

THIS DRAWING IS UNPUBLISHED.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
			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

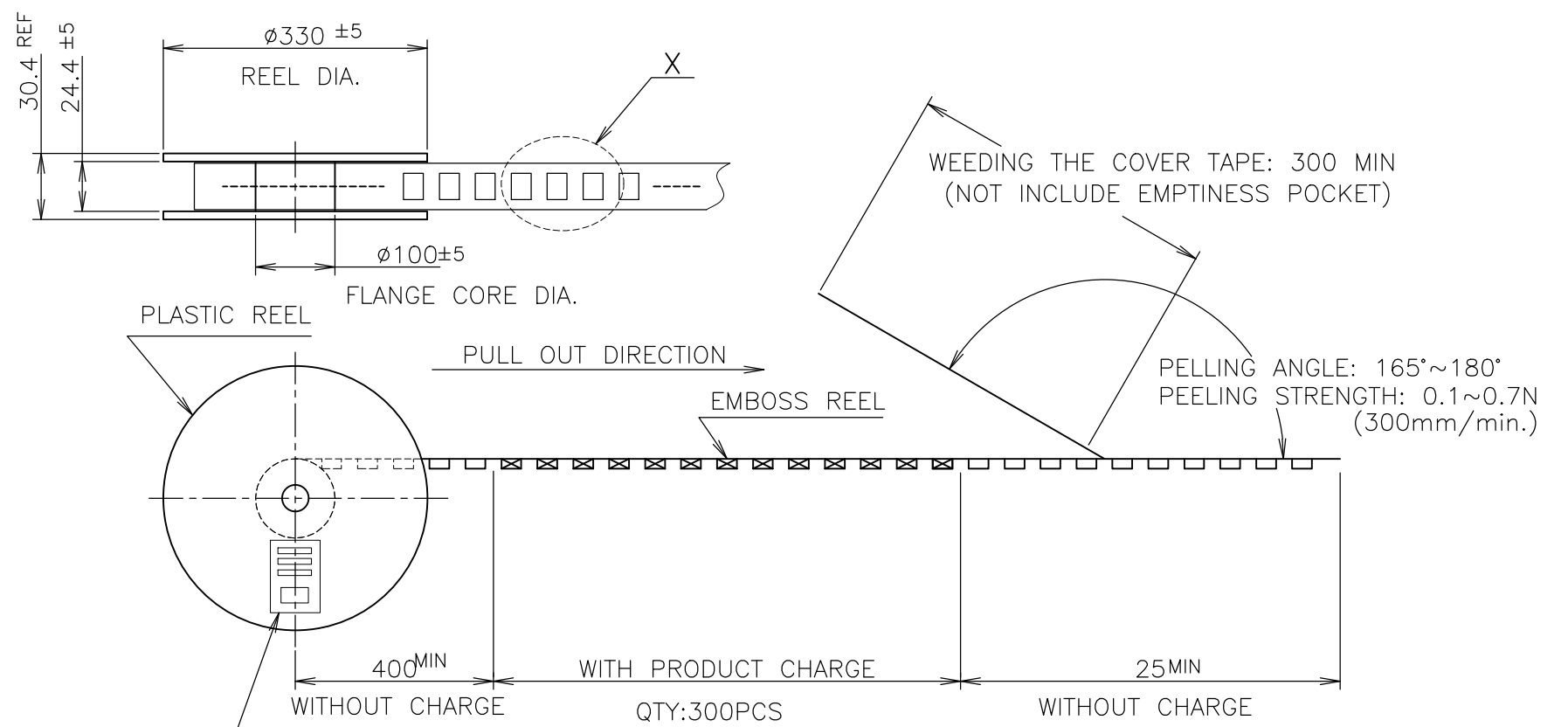
THIS DRAWING IS A CONTROLLED DOCUMENT.

DWN Y.HIRATA	15SEP2005	 <b>TE Connectivity</b> HDMI 19 POS RECEPTACLE ASSY SMT TYPE -LEAD FREE-
CHK T.KIMURA	15SEP2005	
APVD K.IKEGAMI	15SEP2005	
NAME 名称		
PRODUCT SPEC 製品規格	108-78180-1	SIZE CAGE CODE DRAWING NO 番号 <b>A3 00779 C-1747981</b>
APPLICATION SPEC 取付適用規格		
MATERIAL 材料	FINISH 仕上	RESTRICTED TO
CUSTOMER DRAWING		SCALE 尺度 NTS SHEET 1 OF 8 REV F5

