

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0878390018](#)
Status: **Active**
Description: 1.27mm (.050") Signal Pitch, 0.80mm (.031") SCSI Pitch, 1.27mm (.050") Power Pitch SAS Receptacle, Vertical, Hybrid, with Straight Solder Tab, 2.36mm (.093") PCB Thickness, Embossed Tape Packaging, with Cap, 29 Circuits, Lead free

Documents:

[3D Model](#) [Product Specification PS-87839-041 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

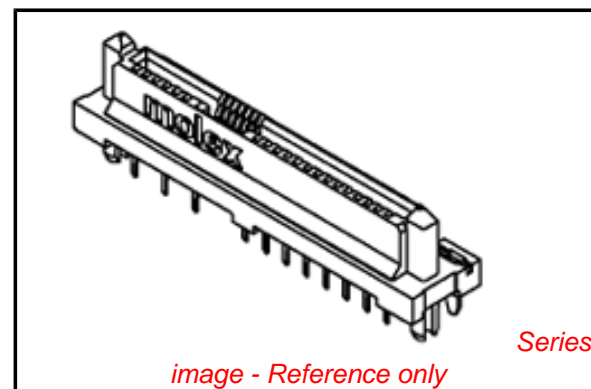
CSA LR19980
 UL E29179

General

Product Family I/O Connectors
 Series [87839](#)
 Application Board-to-Board
 Comments With pick and place cap
 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, Tin
 Material - Plating Termination Tin
 Material - Resin High Temperature Thermoplastic
 Number of Rows 2
 Orientation Vertical
 PC Tail Length (in) 0.093 In
 PC Tail Length (mm) 2.36 mm
 PCB Locator Yes
 PCB Retention Yes
 PCB Thickness Recommended (in) 0.093 In
 PCB Thickness Recommended (mm) 2.36 mm
 Packaging Type Embossed Tape on Reel
 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



EU RoHS

ELV and RoHS Compliant

REACH SVHC

Not Reviewed

Halogen-Free

Status

Not Halogen-Free

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.

China RoHS



Search Parts in this Series

[87839Series](#)

Mates With

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

Polarized to Mating Part	Yes
Polarized to PCB	Yes
Surface Mount Compatible (SMC)	Yes
Temperature Range - Operating	0°C to +55°C
Termination Interface: Style	Surface Mount, Through Hole
Waterproof / Dustproof	No
Wire Size AWG	N/A

