

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0781641051](#)
Status: **Active**
Description: 1.27mm (.050") Pitch SAS Combo Device Plug, Vertical, SMT, Standard Height
7.88mm (.310"), with Solder Tab and Pick-and-Place Cap, 29 Circuits, Lead free

Documents:

3D Model	Product Specification PS-78012-002 (PDF)
Drawing (PDF)	RoHS Certificate of Compliance (PDF)

Agency Certification

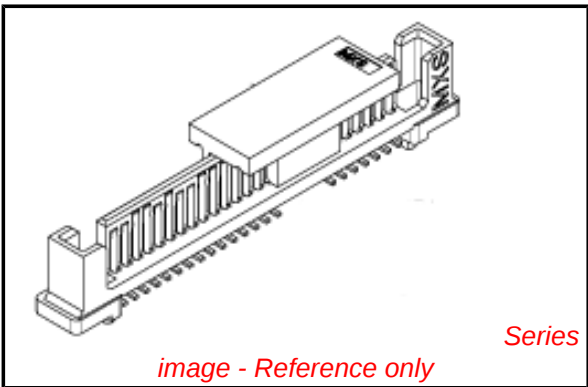
CSA	LR19980
UL	E29179

General

Product Family	I/O Connectors
Series	78164
Application	Wire-to-Board
Comments	With Cap
Component Type	Plug
Product Name	SAS
Type	N/A

Physical

Boot Color	N/A
Circuits (Loaded)	29
Circuits (maximum)	29
Color - Resin	Black
Durability (mating cycles max)	500
Flammability	94V-0
Gender	Plug
Lock to Mating Part	None
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Number of Rows	1
Orientation	Vertical
PC Tail Length (in)	0.000 In
PC Tail Length (mm)	0.00 mm
PCB Locator	Yes
PCB Retention	Yes
PCB Thickness Recommended (in)	0.000 In
PCB Thickness Recommended (mm)	0.00 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
Polarized to Mating Part	Yes
Polarized to PCB	Yes
Ports	2
Surface Mount Compatible (SMC)	Yes
Temperature Range - Operating	-40°C to +85°C
Termination Interface: Style	Surface Mount
Waterproof / Dustproof	No
Wire Size AWG	N/A



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
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

[78164Series](#)

Mates With

[78011](#) SAS/SATA Receptacle; and [87824](#),
[87839](#), [87863](#), [87970](#), [87945](#), [87975](#) SAS
Receptacles

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-78012-002
Sales Drawing	SD-78164-100

This document was generated on 04/02/2010

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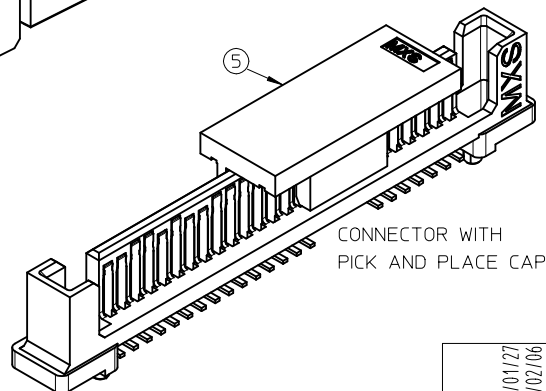
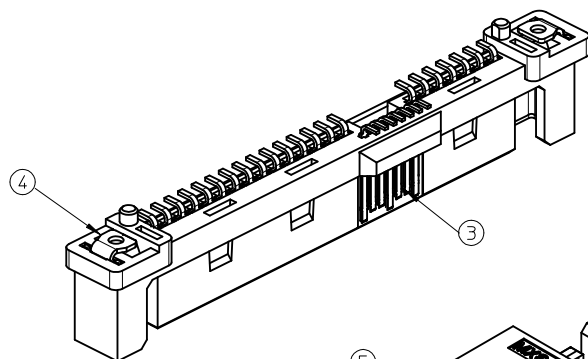
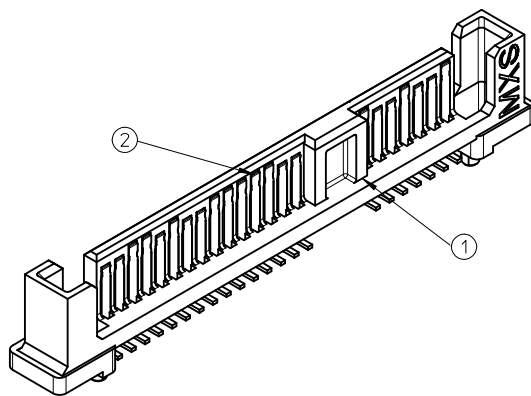
NO.	PART NAME	QTY.	MATERIAL
1	HOUSING	1	NYLON(PA), UL 94V-0, COLOR: BLACK
2	CONTACT A	22	COPPER ALLOY
3	CONTACT B	7	COPPER ALLOY
4	FITTING-NAIL	2	COPPER ALLOY
5	PICK & PLACE CAP	1	PA46, UL 94V-0, COLOR: BLACK

