

THIS DRAWING IS UNPUBLISHED. RELEASED FOR PUBLICATION SEP. 2005.
 © COPYRIGHT 2005 By - ALL RIGHTS RESERVED.

LOC	DIST	REVISIONS 変更					
J	/	P	LTR	DESCRIPTION	DATE	DWN	APVD
			F5	REVISED(ADD A NEW PN)	23DEC2015	A.X	H.W

NOTICE: THIS COMMUNICATION INCLUDES TE CONNECTIVITY CONFIDENTIAL
 OR PROPRIETARY INFORMATION THAT MAY ALSO BE LEGALLY PRIVILEGED.


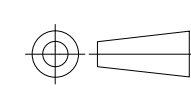
AVAILABLE	WITHOUT P/N	Au 0.1um MIN OVER PdNi 0.2um MIN	-	-	0.5	10.55	-	-	1.1	1.1	WITHOUT BOSS	EMBOSS PACKING (SEE SHEET 2)	WITHOUT FLANGE TYPE (SEE SHEET 6)	9-1747981-2
AVAILABLE	WITH P/N	Au 0.1um MIN OVER PdNi 0.2um MIN	-	M3 x 0.5	1.0	10.55	12.75	10.08	2.2	1.8	WITH BOSS	SOFT TRAY PACKING (SEE SHEET 4)	WITH FLANGE TYPE (SEE SHEET 7)	9-1747981-1
AVAILABLE	WITHOUT P/N	Au 0.1um MIN OVER PdNi 0.2um MIN	14.3	M3 x 0.5	0.5	10.05	10.95	7.98	2.2	1.8	WITHOUT BOSS	EMBOSS PACKING (SEE SHEET 3)	WITH FLANGE TYPE (SEE SHEET 7)	8-1747981-2 2-1747981-5
AVAILABLE	WITHOUT P/N	Au 0.1um MIN OVER PdNi 0.2um MIN	-	M3 x 0.5	0.5	10.05	10.95	7.98	2.2	1.8	WITHOUT BOSS	CLEAR TRAY PACKING (SEE SHEET 4)	WITH FLANGE TYPE (SEE SHEET 7)	8-1747981-1
AVAILABLE	WITHOUT P/N	Au 0.1um MIN OVER PdNi 0.2um MIN	-	M3 x 0.5	1.0	10.55	12.75	10.08	2.2	1.8	WITH BOSS	SOFT TRAY PACKING (SEE SHEET 4)	WITH FLANGE TYPE (SEE SHEET 7)	3-1747981-1
NOT AVAILABLE	WITHOUT P/N	Au 0.1um MIN OVER PdNi 0.2um MIN	16.3	#4-40 UNC	0.5	10.55	12.75	10.08	2.2	1.8	WITH BOSS	EMBOSS PACKING (SEE SHEET 3)	WITH FLANGE TYPE (SEE SHEET 7)	2-1747981-4
AVAILABLE	WITHOUT P/N	Au 0.76um MIN	16.3	M3 x 0.5	1.0	10.55	12.75	10.08	2.2	1.8	WITHOUT BOSS	EMBOSS PACKING (SEE SHEET 3)	WITH FLANGE TYPE (SEE SHEET 7)	2-1747981-3
NOT AVAILABLE	WITHOUT P/N	Au 0.1um MIN OVER PdNi 0.2um MIN	-	#4-40 UNC	0.5	10.05	12.75	10.08	2.2	1.8	WITHOUT BOSS	HARDTRAY PACKING (-)	WITH FLANGE TYPE (SEE SHEET 7)	2-1747981-2
AVAILABLE	WITHOUT P/N	Au 0.76um MIN	-	M3 x 0.5	1.0	10.55	12.75	10.08	2.2	1.8	WITHOUT BOSS	SOFT TRAY PACKING (SEE SHEET 4)	WITH FLANGE TYPE (SEE SHEET 7)	2-1747981-1
AVAILABLE	WITHOUT P/N	Au 0.1um MIN OVER PdNi 0.2um MIN	-	M3 x 0.5	1.0	10.55	12.75	10.08	1.5	1.5	WITHOUT BOSS	SOFT TRAY PACKING (SEE SHEET 4)	WITH FLANGE TYPE (SEE SHEET 7)	1-1747981-8
AVAILABLE	WITHOUT P/N	Au 0.1um MIN OVER PdNi 0.2um MIN	16.3	M3 x 0.5	1.0	10.55	12.75	10.08	2.2	1.8	WITHOUT BOSS	EMBOSS PACKING (SEE SHEET 3)	WITH FLANGE TYPE (SEE SHEET 7)	1-1747981-7
AVAILABLE	WITHOUT P/N	Au 0.1um MIN OVER PdNi 0.2um MIN	-	M3 x 0.5	0.5	10.05	10.95	7.98	2.2	1.8	WITHOUT BOSS	SOFT TRAY PACKING (SEE SHEET 5)	WITH FLANGE TYPE (SEE SHEET 7)	1-1747981-6
AVAILABLE	WITHOUT P/N	Au 0.1um MIN OVER PdNi 0.2um MIN	14.3	M3 x 0.5	0.5	10.05	10.95	7.98	1.5	1.5	WITHOUT BOSS	EMBOSS PACKING (SEE SHEET 3)	WITH FLANGE TYPE (SEE SHEET 7)	1-1747981-5
AVAILABLE	WITHOUT P/N	Au 0.1um MIN OVER PdNi 0.2um MIN	-	M3 x 0.5	1.0	10.55	12.75	10.08	2.2	1.8	WITHOUT BOSS	SOFT TRAY PACKING (SEE SHEET 4)	WITH FLANGE TYPE (SEE SHEET 7)	1-1747981-4
AVAILABLE	WITHOUT P/N	Au 0.1um MIN OVER PdNi 0.2um MIN	-	#4-40 UNC	0.5	10.05	12.75	10.08	2.2	1.8	WITHOUT BOSS	SOFT TRAY PACKING (SEE SHEET 4)	WITH FLANGE TYPE (SEE SHEET 7)	1-1747981-3
AVAILABLE	WITHOUT P/N	Au 0.1um MIN OVER PdNi 0.2um MIN	-	M3 x 0.5	0.5	10.05	10.95	7.98	1.5	1.5	WITHOUT BOSS	SOFT TRAY PACKING (SEE SHEET 4)	WITH FLANGE TYPE (SEE SHEET 7)	1-1747981-2
AVAILABLE	WITHOUT P/N	Au 0.1um MIN OVER PdNi 0.2um MIN	-	M3 x 0.5	0.5	10.05	10.95	7.98	2.2	1.8	WITHOUT BOSS	SOFT TRAY PACKING (SEE SHEET 4)	WITH FLANGE TYPE (SEE SHEET 7)	1-1747981-1
AVAILABLE	WITHOUT P/N	Au 0.1um MIN OVER PdNi 0.2um MIN	-	-	0.5	10.05	-	-	1.5	1.5	WITHOUT BOSS	EMBOSS PACKING (SEE SHEET 2)	WITHOUT FLANGE TYPE (SEE SHEET 6)	1747981-2
AVAILABLE	WITHOUT P/N	Au 0.1um MIN OVER PdNi 0.2um MIN	-	-	0.5	10.05	-	-	2.2	1.8	WITHOUT BOSS	EMBOSS PACKING (SEE SHEET 2)	WITHOUT FLANGE TYPE (SEE SHEET 6)	1747981-1

TOOL STATUS	PART NUMBER MARKING	CONTACT AREA PLATING SPEC J	DIM H	SCREW SIZE DIM G	DIM F	DIM E	DIM D	DIM C	DIM B	DIM A	BOSS	PACKING	CONNECTOR TYPE	PART NUMBER
-------------	---------------------	-----------------------------	-------	------------------	-------	-------	-------	-------	-------	-------	------	---------	----------------	-------------

1 CONTACT COPLANALITY IS 0.1 MAXIMUM.
 THIS DIMENSION MEANS CENTER OF THE POCKET.
 FINISH
 CONTACT: CONTACT AREA J: SEE TABLE
 2um MIN Sn PLATING ON SOLDERING AREA
 2um MIN Ni UNDER PLATING ALL OVER
 SHELL: 1um MIN Sn PLATING ALL OVER
 1um MIN Ni UNDER PLATING ALL OVER

REFER TO THE TABLE FOR BOSS.
 SCREW SIZE
 PART NUMBER MAKING

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: 单位: 毫米 mm	TOLERANCES UNLESS OTHERWISE SPECIFIED: 一般公差	DWN Y.HIRATA 15SEP2005	 TE Connectivity HDMI 19 POS RECEPTACLE ASSY SMT TYPE -LEAD FREE-
	0 PLC ± 0.2	CHK T.KIMURA 15SEP2005	
	1 PLC ± 0.2	APVD K.IKEGAMI 15SEP2005	
MATERIAL 材料	FINISH 仕上	NAME 名称	