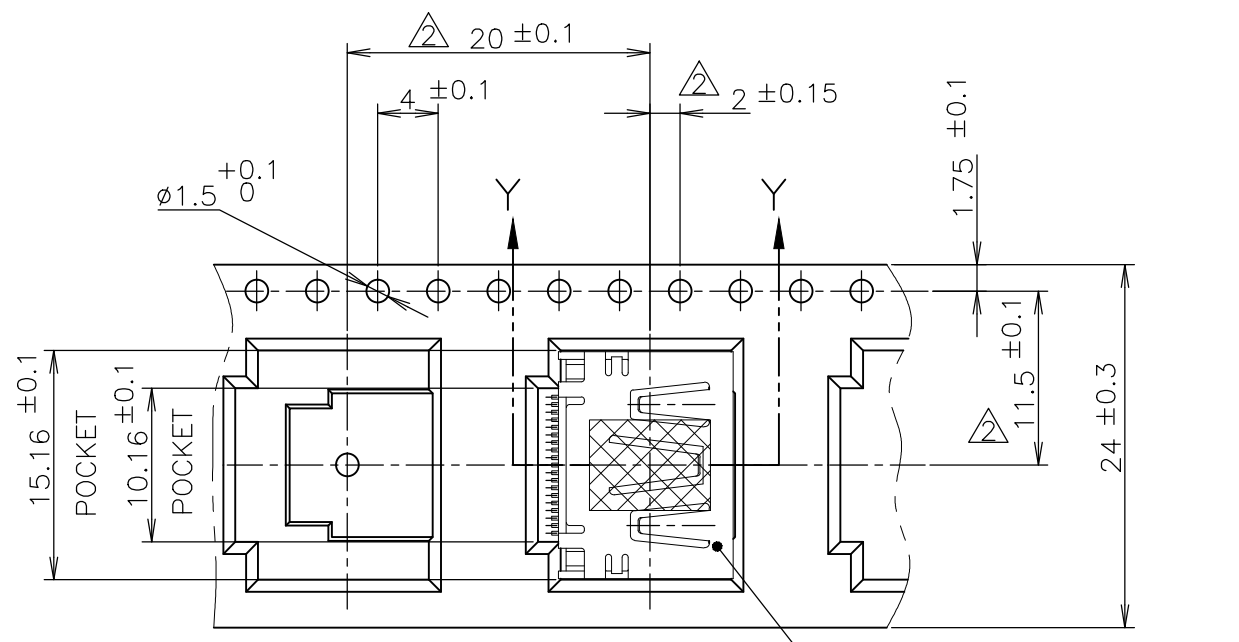
THIS DRAWING IS UNPUBLISHED. RELEASED FOR PUBLICATION SEP ,2005.  
 © COPYRIGHT 2005 By - ALL RIGHTS RESERVED.

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

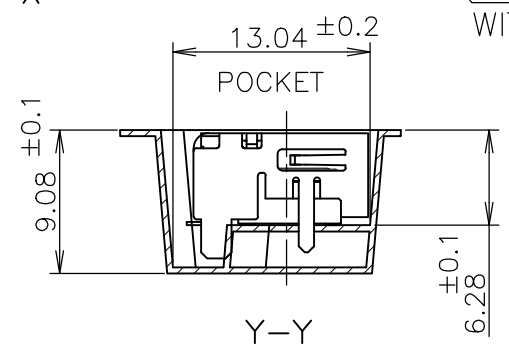
NOTICE: THIS COMMUNICATION INCLUDES TE CONNECTIVITY CONFIDENTIAL OR PROPRIETARY INFORMATION THAT MAY ALSO BE LEGALLY PRIVILEGED.