Electrical

Current - Maximum per Contact	1.5A
Shielded	No
Voltage - Maximum	30V

Solder Process Data

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

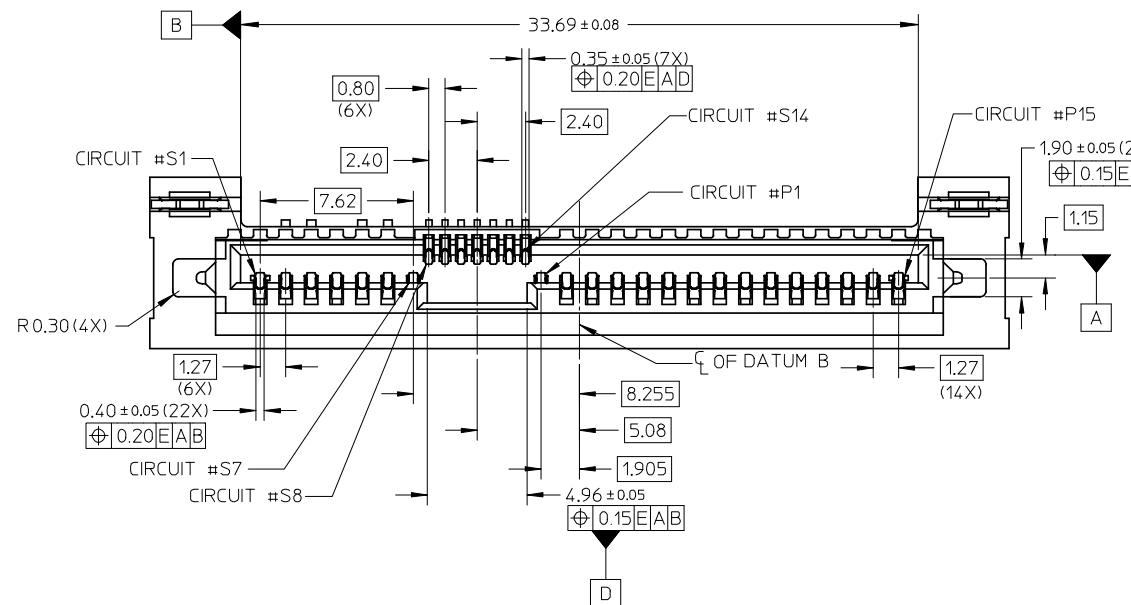
Material Info

Reference - Drawing Numbers

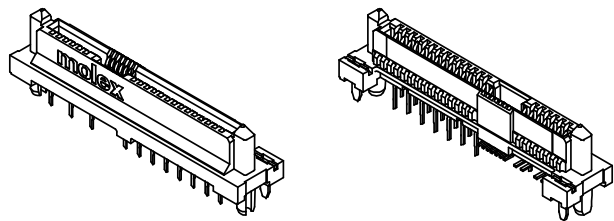
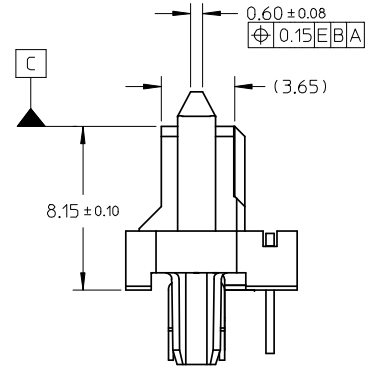
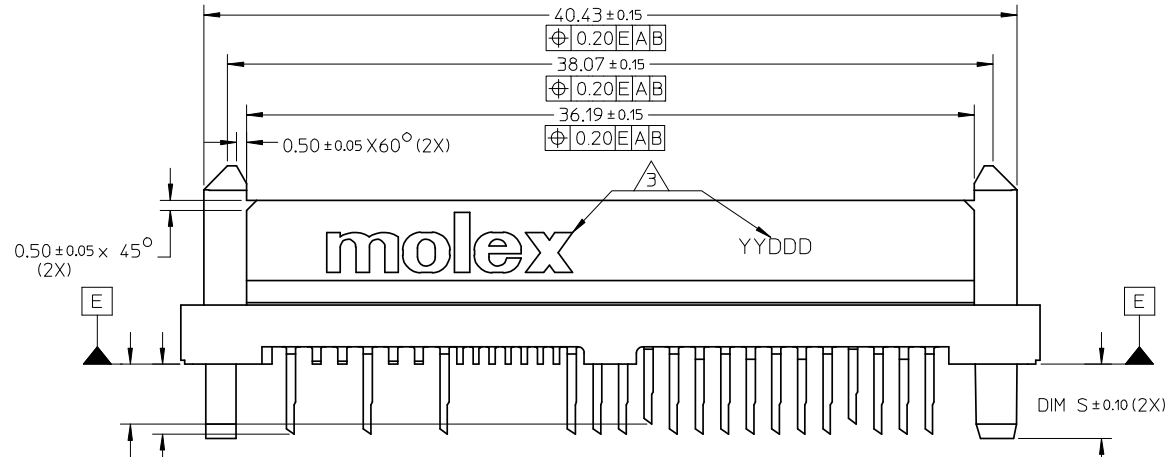
Product Specification	PS-87839-041
Sales Drawing	SD-87839-040