PRODUCT SPEC 製品規格: 108-78180-1
 APPLICATION SPEC 取付適用規格

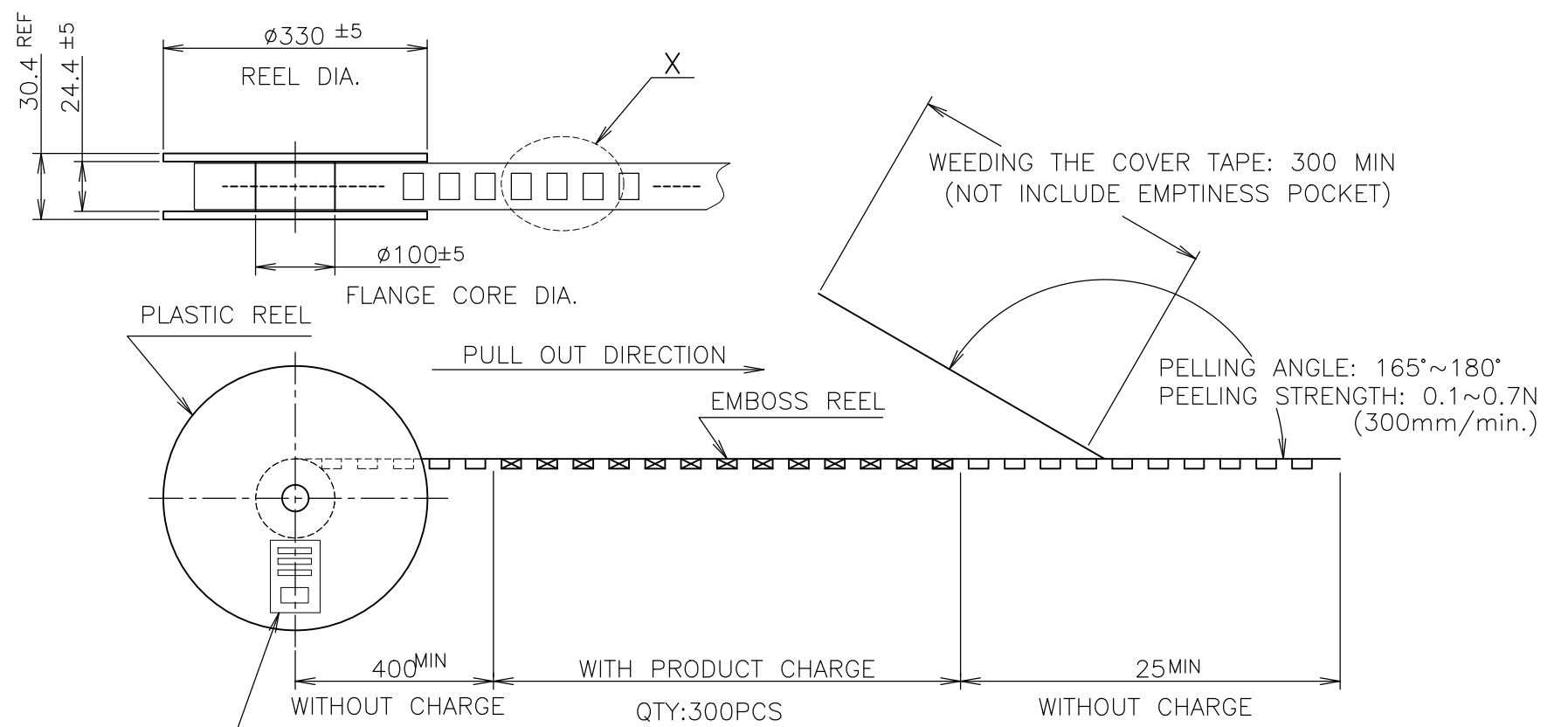
SIZE	CAGE CODE	DRAWING NO 番号	RESTRICTED TO
A3	00779	G-1747981	-

CUSTOMER DRAWING SCALE 尺度: NTS SHEET 1 OF 8 REV F5

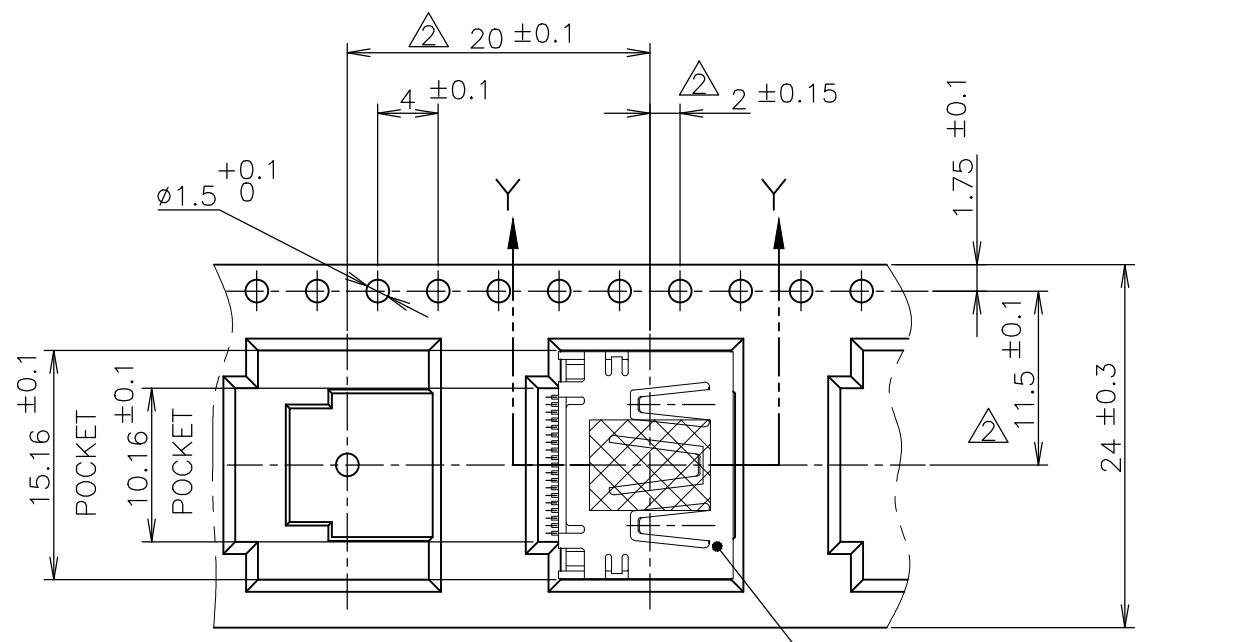
THIS DRAWING IS UNPUBLISHED. RELEASED FOR PUBLICATION SEP ,2005.
 © COPYRIGHT 2005 By - ALL RIGHTS RESERVED.

LOC	DIST	REVISIONS					
J	/	P	LTR	DESCRIPTION	DATE	DWN	APVD
		-		SEE SHEET 1	-	-	-

NOTICE: THIS COMMUNICATION INCLUDES TE CONNECTIVITY CONFIDENTIAL OR PROPRIETARY INFORMATION THAT MAY ALSO BE LEGALLY PRIVILEGED.