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



DETAIL X  
 CONNECTOR WITHOUT FLANGE TYPE



Y-Y

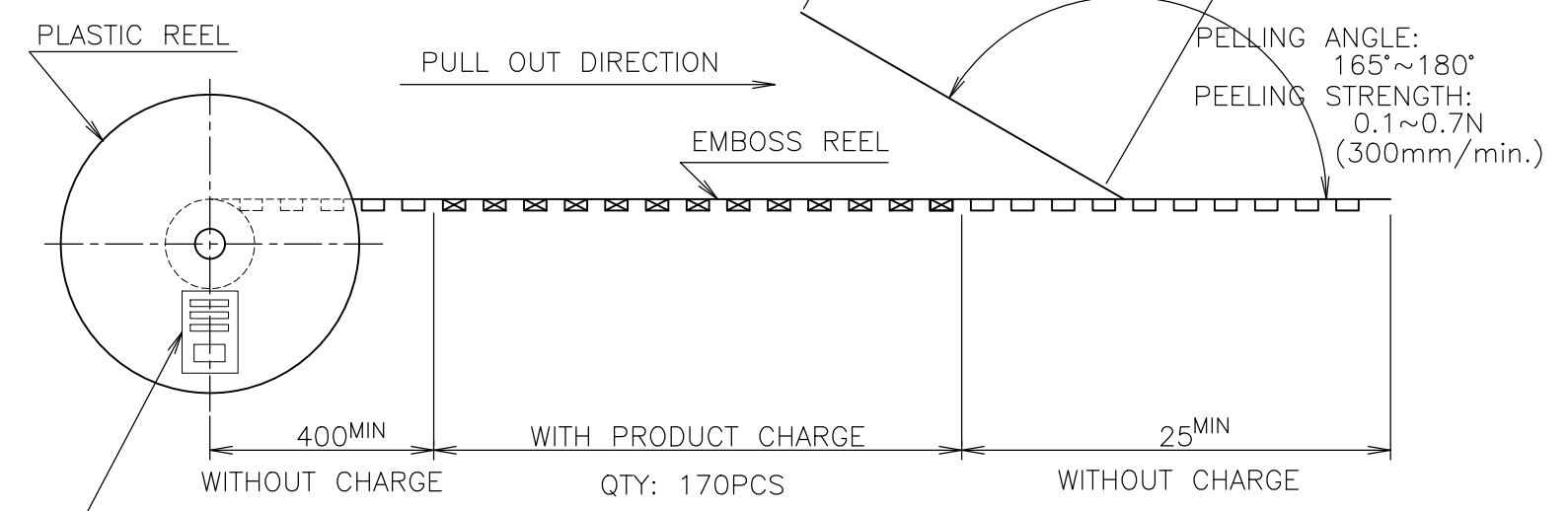
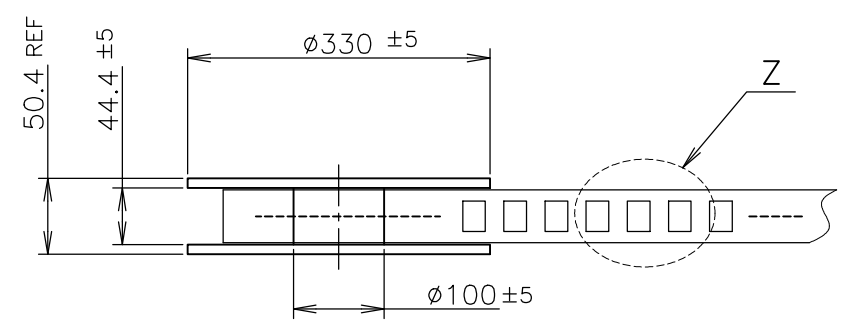
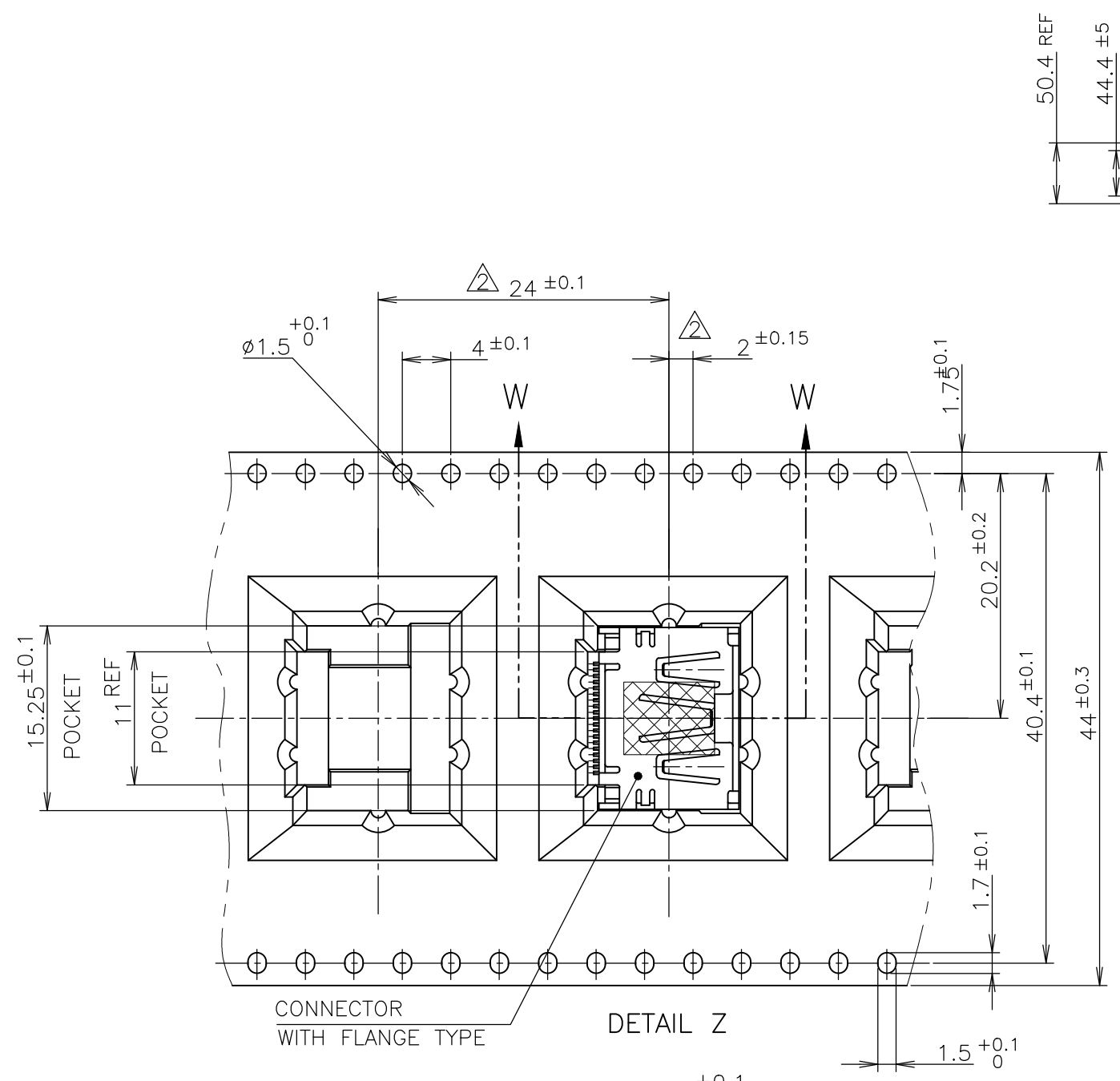
300	WITHOUT FLANGE TYPE	9-1747981-2
300	WITHOUT FLANGE TYPE	1747981-2
300	WITHOUT FLANGE TYPE	1747981-1
QTY	CONNECTOR TYPE	PART NUMBER