This document was generated on 04/09/2010

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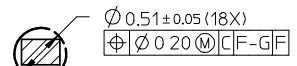
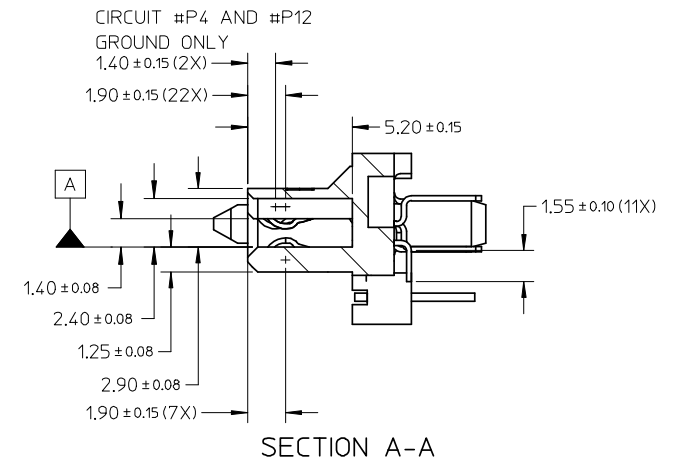
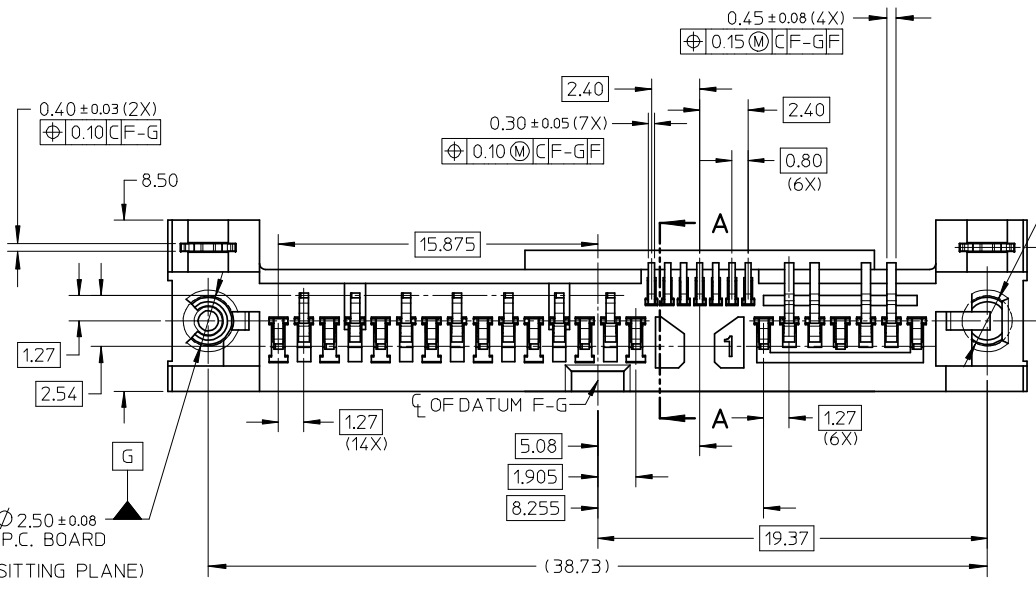
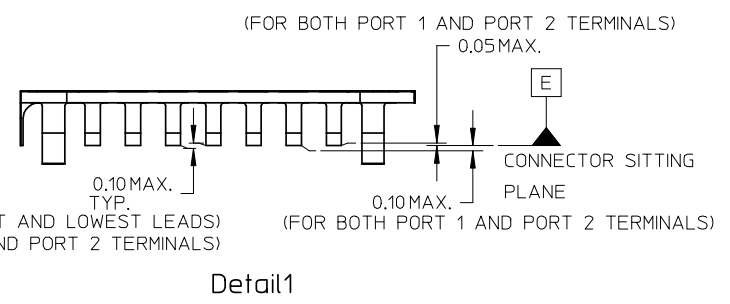
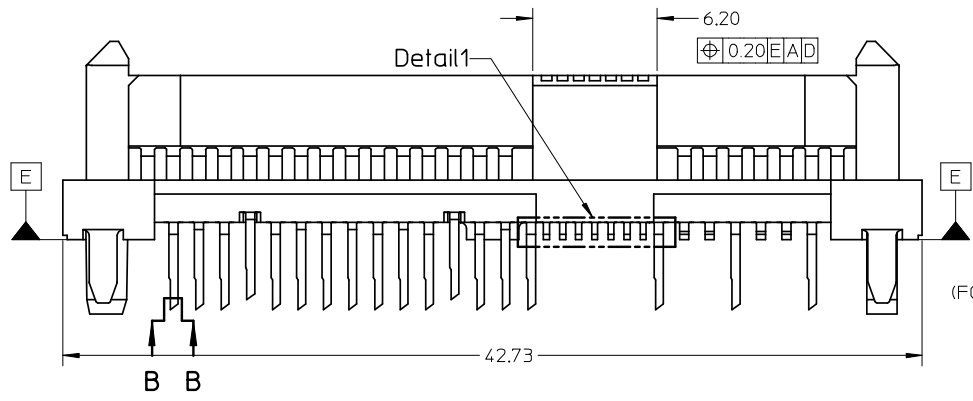