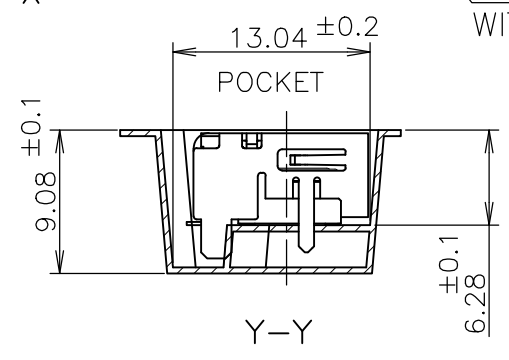


TE CONNECTIVITY P/N.: 1747981-*
 QTY: 300 pcs
 D/C:
 MADE IN CHINA



DETAIL X

CONNECTOR WITHOUT FLANGE TYPE



Y-Y

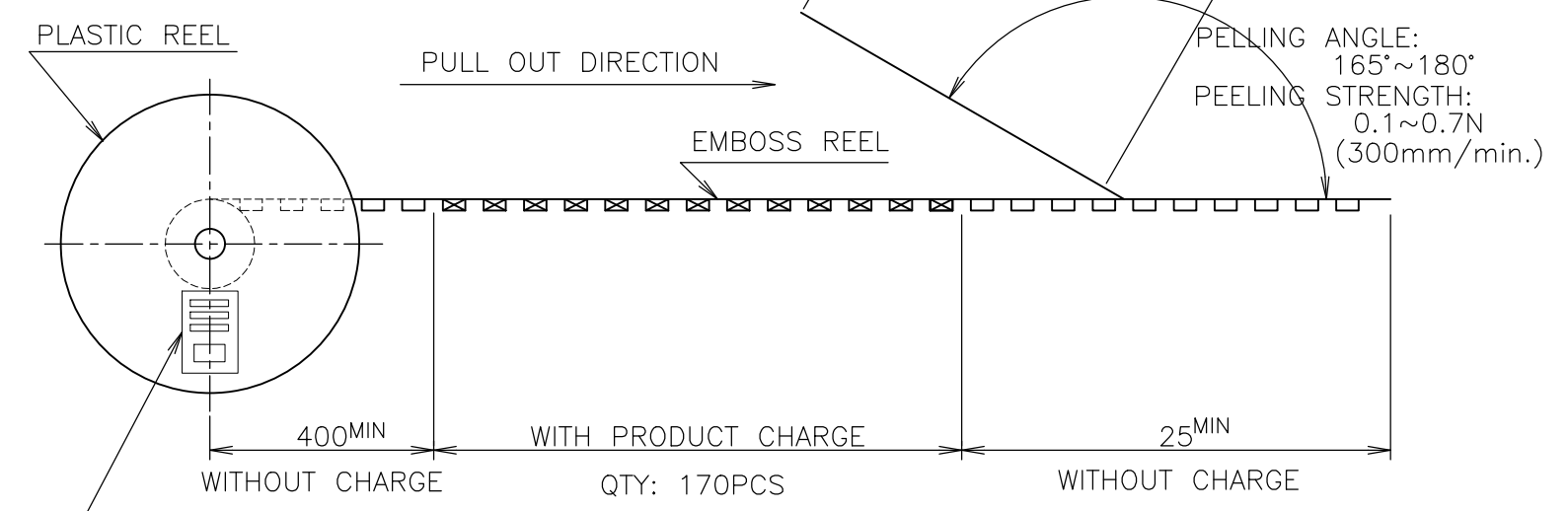
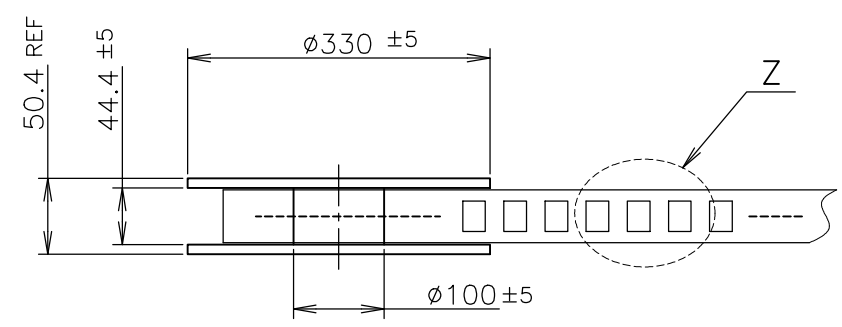
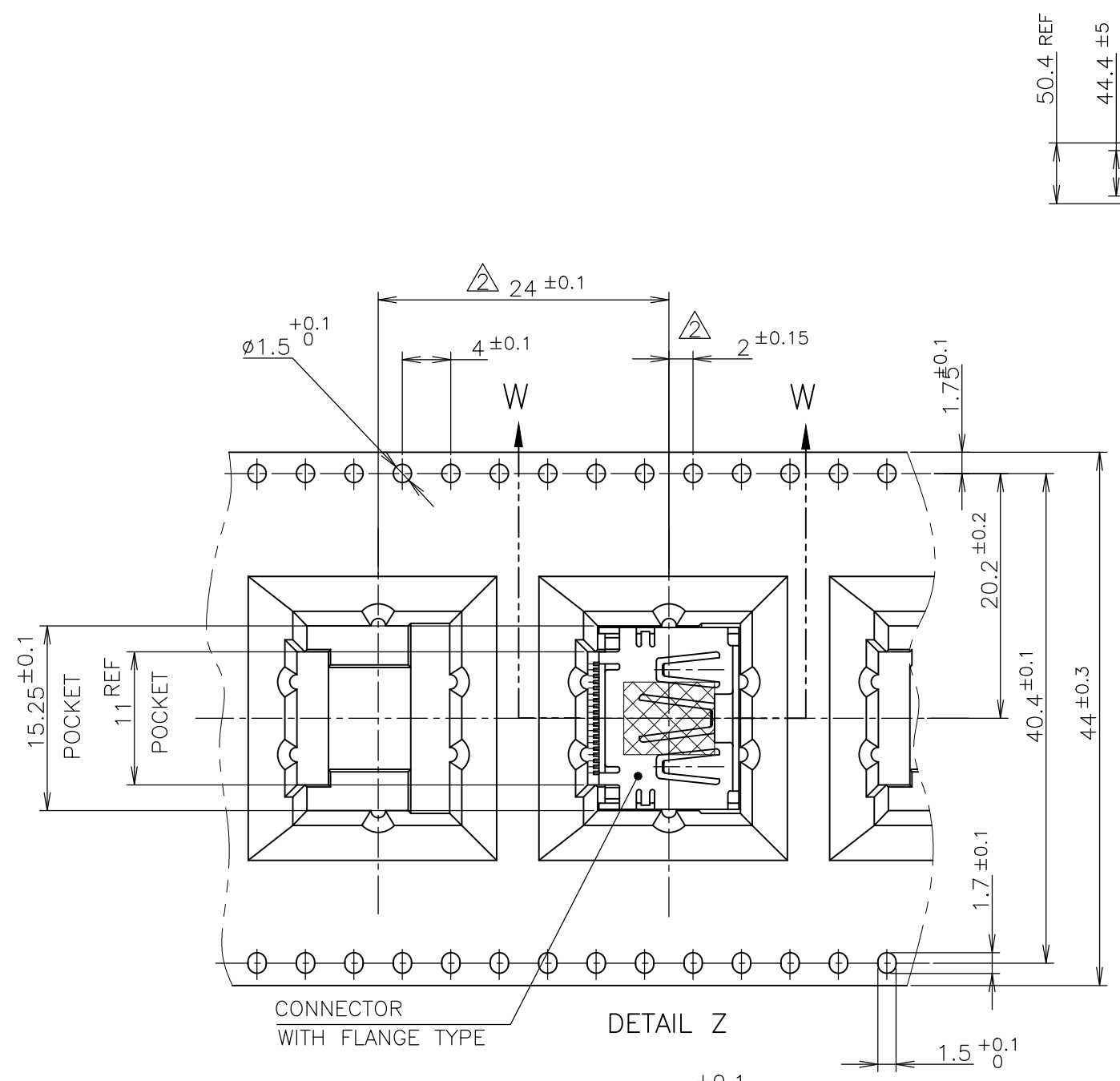
300	WITHOUT FLANGE TYPE	9-1747981-2
300	WITHOUT FLANGE TYPE	1747981-2
300	WITHOUT FLANGE TYPE	1747981-1
QTY	CONNECTOR TYPE	PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN	TE Connectivity HDMI 19 POS RECEPTACLE ASSY SMT TYPE -LEAD FREE-			
DIMENSIONS: 單位: 耗 mm		CHK				NAME 名稱
TOLERANCES UNLESS OTHERWISE SPECIFIED: 一般公差		APVD				PRODUCT SPEC 製品規格
0 PLC ± 0.2 1 PLC ± 0.2 2 PLC ± 0.2 3 PLC ± 0.2 4 PLC ± 0.2 ANGLES ± -		APPLICATION SPEC 取付適用規格 108-78180-1				SIZE
MATERIAL 材料	FINISH 仕上	WEIGHT	CAGE CODE	DRAWING NO 番号	RESTRICTED TO	
CUSTOMER DRAWING			A300779	G-1747981	-	
SCALE 尺度 NTS			SHEET 2 OF 8	REV F5		

THIS DRAWING IS UNPUBLISHED. RELEASED FOR PUBLICATION SEP, 2005.
 © COPYRIGHT 2005 By - ALL RIGHTS RESERVED.

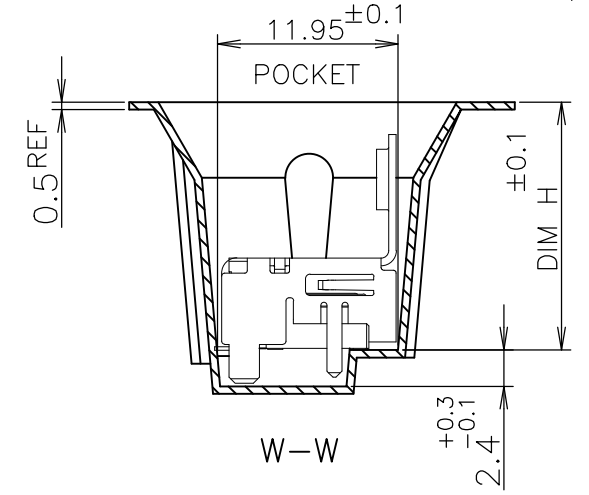
LOC	DIST	REVISIONS		
J	/	P	LTR	DESCRIPTION
		-		SEE SHEET 1
			DATE	DWN
			-	-
			APVD	-

NOTICE: THIS COMMUNICATION INCLUDES TE CONNECTIVITY CONFIDENTIAL OR PROPRIETARY INFORMATION THAT MAY ALSO BE LEGALLY PRIVILEGED.