NOTES:

1. MATERIAL: REFER TO THE ABOVE PART-LIST.
2. PLATING SPECIFICATION: REFER TO TABLE-1.
3. APPLICABLE INDUSTRY SPECIFICATION :
SFF-8482 UNSHIELDED DUAL PORT SERIAL ATTACHMENT CONNECTOR.
4. PRODUCT SPECIFICATION: PS-78012-002.
5. PACKING: REFER TO PACKING INFORMATION (SHEET 5/5).
6. DATE CODE FORMAT: YEAR & DAY OF MANUFACTURE.
7. MOLEX LOGO IS LOCATED APPROXIMATELY AS SHOW.
8. MAXIMUM WARPAGE OF 0.13mm OVER THE LENGTH OF THE CONNECTOR
IN ANY DIRECTION BEFORE AND AFTER EXPOSURE TO MAX. 260°C
FOR 10 SECONDS.

TABLE-1: (CONTACT AND FITTING-NAIL PLATING SPECIFICATION)

PART NAME	MATING AREA	TERMINAL AREA	OTHERS AREA
CONTACT	GOLD (0.764μm MIN.)	TIN (1.914μm MIN.)	NICKEL PLATING
	OVER 1.274μm MIN. NICKEL UNDERPLATE		
FITTING-NAIL	TIN OVER NICKEL UNDERPLATE		



UPDATE VIEWS
EC NO: S2010-0638
DRWN:CGOH 2010/01/27
CHKD:JTAN02 2007/02/06
APPR:BOKOK 2010/02/02

DESCRIPTION
REV
QUALITY SYMBOLS
F_A=0
F_G=0
F_P=0

GENERAL TOLERANCES (UNLESS SPECIFIED)
mm INCH
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 CGOH
DATE 2007/01/12
CHECKED BY CGTAN
DATE 2007/02/06
APPROVED BY BOKOK
DATE 2010/02/02
MATERIAL NO.
78164-1051
SIZE
A3