- NOTES:
- MATERIAL: LIQUID CRYSTALLINE POLYMER (LCP), GLASS FILLED, UL 94V-0, COLOR: BLACK
TERMINAL: COPPER ALLOY
 - PLATING:
CONTACT: 0.76µm MIN. SELECTIVE GOLD OVER 1.27µm MIN. NICKEL UNDERPLATE.
SOLDERTAIL: 2.54µm MIN. TIN OVER 1.27 µm MIN. NICKEL UNDERPLATE.
 - MOLEX LOGO AND DATE CODE LOCATED APPROXIMATELY AS SHOWN.
 - PACKAGING: SEE TABLE
 - PRODUCT IS COMPLIANT TO RoHS DIRECTIVE WITH THE FOLLOWING BANNED SUBSTANCES - LEAD, MERCURY, CADMIUM, HEXAVALENT CHROMIUM, POLYBROMINATED BIPHENYLS AND POLYBROMINATED DIPHENYL ETHERS.
 - PRODUCT SPECIFICATION PS-87839-041 APPLIES.
 - MATES WITH: SFF-8482 PLUG
SATA PLUG SERIES: 87679, 87703, 87799



UPDATE DRAWING EC NO: S2008-0663 2008/02/14 DRW:KHLIM 2008/02/15 CHK:CGOH 2008/02/18 APPR:KCLING	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.20 ± --- 1 PLACE ± --- ± --- ANGULAR ± 3°	mm INCH DRAWN BY DATE DKOH 2004/11/23 CHECKED BY DATE KCLING 2004/12/01 APPROVED BY DATE SKTOH 2004/12/01 MATERIAL NO.	TITLE SERIAL ATTACH SCSI RECEPTACLE, HYBRID STANDARD HEIGHT		MOLEX INCORPORATED		DOCUMENT NO. SD-87839-040	
A6	REV	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

10 9 8 7 6 5 4 3 2 1



SECTION B-B

UPDATE DRAWING	2008/02/14	2008/02/15	2008/02/18
EC NO: S2008-0663	DRW:KHLIM	CHK:CGOH	APP:KCLING
DESCRIPTION	REV	REV	REV
A6			

