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Part Number: **0781590001**
Status: **Active**
Description: 1.27mm (.050") Pitch iVDR* Receptacle, Mating Height 4.60mm (.181"), Gold (Au) Flash, SMT, Right Angle, Top Mount Type, 26 Circuits, Lead Free

Documents:

[3D Model](#) [Product Specification PS-78159-001 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

CSA LR19980
 UL E29179

General

Product Family PCB Receptacles
 Series [78159](#)
 Application Board-to-Board
 Product Name iVDR, Serial ATA

Physical

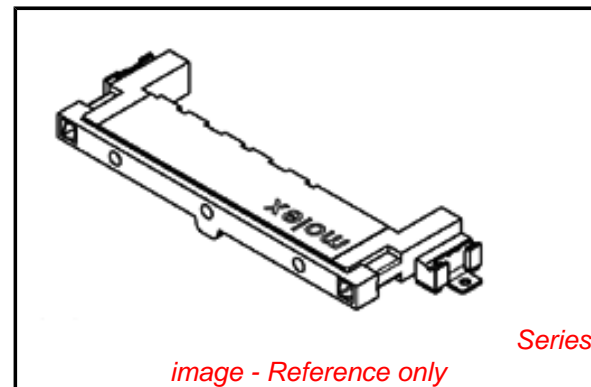
Circuits (Loaded) 26
 Circuits (maximum) 26
 Color - Resin Black
 Durability (mating cycles max) 10,000
 Flammability 94V-0
 Glow-Wire Compliant No
 Guide to Mating Part Yes
 Lock to Mating Part None
 Material - Metal Copper Alloy
 Material - Plating Mating Gold
 Material - Plating Termination Tin
 Number of Rows 1
 Orientation Right Angle
 PCB Locator Yes
 PCB Retention Yes
 Packaging Type Embossed Tape on Reel
 Pitch - Mating Interface (in) 0.050 In
 Pitch - Mating Interface (mm) 1.27 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 PCB Yes
 Temperature Range - Operating 0°C to +55°C
 Termination Interface: Style Surface Mount

Electrical

Current - Maximum per Contact 0.5A
 Grounding to PCB Yes
 Voltage - Maximum 30V

Solder Process Data

Duration at Max. Process Temperature (seconds) 40
 Lead-free Process Capability Reflow Capable (SMT only)
 Max. Cycles at Max. Process Temperature 1
 Process Temperature max. C 260



EU RoHS

ELV and RoHS Compliant
REACH SVHC Contains SVHC: No
Halogen-Free Status

China RoHS



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.

Search Parts in this Series

[78159Series](#)