SCALE
NTS
DESIGN UNITS
METRIC
THIRD ANGLE
PROJECTION
SERIAL ATA SCSI (SAS)
PLUG, VERTICAL MOUNT
SMT
MOLEX INCORPORATED
DOCUMENT NO.
SD-78164-100
SHEET NO.
1 OF 5
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX
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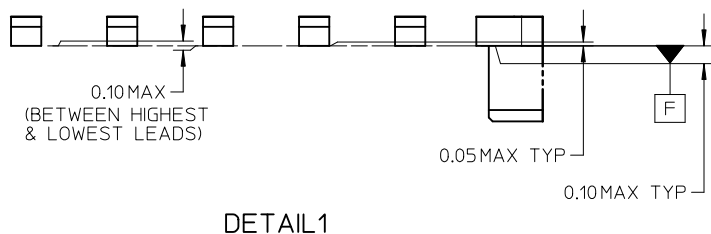
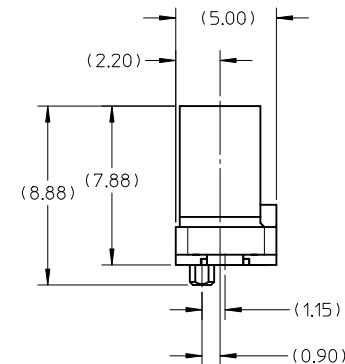
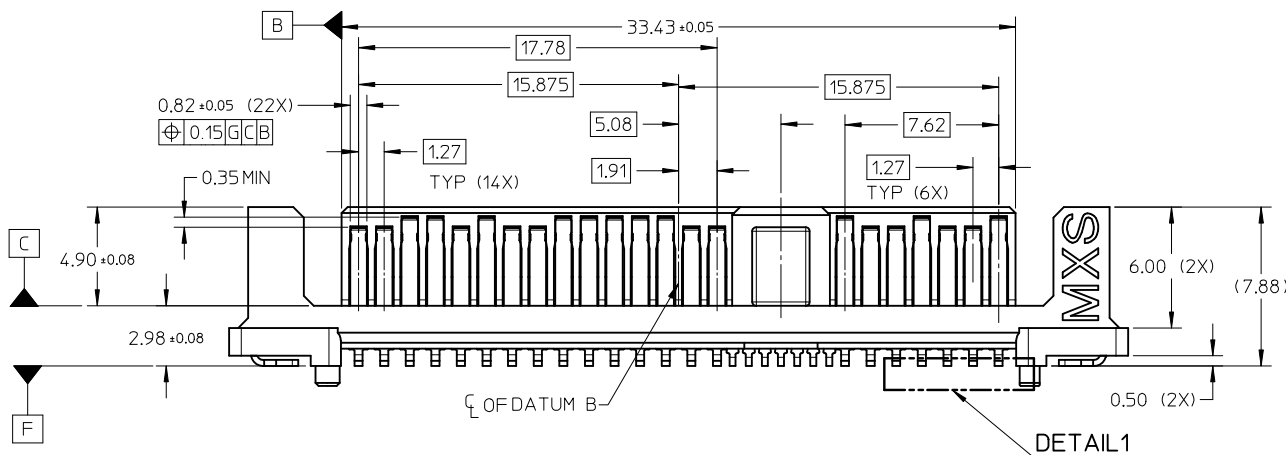
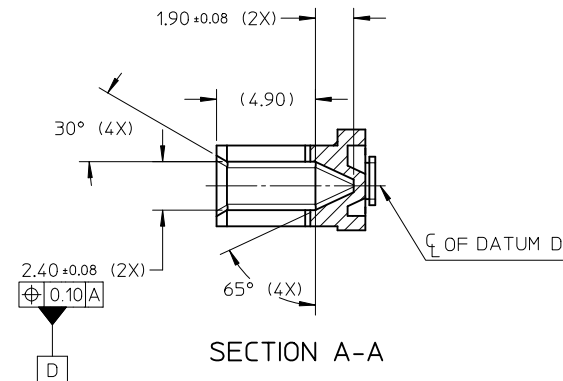
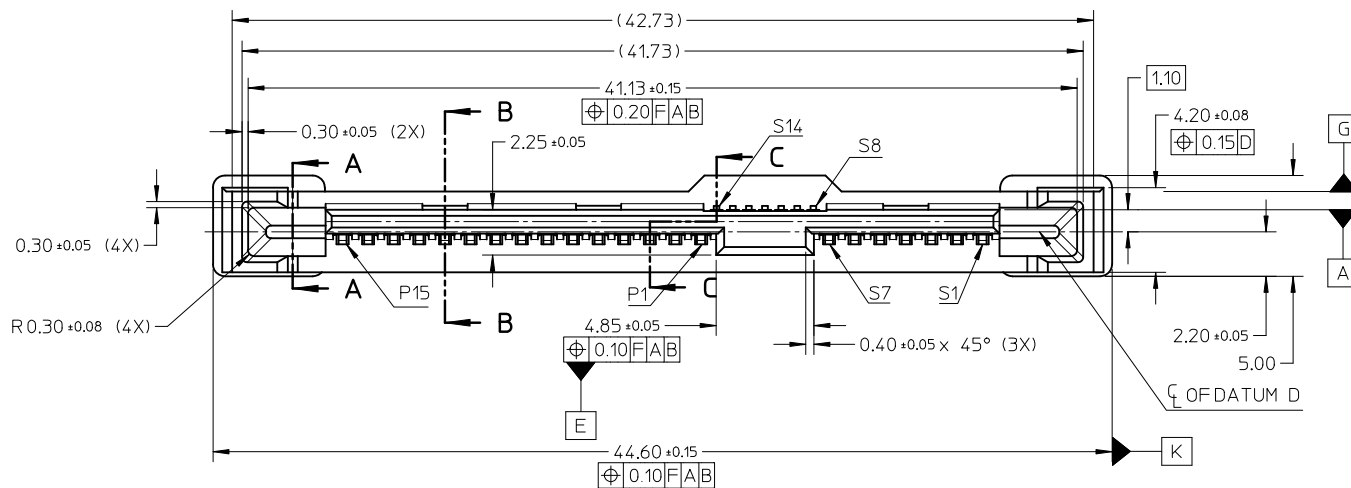
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10 9 8 7 6 5 4 3 2 1