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 ± -		108-78180-1 APPLICATION SPEC 取付適用規格				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.

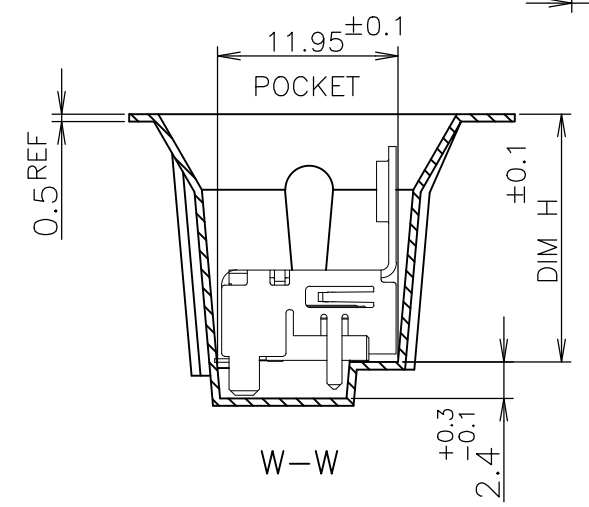
LOC	DIST	REVISIONS					
J	/	P	LTR	DESCRIPTION	DATE	DWN	APVD
		-		SEE SHEET 1	-	-	-