TE CONNECTIVITY P/N.: *-1747981-*
 QTY: 170 pcs
 D/C:
 MADE IN CHINA

170	WITH FLANGE TYPE	8-1747981-2
170	WITH FLANGE TYPE	2-1747981-5
170	WITH FLANGE TYPE	2-1747981-4
170	WITH FLANGE TYPE	2-1747981-3
170	WITH FLANGE TYPE	1-1747981-7
170	WITH FLANGE TYPE	1-1747981-5
QTY	CONNECTOR TYPE	PART NUMBER



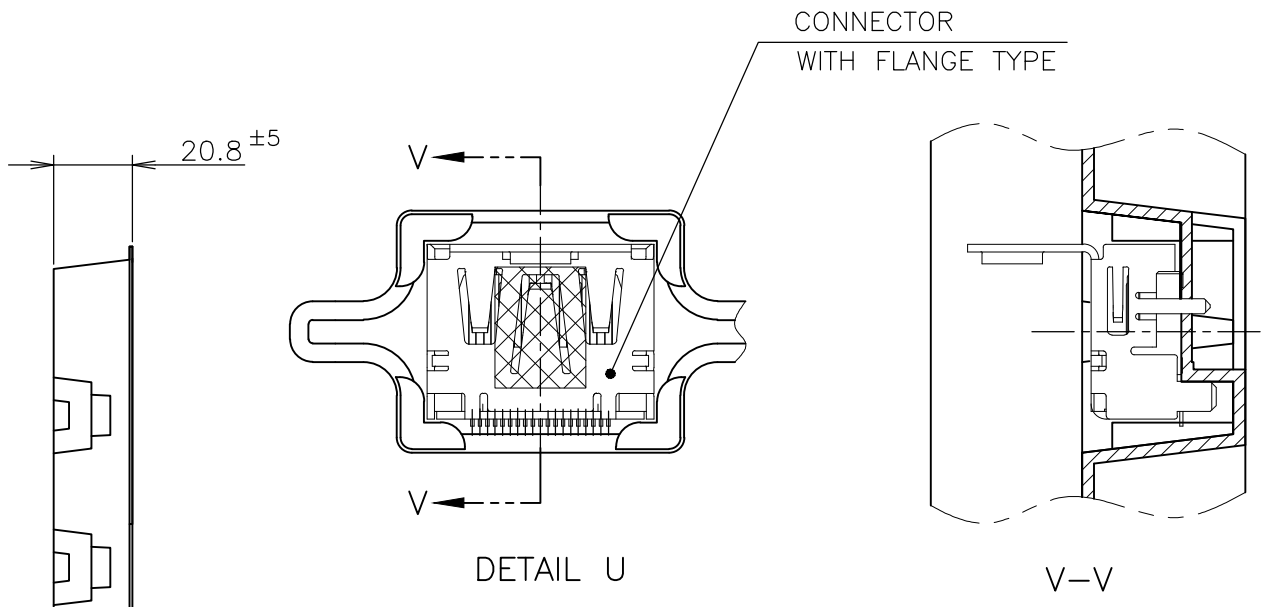
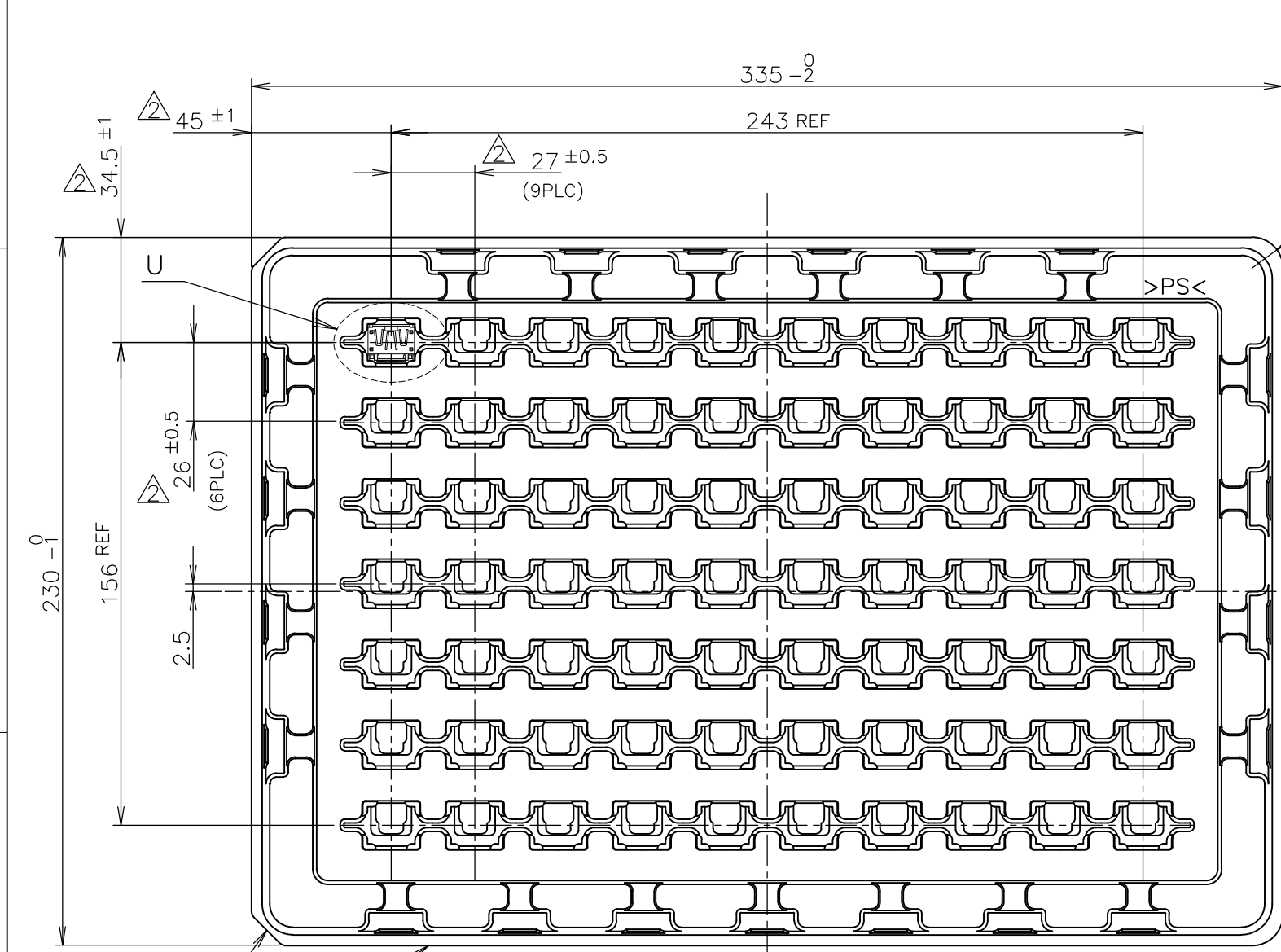
THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: 單位: 耗 mm	TOLERANCES UNLESS OTHERWISE SPECIFIED: 一般公差
0 PLC ±0.2	1 PLC ±0.2
2 PLC ±0.2	3 PLC ±0.2
4 PLC ±0.2	ANGLES ±
MATERIAL 材料	FINISH 仕上

DWN	STE TE Connectivity		
CHK	NAME 名称		
APVD	HDMI 19 POS RECEPTACLE ASSY SMT TYPE -LEAD FREE-		
PRODUCT SPEC 製品規格	108-78180-1		
APPLICATION SPEC 取付適用規格	SIZE	CAGE CODE	DRAWING NO 番号
WEIGHT	A3	00779	G-1747981
CUSTOMER DRAWING	SCALE 尺度	SHEET	REV
	NTS	3 OF 8	F5

THIS DRAWING IS UNPUBLISHED. RELEASED FOR PUBLICATION SEP , 2005.
 © COPYRIGHT 2005 By - ALL RIGHTS RESERVED.