DETAIL1

UPDATE VIEWS
EC NO: S2010-0638
DRWN:CGOH
CHKD:JTAN02
APPR:BOKOK
2010/01/27
2007/02/06
2010/02/02

QUALITY SYMBOLS
F_A=0
F_C=0
F_P=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
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
CGOH	2007/01/12

CHECKED BY	DATE
CGTAN	2007/02/06

APPROVED BY	DATE
BOKOK	2010/02/02

MATERIAL NO.
78164-1051

SCALE
NTS

DESIGN UNITS
METRIC

THIRD ANGLE PROJECTION

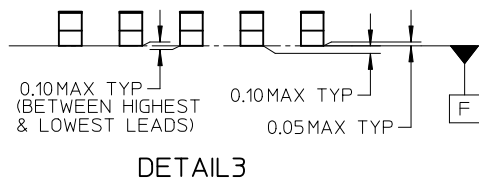
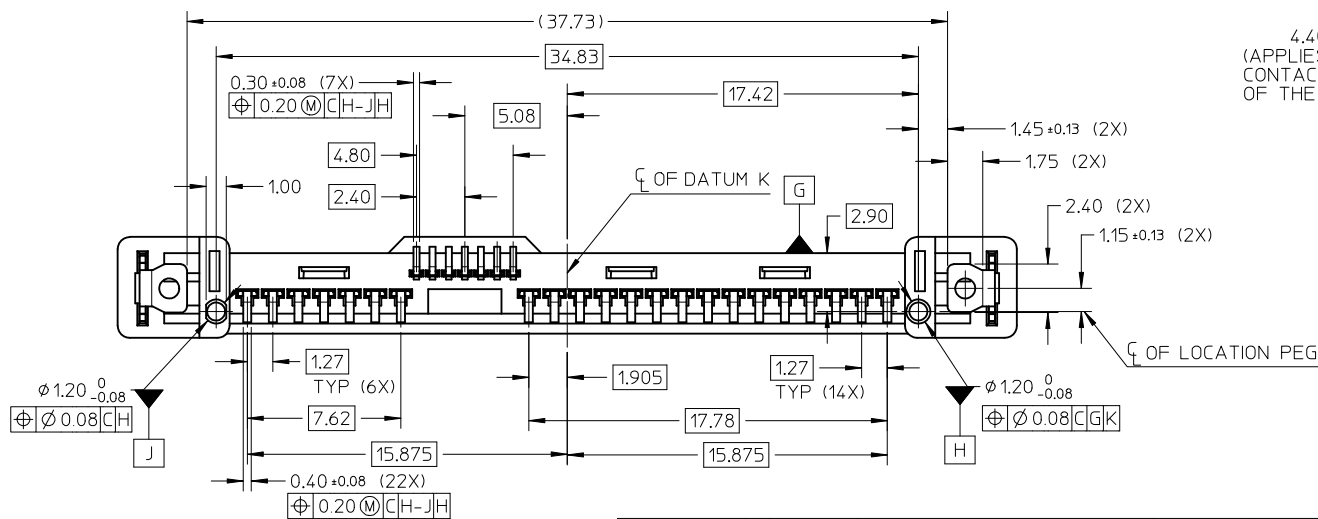
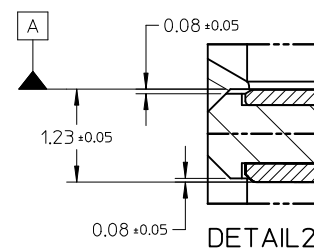
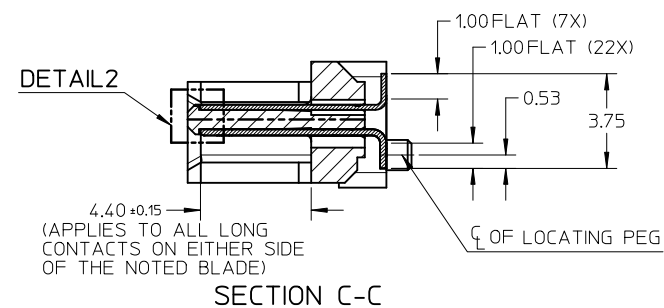
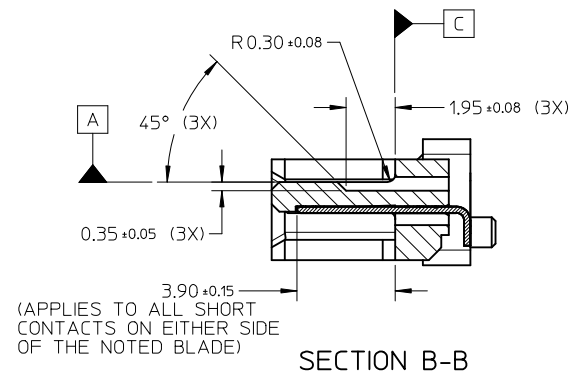
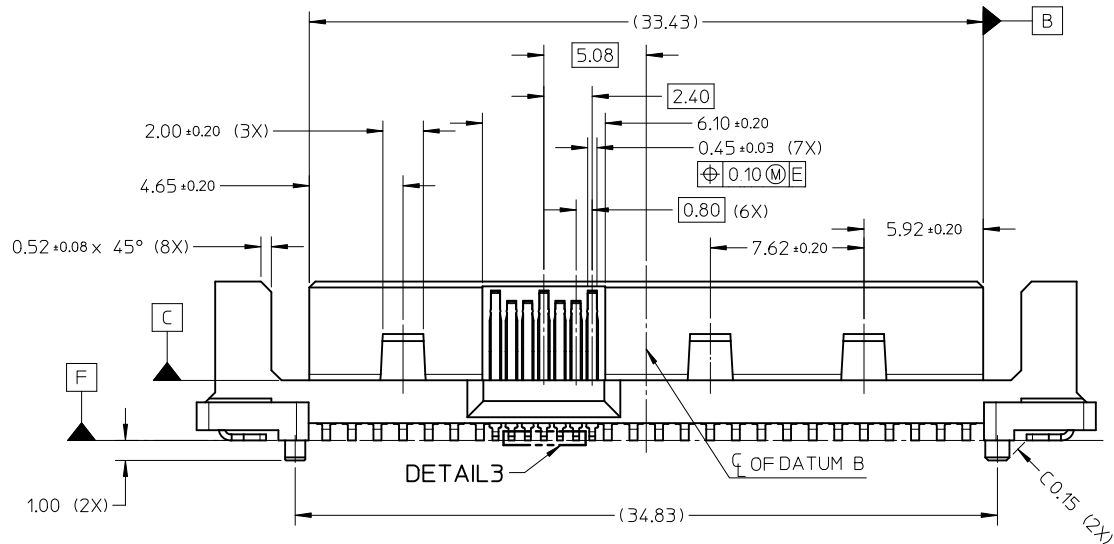
SERIAL ATA SCSI (SAS)
PLUG, VERTICAL MOUNT
SMT