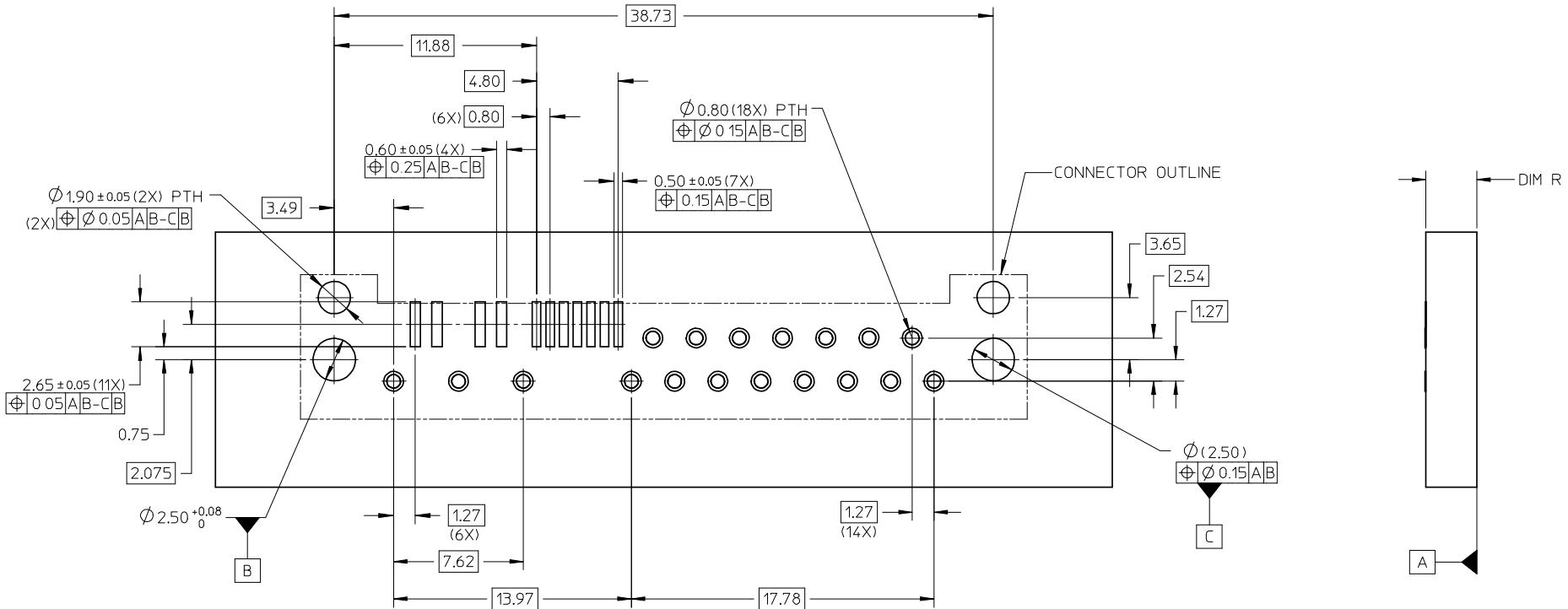
QUALITY SYMBOLS	$\blacktriangledown = 0$	
	$\nabla = 0$	
	ANGULAR $\pm 3^\circ$	
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	
	SIZE	A3

GENERAL TOLERANCES (UNLESS SPECIFIED)	
mm	INCH
4 PLACES	$\pm \text{---}$
3 PLACES	$\pm \text{---}$
2 PLACES	± 0.20
1 PLACE	$\pm \text{---}$
DRAWN BY: DKOH	
DATE: 2004/11/23	
CHECKED BY: KCLING	
DATE: 2004/12/01	
APPROVED BY: SKTOH	
DATE: 2004/12/01	
MATERIAL NO. SEE TABLE	

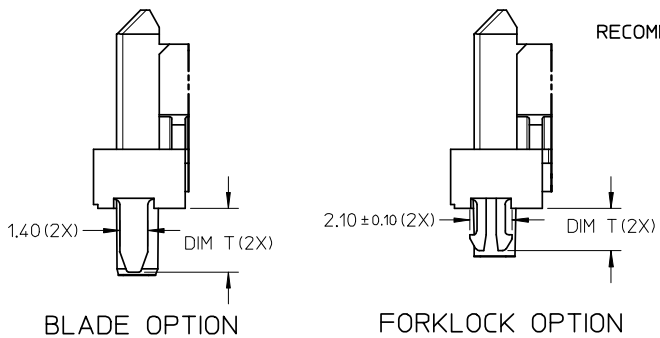
DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
MM ONLY	NTS	METRIC	
TITLE: SERIAL ATTACH SCSI RECEPTACLE, HYBRID STANDARD HEIGHT			
MOLEX INCORPORATED			SHEET NO. 2 OF 4
DOCUMENT NO. SD-87839-040			
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