Material Info

Reference - Drawing Numbers

Product Specification

PS-78159-001

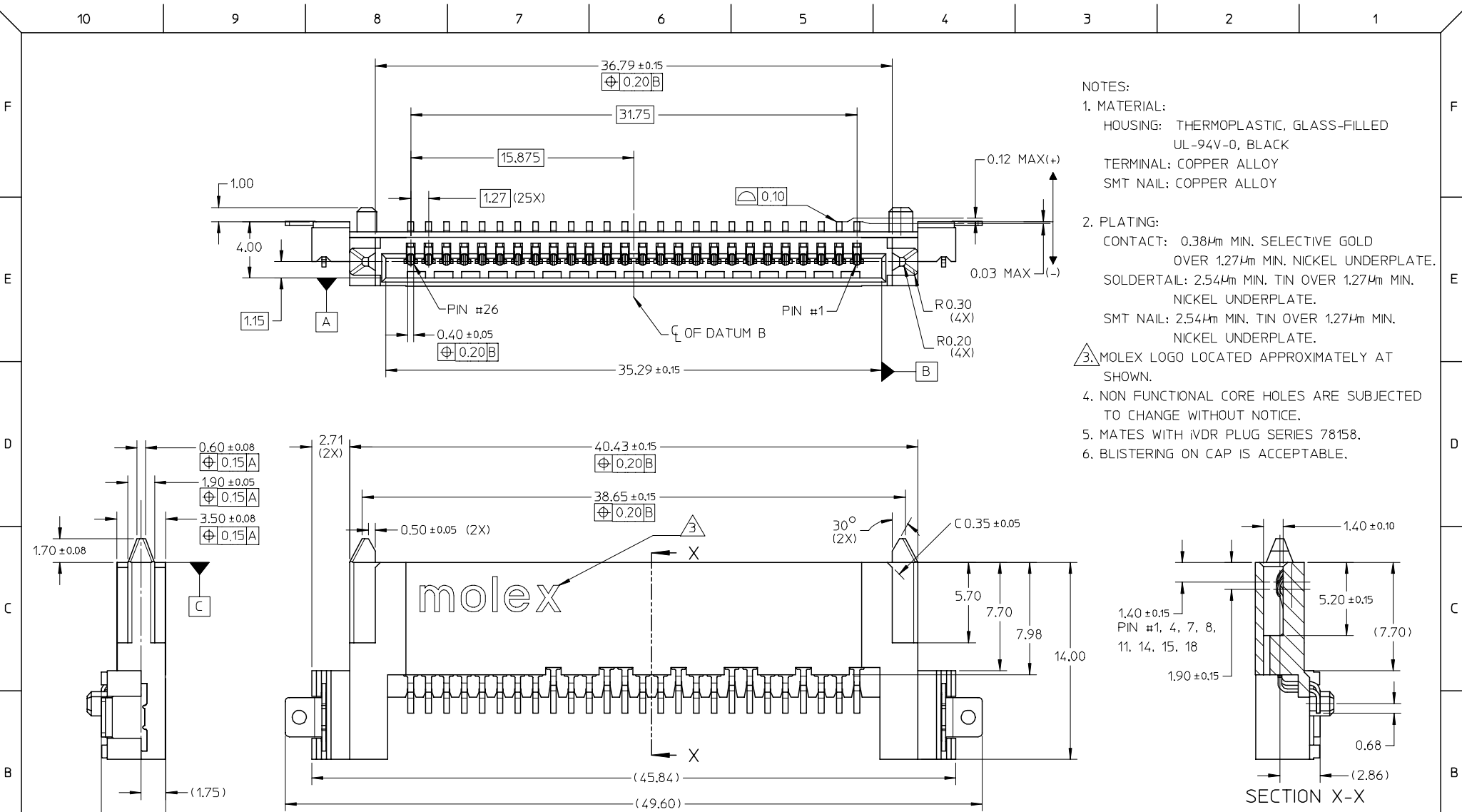
Sales Drawing

SD-78159-001

*iVDR (Information Versatile Disk for Removable usage) is a trademark of iVDR Hard Disk Drive Consortium .

This document was generated on 05/20/2010

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- NOTES:
- MATERIAL:
HOUSING: THERMOPLASTIC, GLASS-FILLED UL-94V-0, BLACK
TERMINAL: COPPER ALLOY
SMT NAIL: COPPER ALLOY
 - PLATING:
CONTACT: 0.38µm MIN. SELECTIVE GOLD OVER 1.27µm MIN. NICKEL UNDERPLATE.
SOLDERTAIL: 2.54µm MIN. TIN OVER 1.27µm MIN. NICKEL UNDERPLATE.
SMT NAIL: 2.54µm MIN. TIN OVER 1.27µm MIN. NICKEL UNDERPLATE.
 - MOLEX LOGO LOCATED APPROXIMATELY AT SHOWN.
 - NON FUNCTIONAL CORE HOLES ARE SUBJECTED TO CHANGE WITHOUT NOTICE.
 - MATES WITH IVDR PLUG SERIES 78158.
 - BLISTERING ON CAP IS ACCEPTABLE.

RELEASE EC NO: S2008-0173 DRWNS: SCHEONG 2007/09/21 CHKD: CGOH 2007/09/25 APPR: KCL ING 2007/09/25	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
						DRAWN BY SCHEONG		DATE 2007/08/31	
						CHECKED BY CGOH		DATE 2007/09/17	
						APPROVED BY KCL ING		DATE 2007/09/18	
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. 78159-0001		DOCUMENT NO. SD-78159-001		SHEET NO. 1 OF 4	