LOC	DIST	REVISIONS					
J	/	P	LTR	DESCRIPTION	DATE	DWN	APVD
		-		SEE SHEET 1	-	-	-



10 x45° SOFT TRAY PACKING (MATERIAL: PS, THK=0.8mm) REF

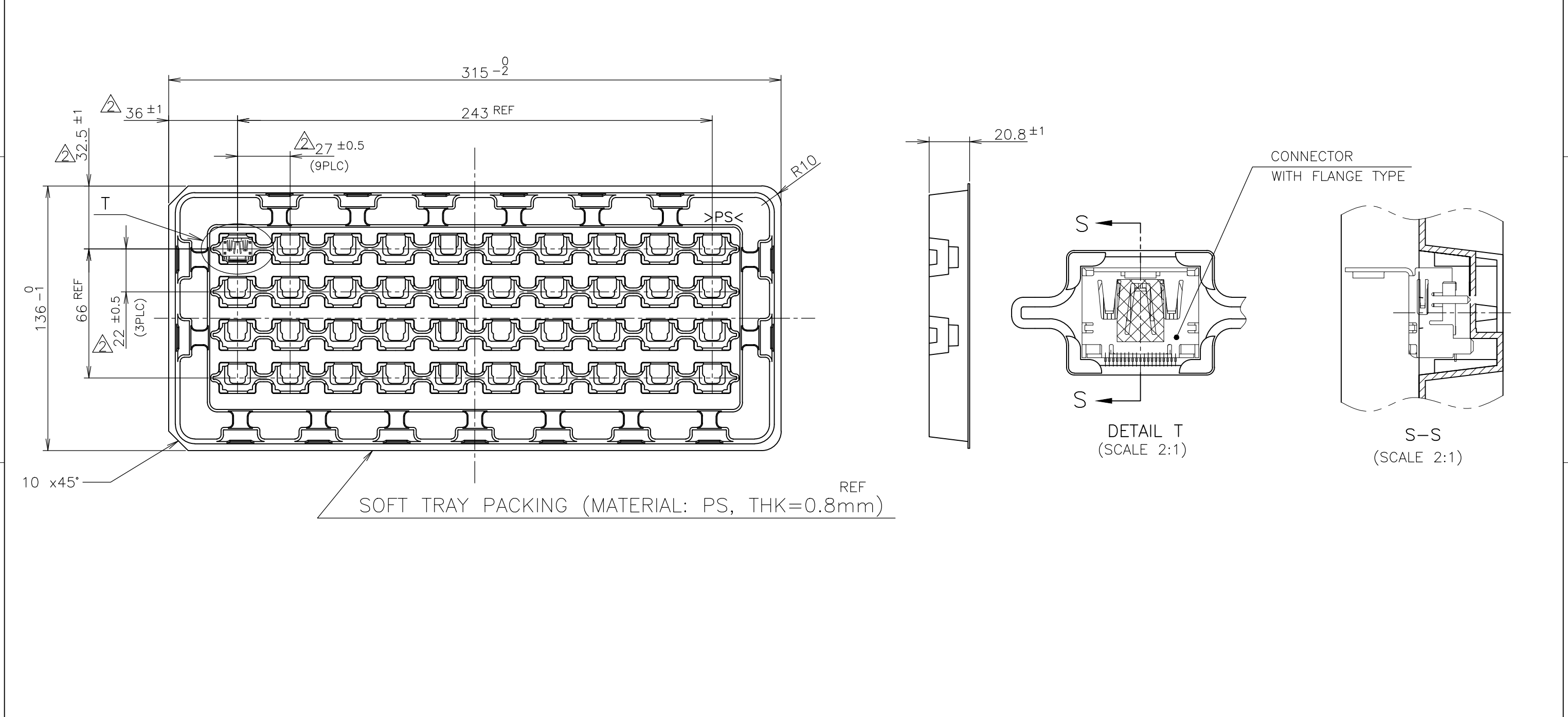
70	WITH FLANGE TYPE	9-1747981-1
70	WITH FLANGE TYPE	8-1747981-1
70	WITH FLANGE TYPE	3-1747981-1
70	WITH FLANGE TYPE	2-1747981-1
70	WITH FLANGE TYPE	1-1747981-8
70	WITH FLANGE TYPE	1-1747981-4
70	WITH FLANGE TYPE	1-1747981-3
70	WITH FLANGE TYPE	1-1747981-2
70	WITH FLANGE TYPE	1-1747981-1
QTY	CONNECTOR TYPE	PART NUMBER

NOTICE: THIS COMMUNICATION INCLUDES TE CONNECTIVITY CONFIDENTIAL OR PROPRIETARY INFORMATION THAT MAY ALSO BE LEGALLY PRIVILEGED.

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN		STE TE Connectivity	
DIMENSIONS: 单位: 耗 mm		CHK			
TOLERANCES UNLESS OTHERWISE SPECIFIED: 一般公差		APVD		NAME 名称	
0 PLC ± 0.2		PRODUCT SPEC 製品規格		HDMI 19 POS	
1 PLC ± 0.2		APPLICATION SPEC 取付適用規格		RECEPTACLE ASSY SMT TYPE	
2 PLC ± 0.2 ± 0.3		WEIGHT		-LEAD FREE-	
3 PLC ± 0.2		CUSTOMER DRAWING		SIZE CAGE CODE DRAWING NO 番号	
4 PLC ± 0.2		SCALE 尺度 NTS		A3 00779 C-1747981	
ANGLES ± -		SHEET 4 OF 8		RESTRICTED TO	
FINISH 仕上		REV F5			

THIS DRAWING IS UNPUBLISHED. RELEASED FOR PUBLICATION SEP , 2005.
 © COPYRIGHT 2005 By - ALL RIGHTS RESERVED.