MOLEX INCORPORATED

DOCUMENT NO.
SD-78164-100

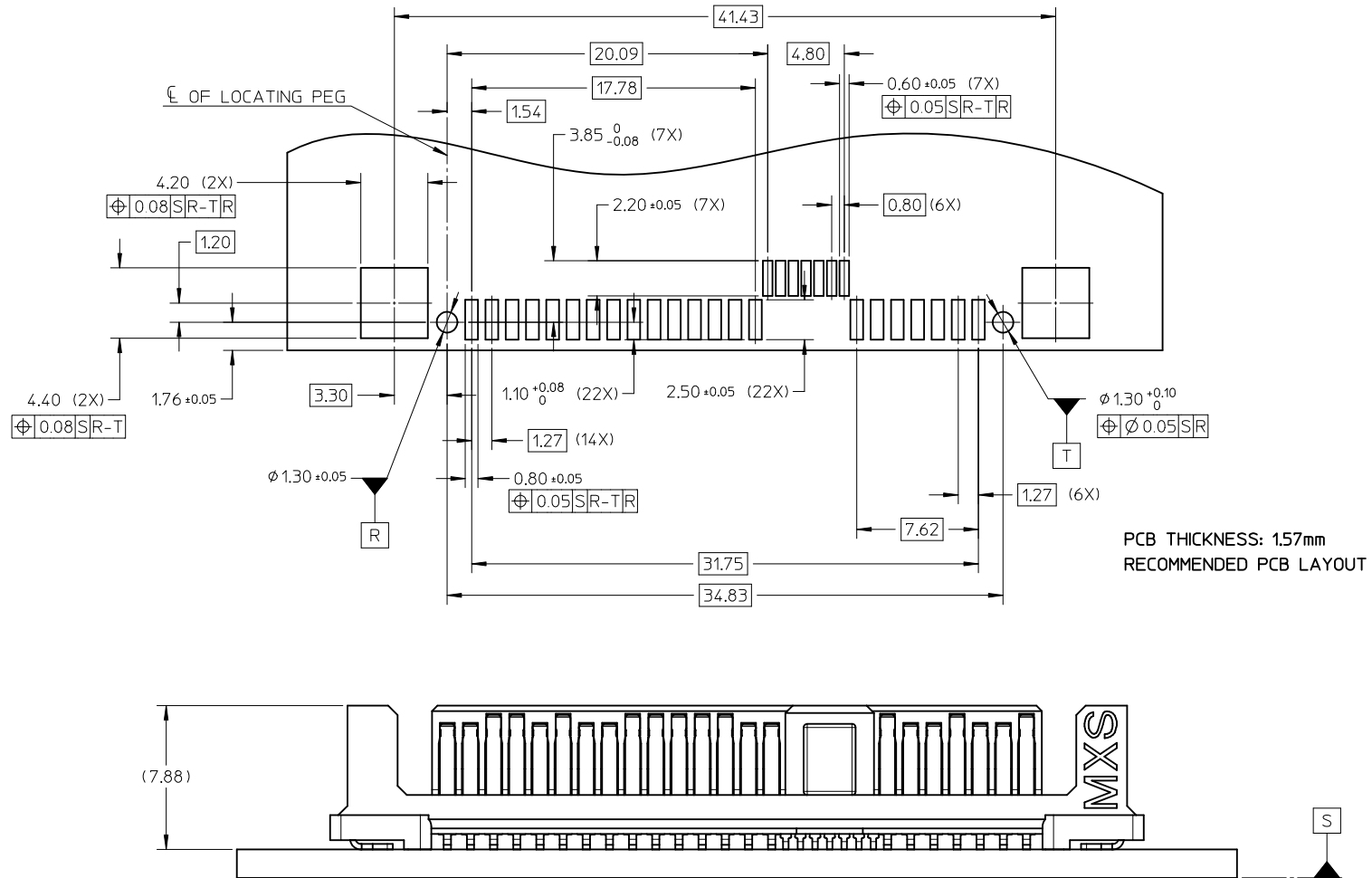
SHEET NO.
2 OF 5

10 9 8 7 6 5 4 3 2 1



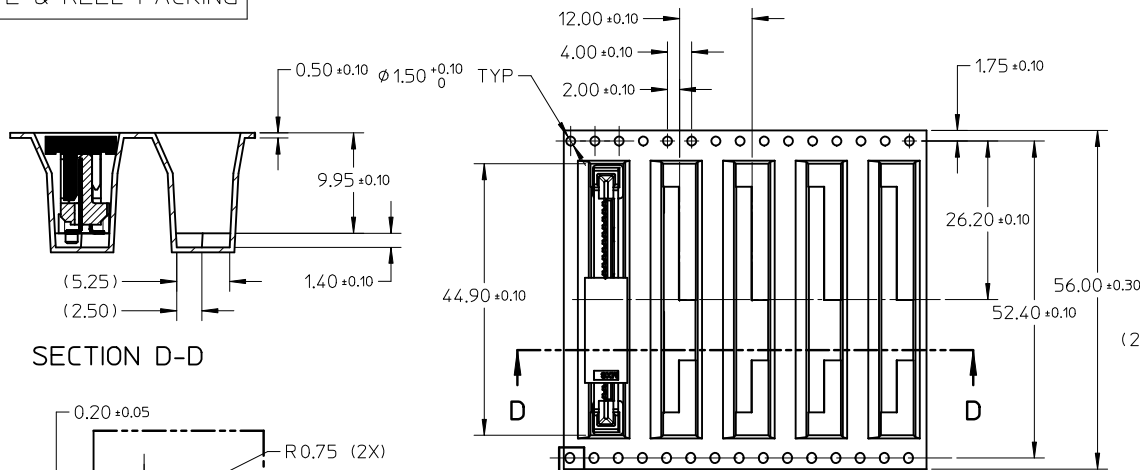
UPDATE VIEWS EC NO: S2010-0638 DRWN:CGOH CHKD:JTAN02 APPR:BOKOK 2010/01/27 2007/02/06 2010/02/02	DESCRIPTION	QUALITY SYMBOLS F_A=0 F_E=0 F_P=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
				mm	INCH	DRAWN BY CGOH	DATE 2007/01/12	TITLE SERIAL ATA SCSI (SAS) PLUG, VERTICAL MOUNT SMT				
			4 PLACES	± ---	± ---	CHECKED BY CGTAN	DATE 2007/02/06					
			3 PLACES	± ---	± ---	APPROVED BY BOKOK	DATE 2010/02/02	MOLEX INCORPORATED				
			2 PLACES	± 0.20	± ---	MATERIAL NO. 78164-1051	DOCUMENT NO. SD-78164-100					
1 PLACE	± ---	± ---	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							

9 8 7 6 5 4 3 2 1

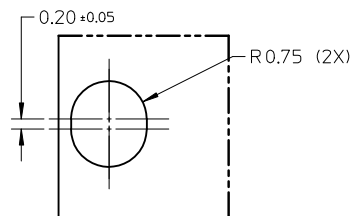


UPDATE VIEWS		QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
EC NO:	DATE			MM ONLY	INCH			
S2010-0638	2010/01/27	$F_A=0$	4 PLACES	± ---	± ---	DRAWN BY	DATE	TITLE
DRWN:CGOH	2007/02/06	$F_C=0$	3 PLACES	± ---	± ---	CGOH	2007/01/12	SERIAL ATA SCSI (SAS) PLUG, VERTICAL MOUNT SMT
CHKD:JTAN02	2007/02/06	$F_P=0$	2 PLACES	± 0.20	± ---	CHECKED BY	DATE	
APPR:BOKOK	2010/02/02		1 PLACE	± ---	± ---	CGTAN	2007/02/06	MOLEX INCORPORATED
						APPROVED BY	DATE	
						BOKOK	2010/02/02	SD-78164-100
						MATERIAL NO.	DOCUMENT NO.	
						78164-1051		4 OF 5