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



CONNECTOR WITH FLANGE TYPE

DETAIL Z

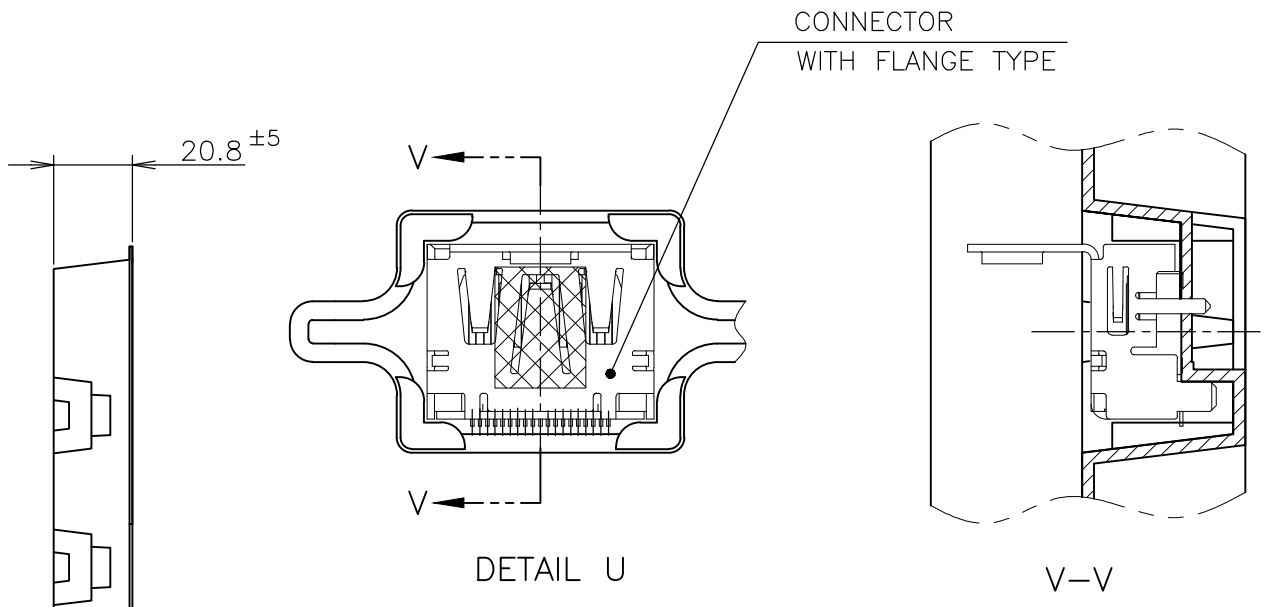
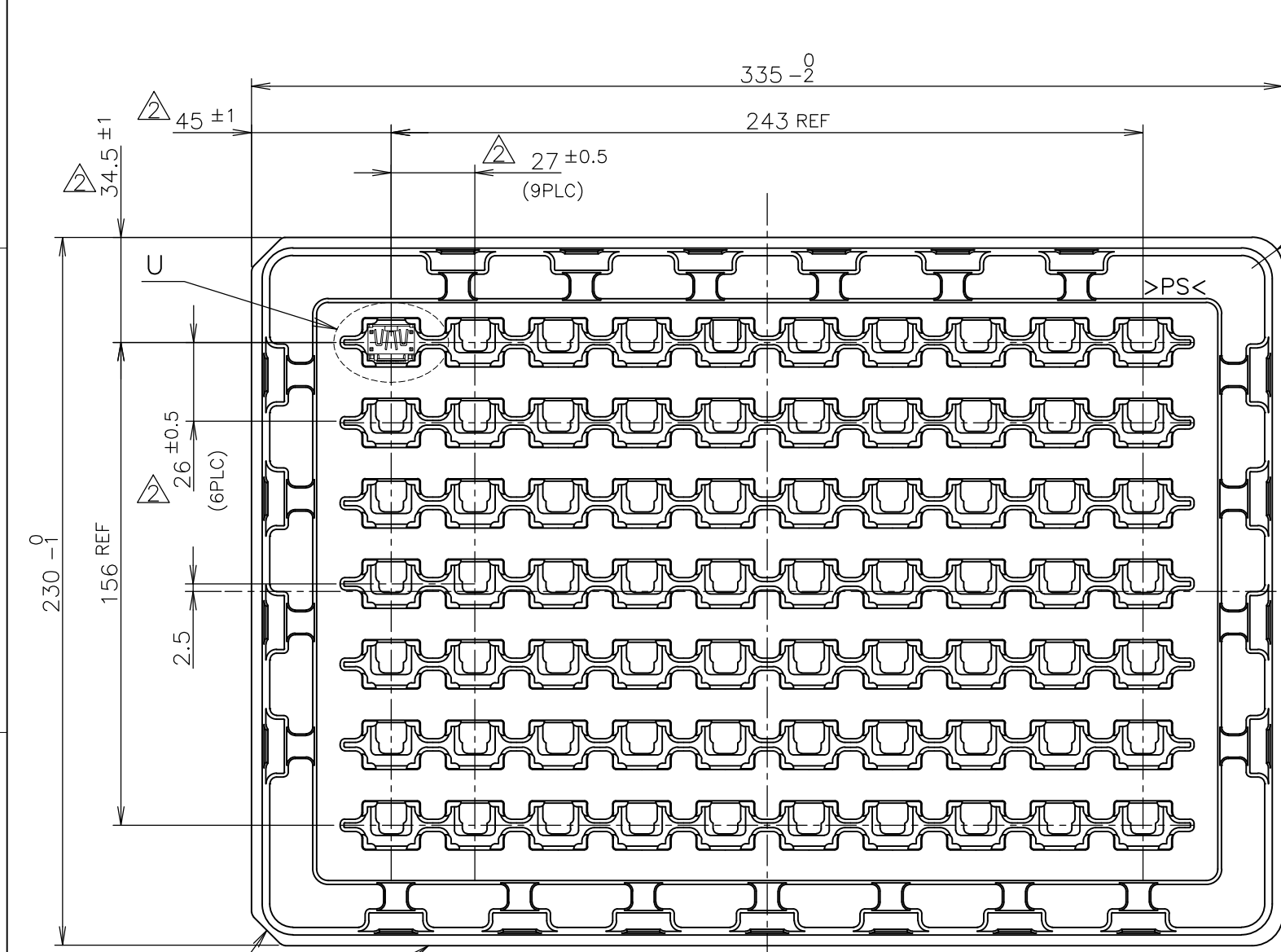