LOC	DIST	REVISIONS					
J	/	P	LTR	DESCRIPTION	DATE	DWN	APVD
		-		SEE SHEET 1	-	-	-



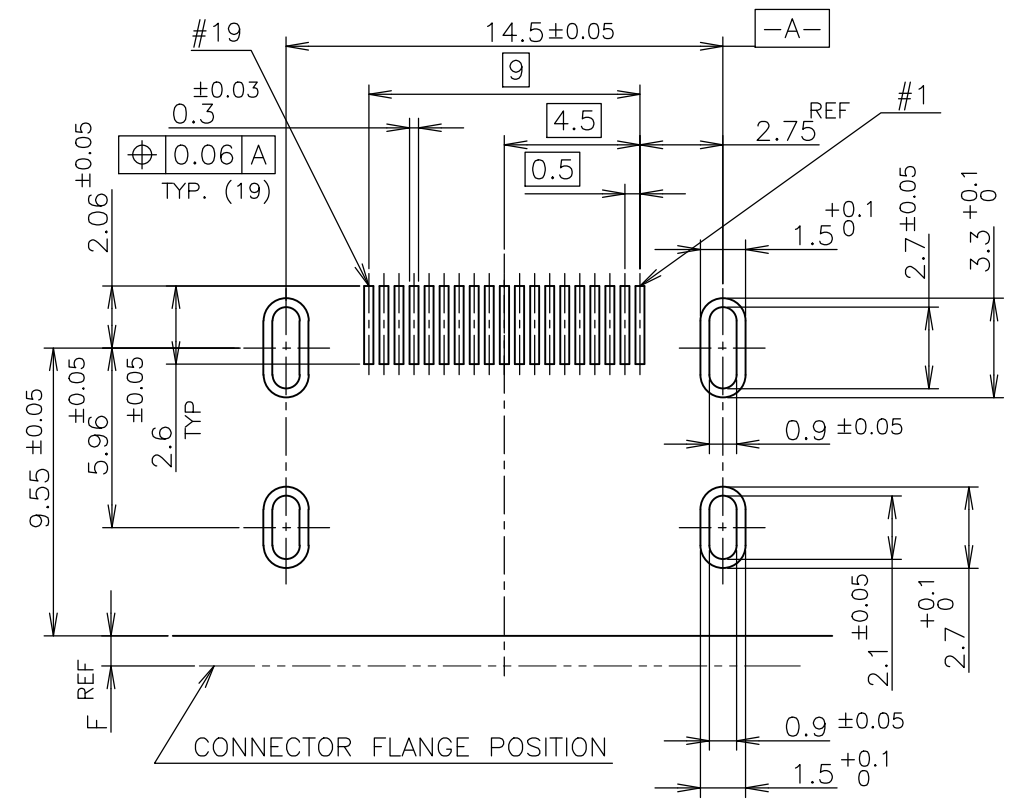
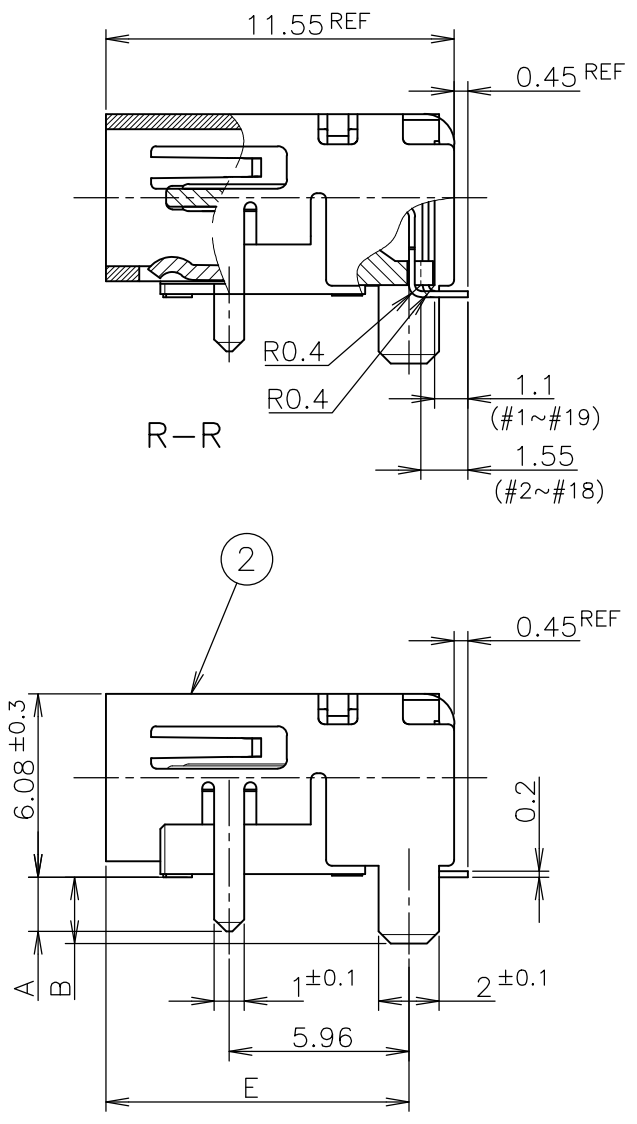
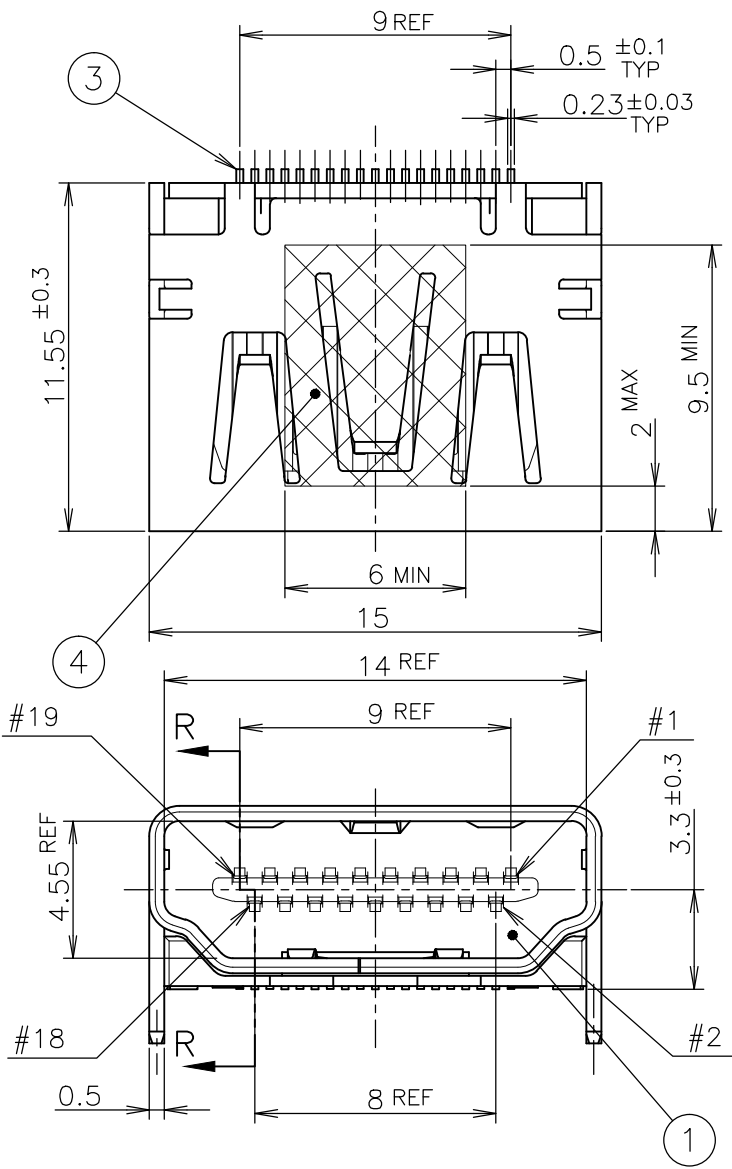
NOTICE: THIS COMMUNICATION INCLUDES TE CONNECTIVITY CONFIDENTIAL OR PROPRIETARY INFORMATION THAT MAY ALSO BE LEGALLY PRIVILEGED.

THIS DRAWING IS A CONTROLLED DOCUMENT.

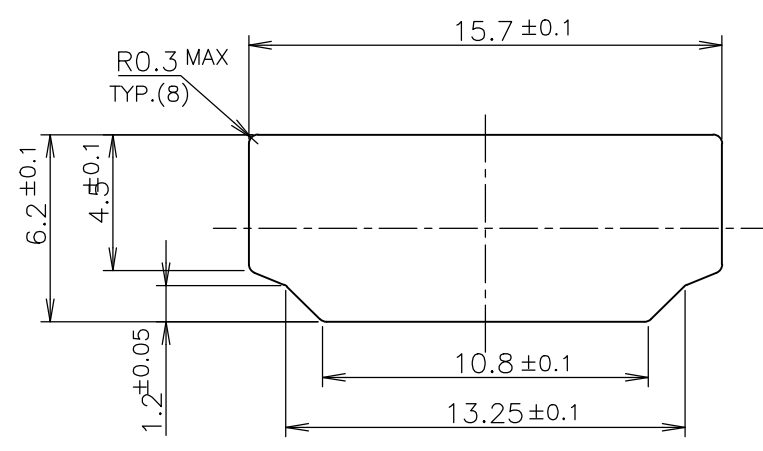
DIMENSIONS: 単位: 耗 mm	TOLERANCES UNLESS OTHERWISE SPECIFIED: 一般公差
	0 PLC ±0.2 1 PLC ±0.2 2 PLC ±0.2 3 PLC ±0.2 4 PLC ±0.2 ANGLES ±-
MATERIAL 材料	FINISH 仕上

40	WITH FLANGE TYPE	1-1747981-6
QTY	CONNECTOR TYPE	PART NUMBER
DWN	TE Connectivity	
CHK		
APVD	NAME 名称	
PRODUCT SPEC 製品規格	HDMI 19 POS	
APPLICATION SPEC 取付適用規格	RECEPTACLE ASSY SMT TYPE	
WEIGHT	SIZE	RESTRICTED TO
CUSTOMER DRAWING	A3 00779	-
	DRAWING NO 番号	SCALE 尺度
	C-1747981	NTS
	SHEET	REV
	5 OF 8	F5

LOC	DIST	REVISIONS			DATE	DWN	APVD
		P	LTR	DESCRIPTION			
J				SEE SHEET 1	-	-	-



P.C.B LAYOUT
SHOWN AS CONNECTOR MOUNTING SIDE
TOLERANCE: NON-CUMULATIVE
(REFERENCE)



PANEL CUT OUT DIMENSION
(REFERENCE)