10 9 8 7 6 5 4 3 2 1

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E

D

C

B

A

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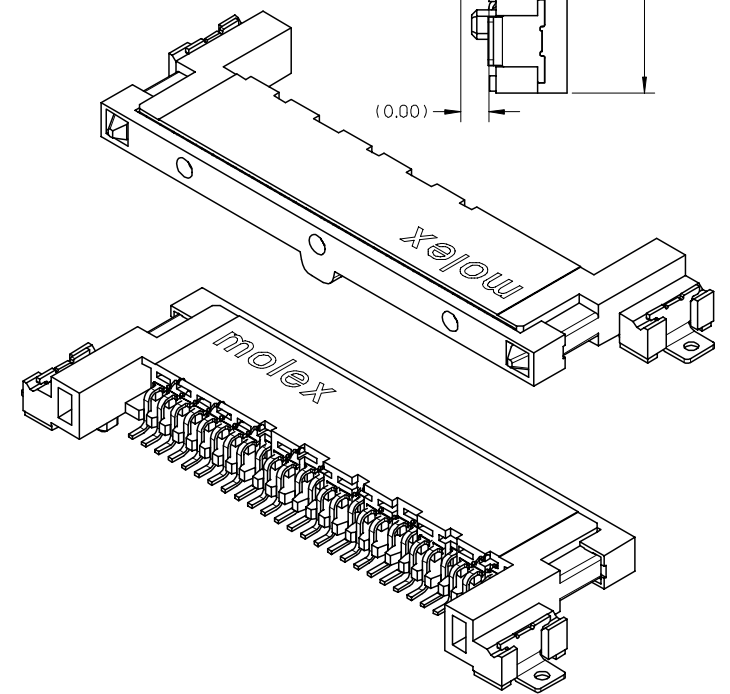
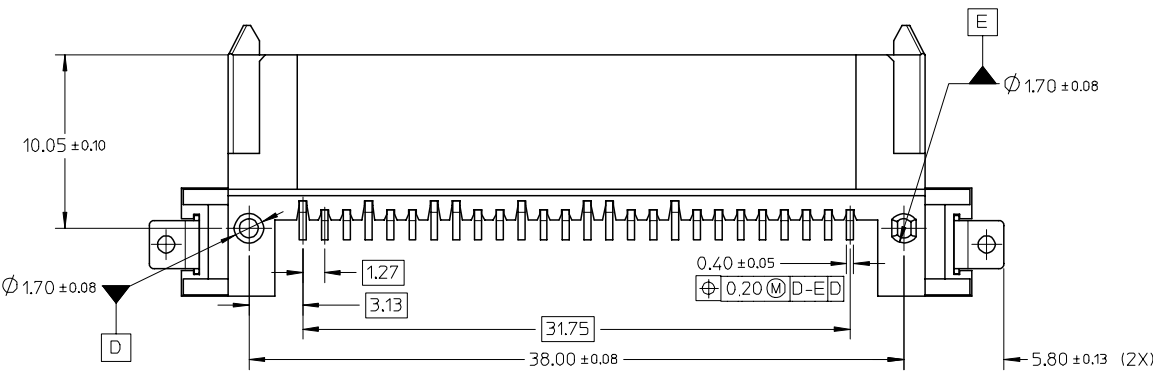
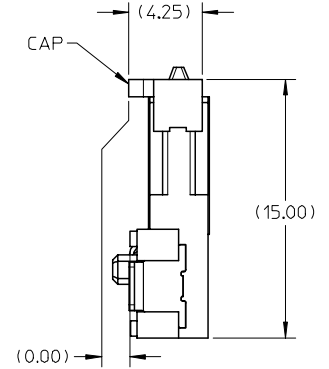
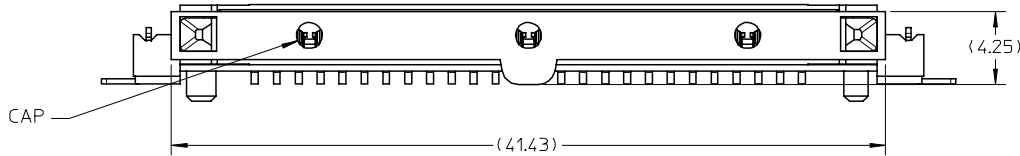
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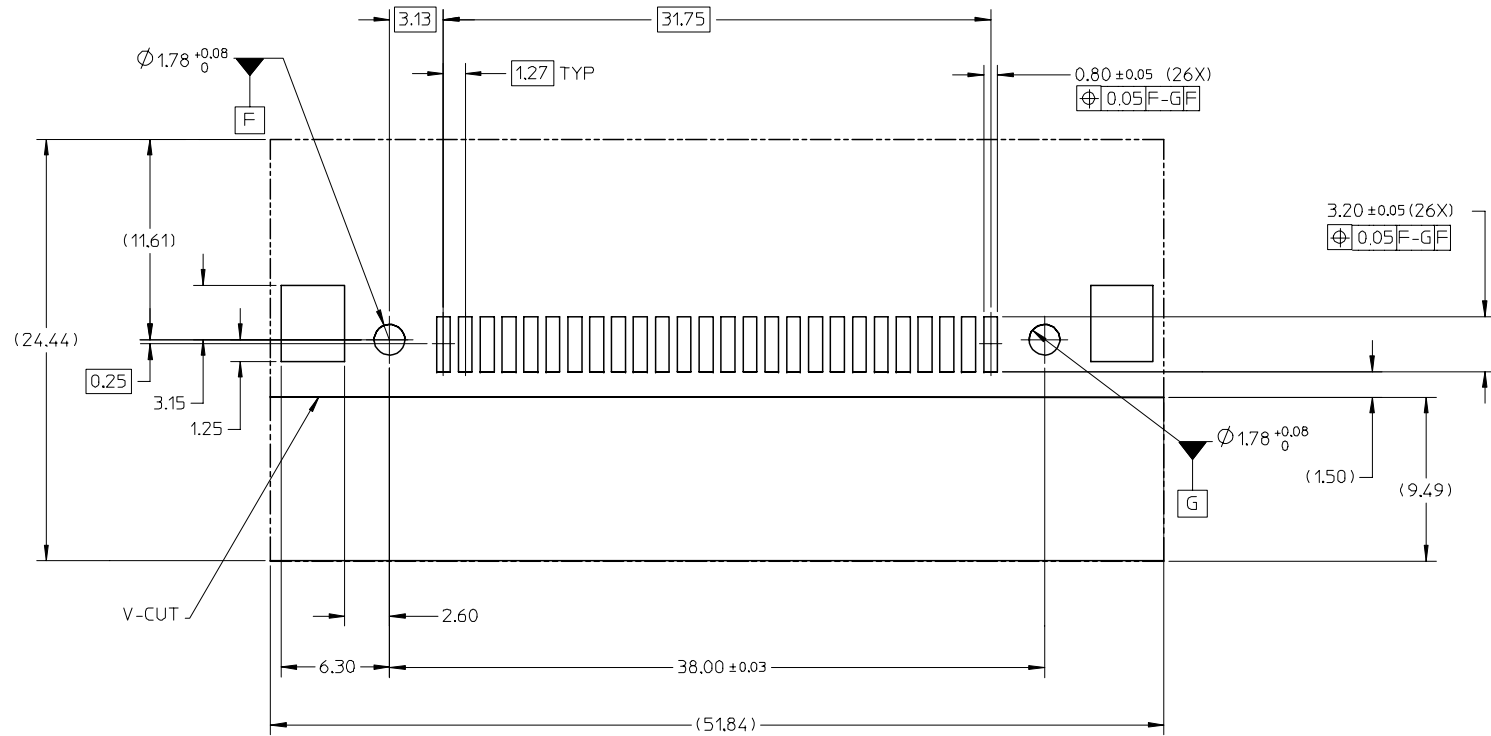
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RELEASE EC NO: S2008-0173 DRWNS: SCHEONG CHKD: CGOH APPR: KCLING	2007/09/21 2007/09/25 2007/09/25	DESCRIPTION A	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
			▼=0 ▽=0	mm INCH	MM ONLY	NTS	METRIC	
			4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.20 ± --- 1 PLACE ± --- ± ---	DRAWN BY DATE SCHEONG 2007/08/31 CHECKED BY DATE CGOH 2007/09/17 APPROVED BY DATE KCLING 2007/09/18	TITLE			
			ANGULAR ± 3 °	MATERIAL NO. 78159-0001	MOLEX INCORPORATED	DOCUMENT NO. SD-78159-001	SHEET NO. 2 OF 4	