170	WITH FLANGE TYPE	8-1747981-2
170	WITH FLANGE TYPE	2-1747981-5
170	WITH FLANGE TYPE	2-1747981-4
170	WITH FLANGE TYPE	2-1747981-3
170	WITH FLANGE TYPE	1-1747981-7
170	WITH FLANGE TYPE	1-1747981-5
QTY	CONNECTOR TYPE	PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN	<b>STE</b> 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		108-78180-1		RECEPTACLE ASSY SMT TYPE	
2 PLC ± 0.2		APPLICATION SPEC 取付適用規格		-LEAD FREE-	
3 PLC ± 0.2		SIZE	CAGE CODE	DRAWING NO 番号	RESTRICTED TO
4 PLC ± 0.2		A3 00779		G-1747981	-
ANGLES ± -		CUSTOMER DRAWING		SCALE 尺度 NTS	SHEET 3 OF 8
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	-	-	-



10 x 45°  
 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

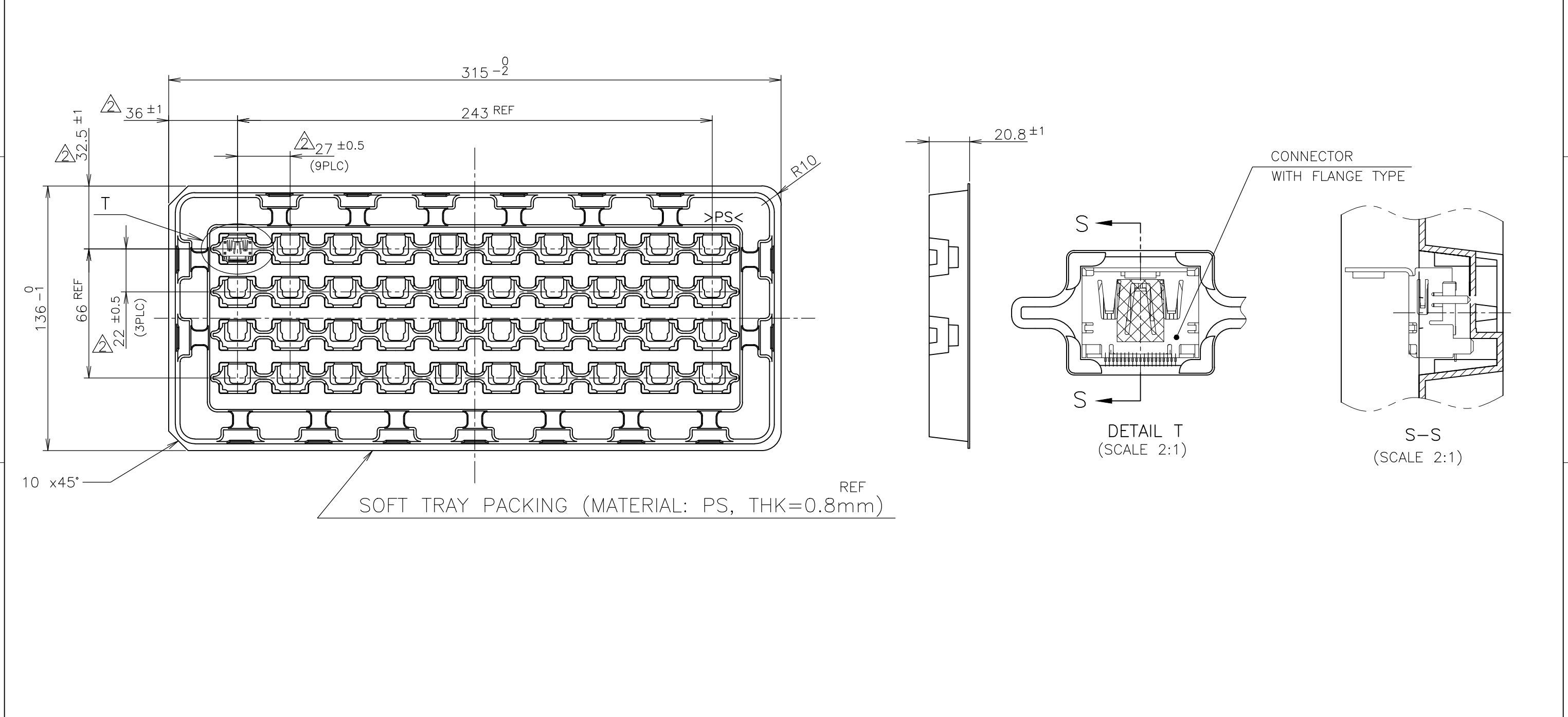
NOTICE: THIS COMMUNICATION INCLUDES TE CONNECTIVITY CONFIDENTIAL OR PROPRIETARY INFORMATION THAT MAY ALSO BE LEGALLY PRIVILEGED.