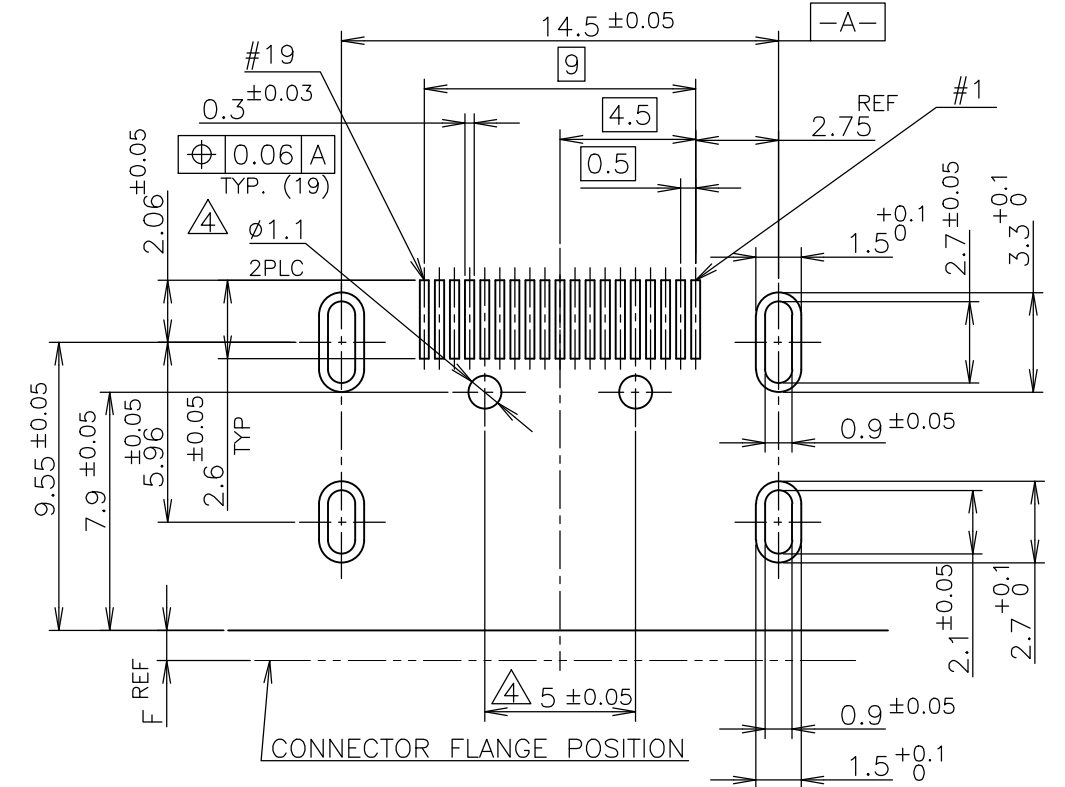
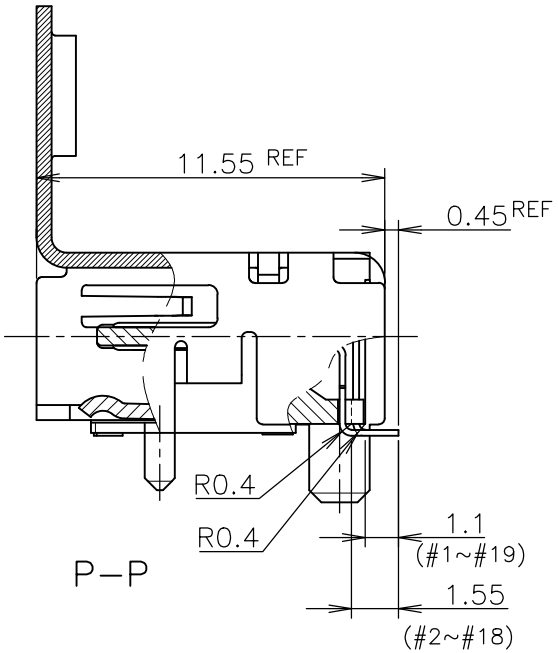
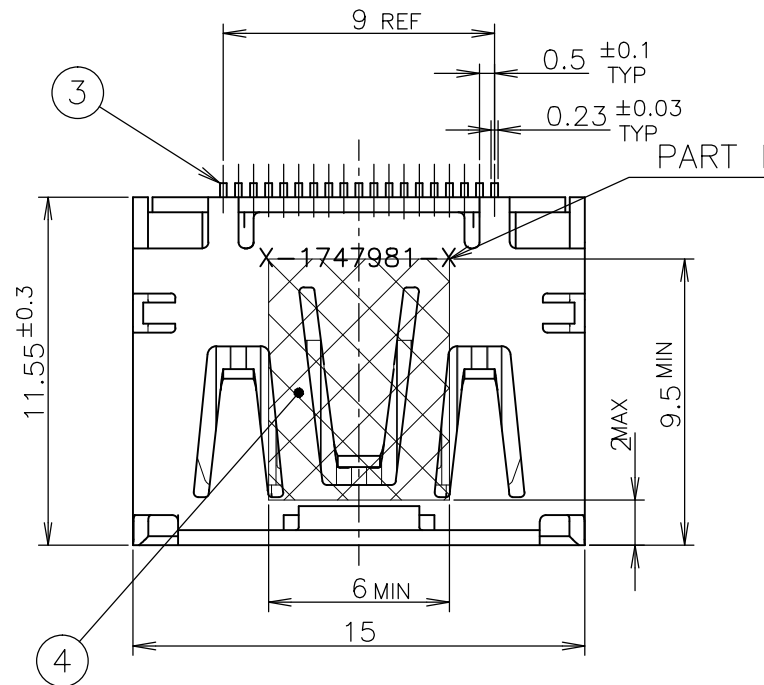
CONNECTOR WITHOUT FLANGE TYPE

NOTICE: THIS COMMUNICATION INCLUDES TE CONNECTIVITY CONFIDENTIAL OR PROPRIETARY INFORMATION THAT MAY ALSO BE LEGALLY PRIVILEGED.

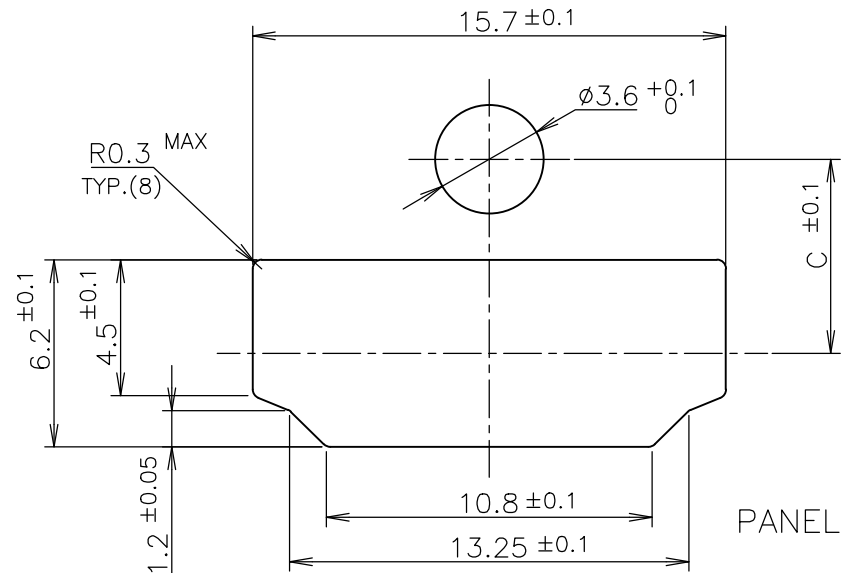
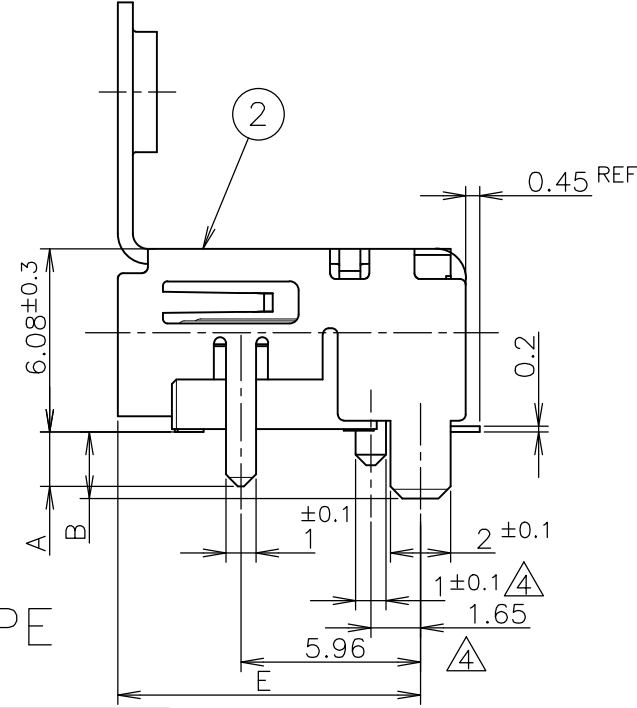
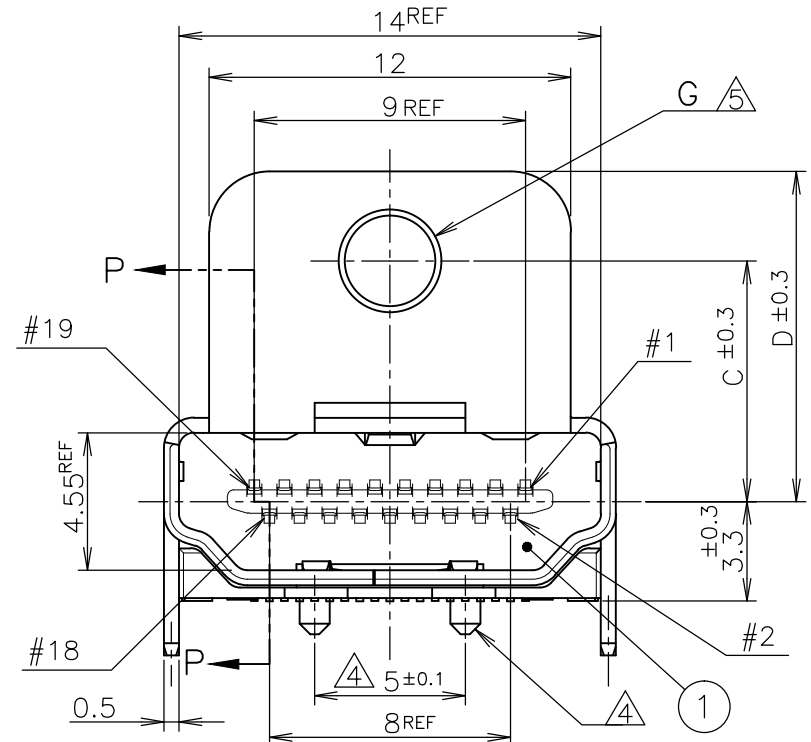
FINISH	MATERIAL	QTY	DISCRIPTION	ITEM
	POLYIMIDE	1	POLYIMIDE TAPE	④
	COPPER ALLOY	19	CONTACT	③
	COPPER ALLOY	1	SHELL	②
	THERMOPLASTIC UL94V-0, BLACK COLOR	1	HOUSING	①