9 8 7 6 5 4 3 2 1

10	9	8	7	6	5	4	3	2	1
PART NO	PACKAGING	QUANTITY	HOLD DOWN	PICK AND PLACE CAP	DIM P (16X) (PORT 1 AND POWER PORT) (EXCLUDING P4 AND P12)	DIM Q (2X) (PORT P4 AND P12)	DIM R PCB THICKNESS	DIM S (2X) PEG HEIGHT	DIM T (2X) BLADE/FORKLOCK HEIGHT
87839-0011	TRAY	50/TRAY	BLADE	YES	3.49±0.15	2.99±0.15	3.00±0.10	3.70±0.10	3.12
87839-0019	TRAY	30/TRAY	BLADE	NO	3.49±0.15	2.99±0.15	3.00±0.10	3.70±0.10	3.12
87839-0017	TAPE AND REEL	350/REEL	BLADE	YES	3.49±0.15	2.99±0.15	3.00±0.10	3.70±0.10	3.12
87839-0018	TAPE AND REEL	350/REEL	BLADE	YES	2.36±0.15	2.36±0.15	2.36±0.10	2.00±0.10	2.36
87839-0039	TAPE AND REEL	350/REEL	FORKLOCK	YES	2.11±0.15	2.11±0.15	2.36±0.10	2.00±0.10	2.06

