 CHECKED BY: CGOH    DATE: 2009/12/01 APPROVED BY: BOKOK    DATE: 2010/04/30	TITLE	ESATA AND USB COMBO TOP MOUNT/ SINK TYPE 1.80MM HEIGHT		
		MATERIAL NO.    DOCUMENT NO.    SHEET NO. SEE TABLE    SD-78560-001    4 OF 4	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				