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN		TE Connectivity	
DIMENSIONS: 單位: 耗 mm		CHK			
TOLERANCES UNLESS OTHERWISE SPECIFIED: 一般公差		APVD		NAME 名称	
0 PLC ± 0.2 1 PLC ± 0.2 2 PLC ± 0.2 3 PLC ± 0.2 4 PLC ± 0.2 ANGLES ± -		PRODUCT SPEC 製品規格 108-78180-1		HDMI 19 POS RECEPTACLE ASSY SMT TYPE -LEAD FREE-	
MATERIAL 材料		WEIGHT		SIZE	RESTRICTED TO
FINISH 仕上		CUSTOMER DRAWING		CAGE CODE	REV
				DRAWING NO 番号	SCALE 尺度
				A300779	4:1
				G-1747981	SHEET 6 of 8
					F5

LOC	DIST	REVISIONS					
		P	LTR	DESCRIPTION	DATE	DWN	APVD
J	/	-	-	SEE SHEET 1	-	-	-



P.C.B LAYOUT
SHOWN AS CONNECTOR MOUNTING SIDE
TOLERANCE: NON-CUMULATIVE
(REFERENCE)



PANEL CUT OUT DIMENSION
(REFERENCE)

CONNECTOR WITH FLANGE TYPE

NOTICE: THIS COMMUNICATION INCLUDES TE CONNECTIVITY CONFIDENTIAL OR PROPRIETARY INFORMATION THAT MAY ALSO BE LEGALLY PRIVILEGED.

FINISH	MATERIAL	QTY	DISCRIPTION	ITEM
	POLYIMIDE	1	POLYIMIDE TAPE	④
③	COPPER ALLOY	19	CONTACT	③
③	COPPER ALLOY	1	SHELL	②
	THERMOPLASTIC UL94V-0, BLACK COLOR	1	HOUSING	①

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: 単位: 耗 mm	TOLERANCES UNLESS OTHERWISE SPECIFIED: 一般公差
0 PLC	± 0.2
1 PLC	± 0.2
2 PLC	± 0.2
3 PLC	± 0.2
4 PLC	± 0.2
ANGLES	±
FINISH 仕上	

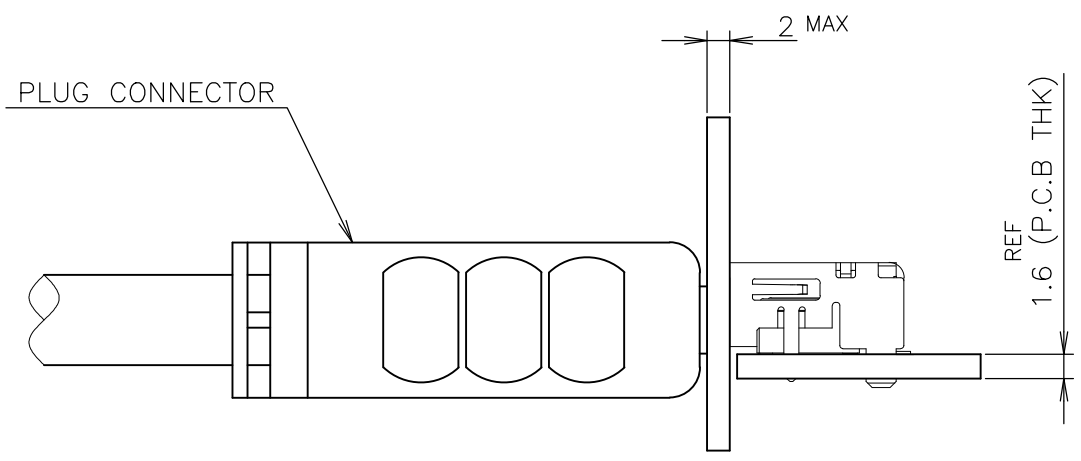
DWN
CHK
APVD
PRODUCT SPEC 製品規格 108-78180-1
APPLICATION SPEC 取付適用規格
WEIGHT
CUSTOMER DRAWING

STE TE Connectivity			
NAME 名称 HDMI 19 POS RECEPTACLE ASSY SMT TYPE -LEAD FREE-			
SIZE	CAGE CODE	DRAWING NO 番号 A300779 C-1747981	RESTRICTED TO
SCALE 尺度	NTS	SHEET 7 of 8	REV F5

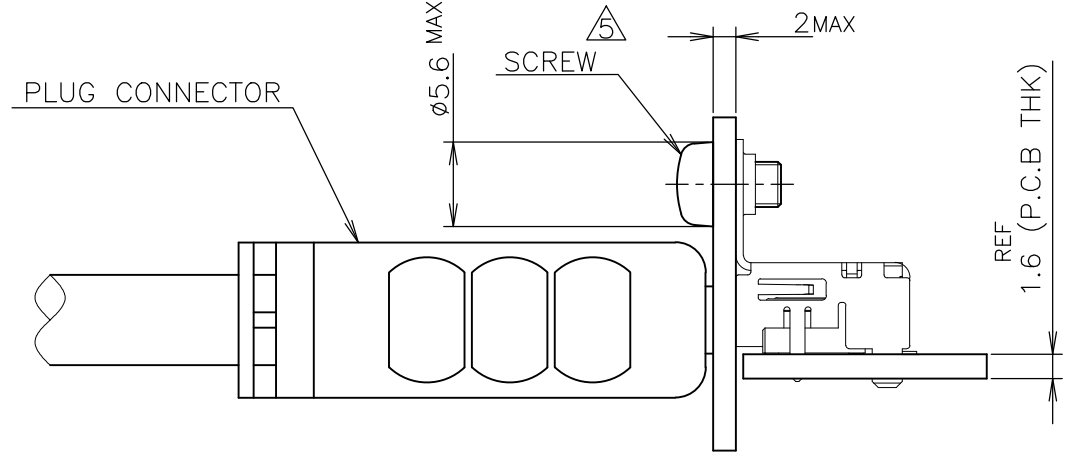
THIS DRAWING IS UNPUBLISHED. RELEASED FOR PUBLICATION SEP. 2005.
 © COPYRIGHT 2005 By - ALL RIGHTS RESERVED.

LOC	DIST	REVISIONS		
J	/	P	LTR	变更
				DESCRIPTION
				DATE
				DWN
				APVD
		-	SEE SHEET 1	-

NOTICE: THIS COMMUNICATION INCLUDES TE CONNECTIVITY CONFIDENTIAL OR PROPRIETARY INFORMATION THAT MAY ALSO BE LEGALLY PRIVILEGED.



CONNECTOR WITHOUT FLANGE TYPE



CONNECTOR WITH FLANGE TYPE

MATING CONDITION (REFERENCE)
(SCALE 2:1)

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN	TE Connectivity NAME 名称 HDMI 19 POS RECEPTACLE ASSY SMT TYPE -LEAD FREE-					
DIMENSIONS: 单位: 耗 mm		CHK				PRODUCT SPEC	SIZE	CAGE CODE
TOLERANCES UNLESS OTHERWISE SPECIFIED: 一般公差 0 PLC ± 0.2 1 PLC ± 0.2 2 PLC ± 0.2 3 PLC ± 0.2 4 PLC ± 0.2 ANGLES ± -		APVD				108-78180-1	DRAWING NO	RESTRICTED TO
		WEIGHT				取付適用規格	1747981	
MATERIAL 材料	FINISH 仕上	CUSTOMER DRAWING		SCALE 尺度	SHEET 8 of 8	REV F5		

Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «**JONHON**», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «**FORSTAR**».



JONHON

«**JONHON**» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«**FORSTAR**» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели,
кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



Телефон: 8 (812) 309-75-97 (многоканальный)

Факс: 8 (812) 320-03-32

Электронная почта: ocean@oceanchips.ru

Web: <http://oceanchips.ru/>

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, д. 2, корп. 4, лит. А