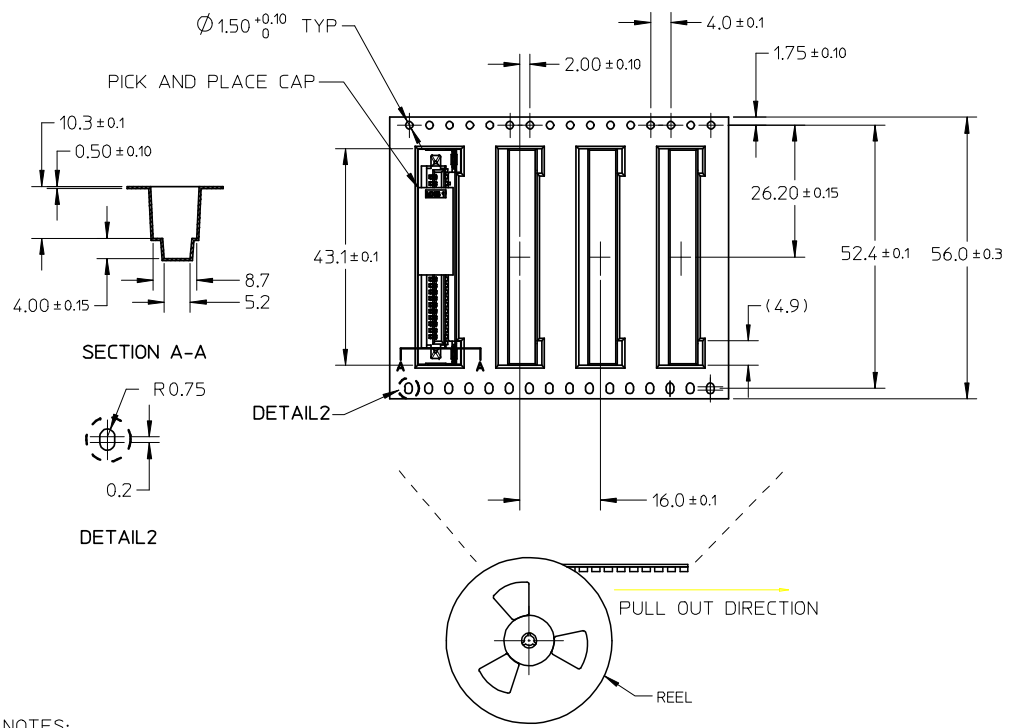


RECOMMENDED PCB LAYOUT
RECOMMENDED PCB THICKNESS DIM R±0.10



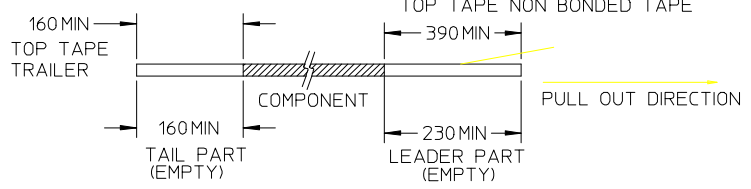
UPDATE DRAWING EC NO: S2008-0663 DRW:KHLIM 2008/02/14 CHKD:CGOH 2008/02/15 APPR:KCLING 2008/02/18	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
		4 PLACES ± --- ± ---	3 PLACES ± --- ± ---	2 PLACES ± 0.20 ± ---	1 PLACE ± --- ± ---	ANGULAR ± 3 °	DRAWN BY DKOH	DATE 2004/11/23	TITLE SERIAL ATTACH SCSI RECEPTACLE, HYBRID STANDARD HEIGHT		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		APPROVED BY SKTOH		DATE 2004/12/01	MOLEX INCORPORATED		
		SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							

TAPE AND REEL PACKAGING

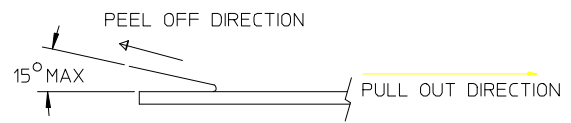


NOTES:

1. LEADER AND TRAILER TAPE



2. PEELING OFF FORCE OF THE TOP TAPE: 80gf MAX.
(PEELING DIRECTION AS SHOWN IN FOLLOWING FIGURE)

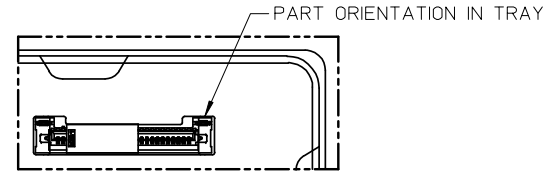
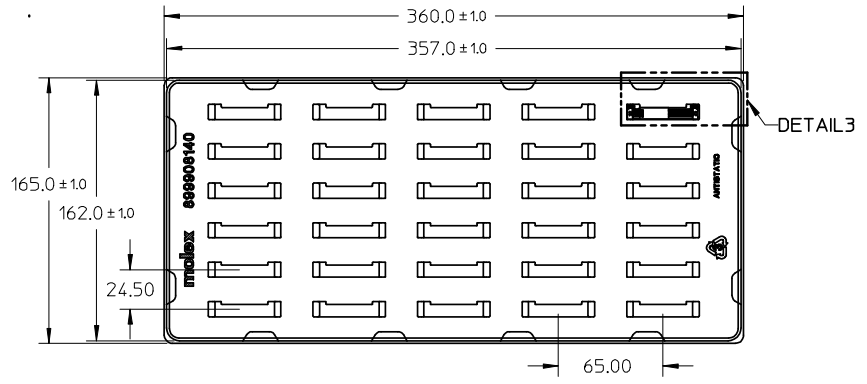


3. PACKAGING QTY IS: 350 PCS/REEL

4. PACKAING STANDARD IS AS PER EIA-481.

5. CONNECTOR COMES WITH PICK AND PLACE CAP.

TRAY PACKAGING



DETAIL3

NOTES:

- 1. PACKAGING QTY: 30PCS/TRAY
- 2. NO PICK AND PLACE CAP

UPDATE DRAWING EC NO: S2008-0663 DRW:KHLIM CHK:D:GGH APPR:KCLING 2008/02/14 2008/02/15 2008/02/18	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY DKOH	DATE 2004/11/23	TITLE SERIAL ATTACH SCSI RECEPTACLE, HYBRID STANDARD HEIGHT			
		4 PLACES	± ---	± ---	CHECKED BY KCLING	DATE 2004/12/01	MOLEX INCORPORATED SD-87839-040			
		3 PLACES	± ---	± ---	APPROVED BY SKTOH	DATE 2004/12/01				
2 PLACES	± 0.20	± ---	MATERIAL NO. SEE TABLE		DOCUMENT NO.	SHEET NO. 4 OF 4				
1 PLACE	± ---	± ---	ANGULAR ± 3 °		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					