TAPE & REEL PACKING

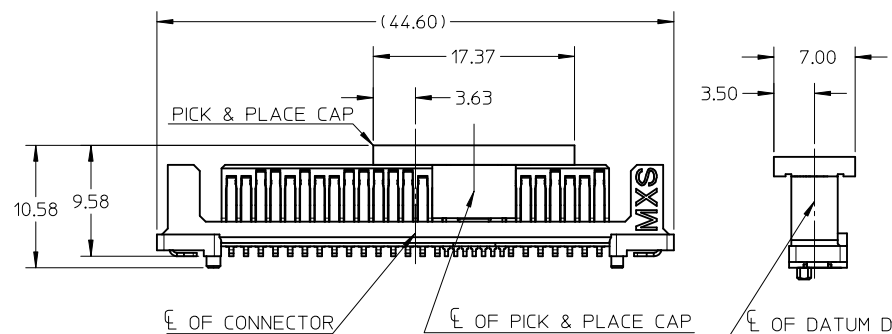
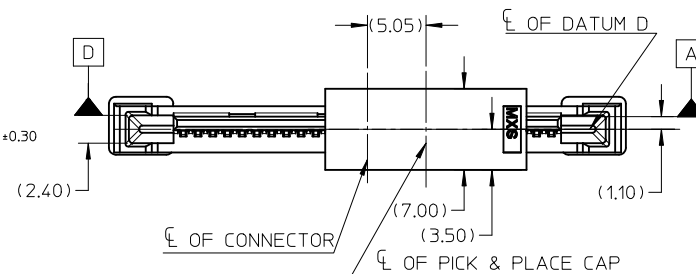
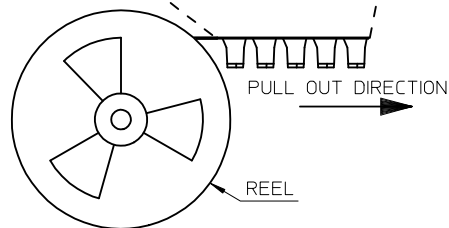


SECTION D-D



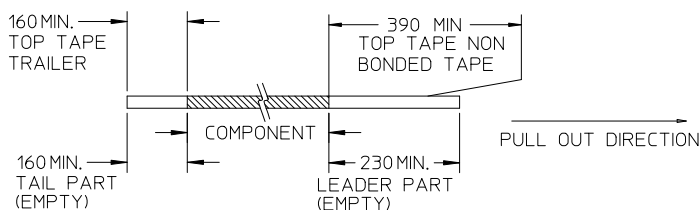
DETAIL 4

DETAIL 4

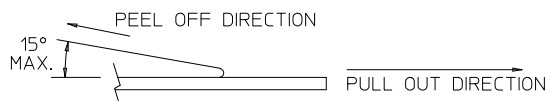


NOTES:

1. LEADER AND TRAILER TAPE



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



- TAPE AND REEL SPECIFICATION IS AS PER EIA-481.
- TAPE AND REEL QUANTITY : 400 PCS/ REEL.
- THE TAPE IS TREATED FOR ANTI-STATIC.

UPDATE VIEWS		DESCRIPTION	QUALITY SYMBOLS
EC NO:	REV		
S2010-0638	A2		
DRWN:CGOH			
CHKD:JTAN02			
APPR:BOKOK			

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
CGOH	2007/01/12
CHECKED BY	DATE
CGTAN	2007/02/06
APPROVED BY	DATE
BOKOK	2010/02/02
MATERIAL NO.	
78164-1051	
SIZE	
A3	

SCALE NTS	DESIGN UNITS METRIC	 THIRD ANGLE PROJECTION
TITLE		
SERIAL ATA SCSI (SAS) PLUG, VERTICAL MOUNT SMT		
MOLEX INCORPORATED		
DOCUMENT NO.		
SD-78164-100		SHEET NO. 5 OF 5
THIS INFORMATION THAT IS PROPRIETARY TO MOLEX SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		



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Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

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