9 8 7 6 5 4 3 2 1

SIZE A3 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

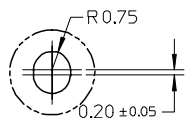


RECOMMENDED PCB THICKNESS: 1.60±0.10

RELEASE EC NO: S2008-0173 DRWNS: SCHEONG CHKD: CGOH APPR: KCLING	2007/09/21 2007/09/25 2007/09/25	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
				mm	INCH	DRAWN BY SCHEONG	DATE 2007/08/31	TITLE 1.27MM PITCH, 26 CKTS R/A, SMT IVDR RECEPTACLE				
			4 PLACES	± ---	± ---	CHECKED BY CGOH	DATE 2007/09/17	MOLEX INCORPORATED				
			3 PLACES	± ---	± ---	APPROVED BY KCLING	DATE 2007/09/18	DOCUMENT NO. SD-78159-001				
A	REV	DESCRIPTION	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. 78159-0001		SHEET NO. 3 OF 4		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

EMBOSSED CARRIER TAPE PACKAGING DETAILS

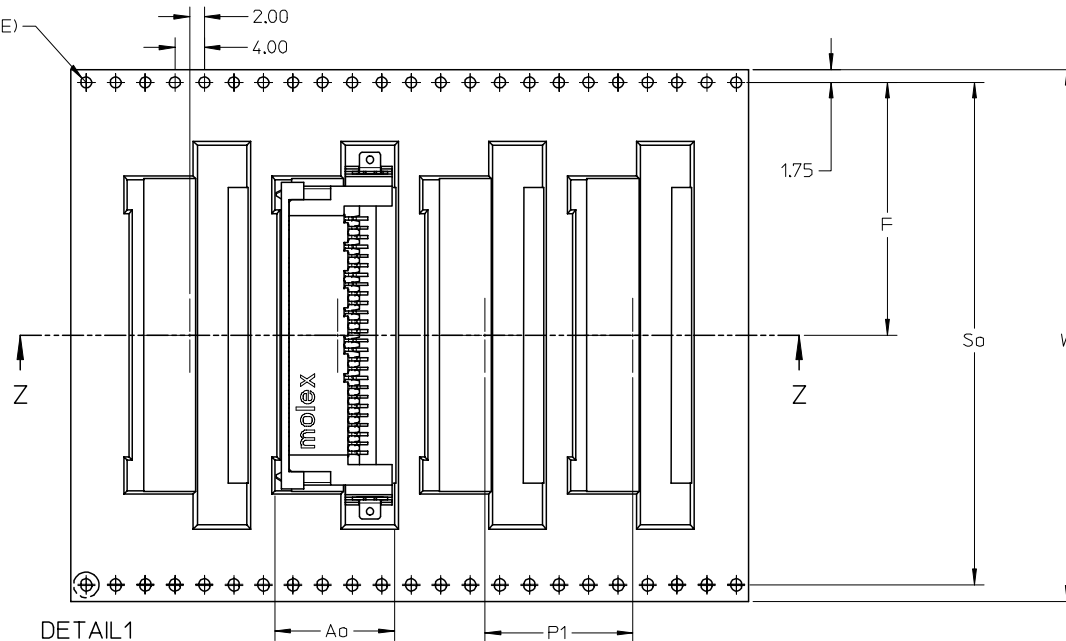
Ao	16.18±0.10
Bo	51.30±0.10
Ko	6.35±0.10
F	34.20±0.15
P1	20.00±0.10
So	68.40±0.10
W	72.00±0.30



DETAIL 1

∅ 1.50^{+0.10}₀ (PILOT HOLE)

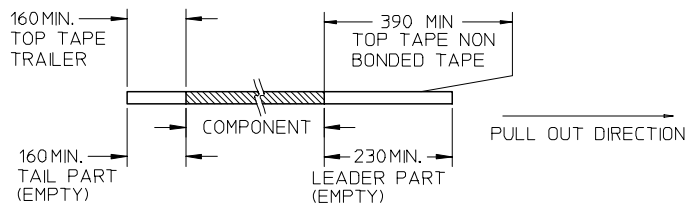
CUSTOMER PULL-OUT DIRECTION



DETAIL 1

NOTES:

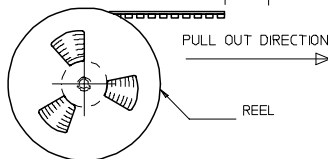
1. LEADER AND TRAILER TAPE



2. PEELING OFF FORCE OF THE TOP TAPE: 20 - 80gf.
(PEELING DIRECTION AS SHOWN IN FOLLOWING FIGURE)



- 3. TAPE AND REEL SPECIFICATION IS AS PER EIA-481.
- 4. TAPE AND REEL QUANTITY : 500 PCS/ REEL.
- 5. THE TAPE IS TREATED FOR ANTI-STATIC.



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	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						
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