THIS DRAWING IS A CONTROLLED DOCUMENT.

DWN	TE Connectivity NAME 名称 HDMI 19 POS RECEPTACLE ASSY SMT TYPE -LEAD FREE-			
CHK				
APVD				
PRODUCT SPEC 製品規格 108-78180-1				
APPLICATION SPEC 取付適用規格	SIZE	CAGE CODE	DRAWING NO 番号 A3 00779 C-1747981	RESTRICTED TO
MATERIAL 材料	WEIGHT	SCALE 尺度 NTS		SHEET 4 OF 8
FINISH 仕上		CUSTOMER DRAWING		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 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
WEIGHT	A3	00779
CUSTOMER DRAWING	DRAWING NO 番号	RESTRICTED TO
	C-1747981	-
	SCALE 尺度 NTS	SHEET 5 OF 8
		REV F5

THIS DRAWING IS UNPUBLISHED.

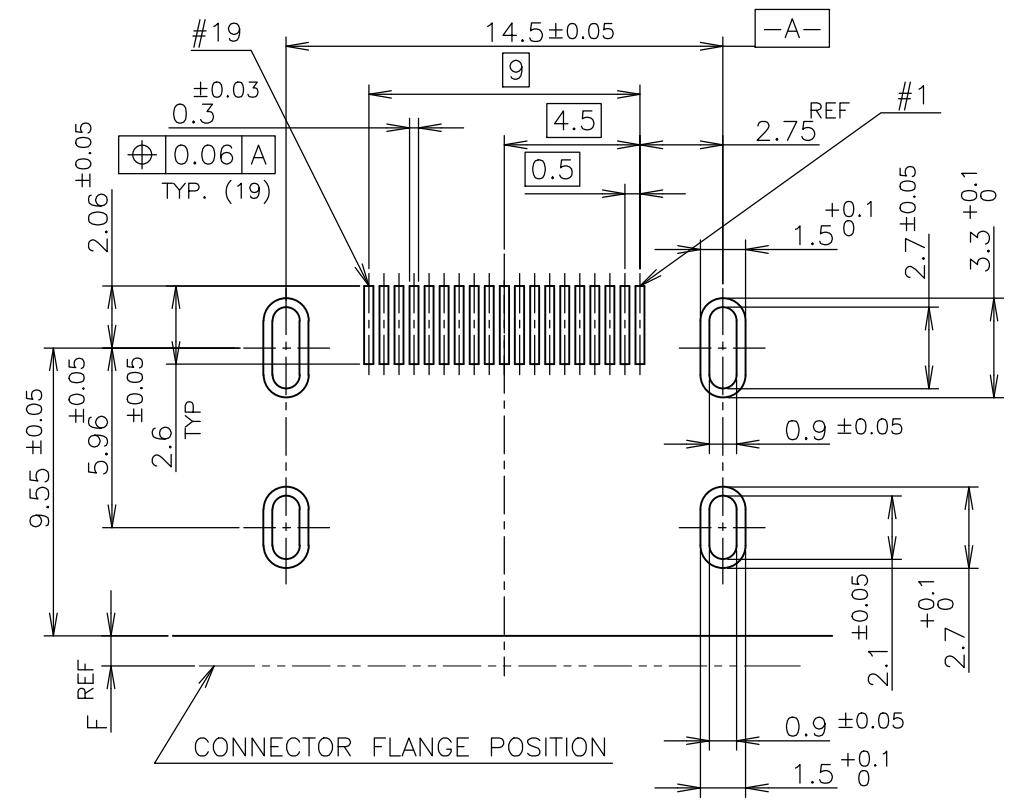
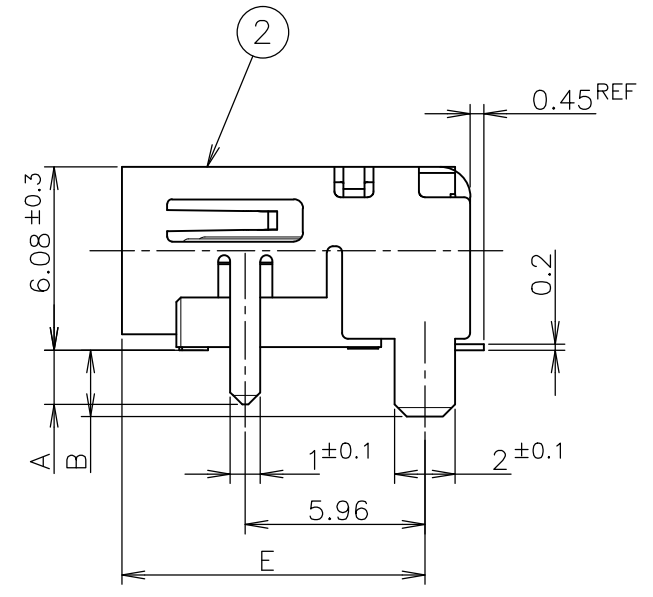
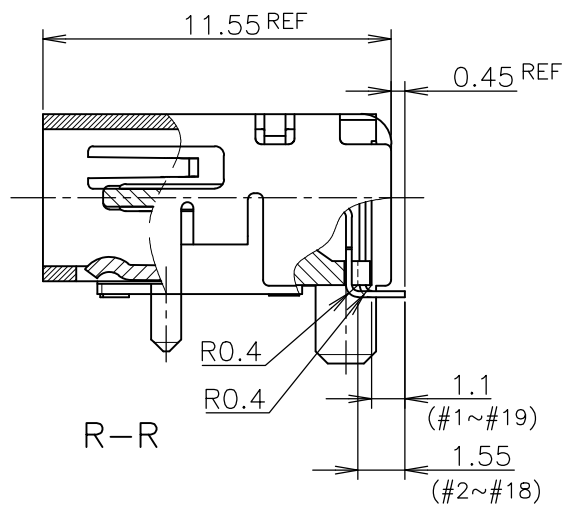
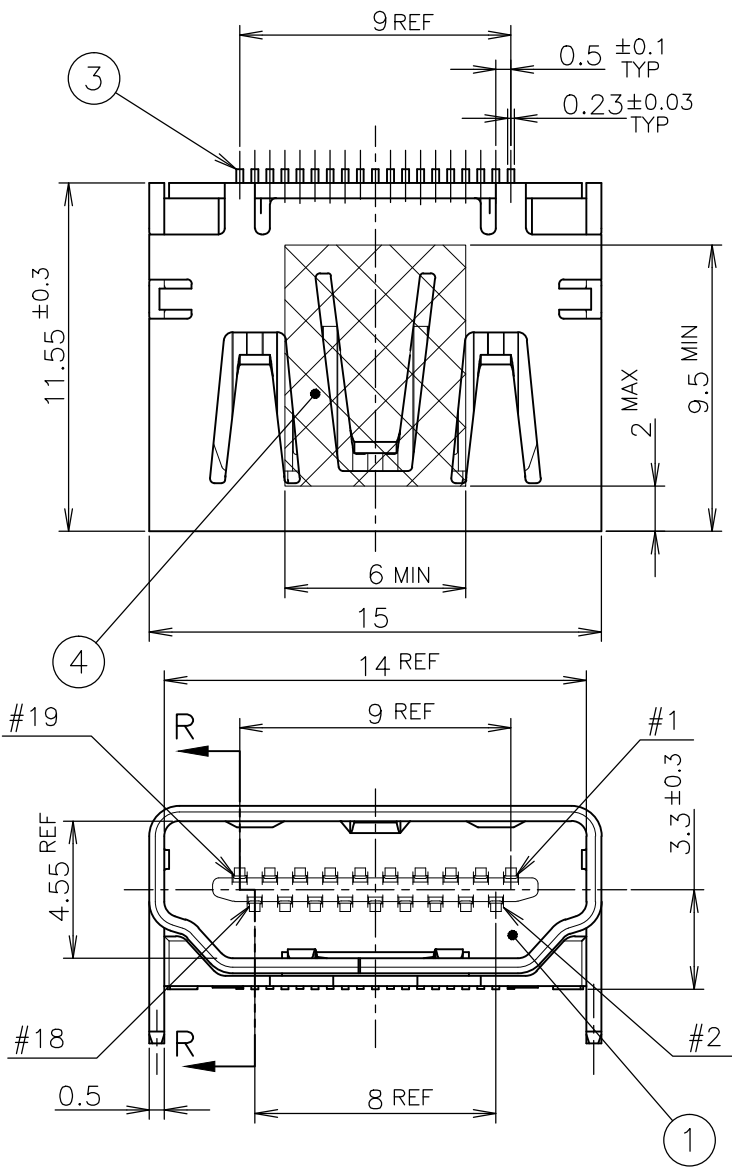
RELEASED FOR PUBLICATION

SEP. 2005.

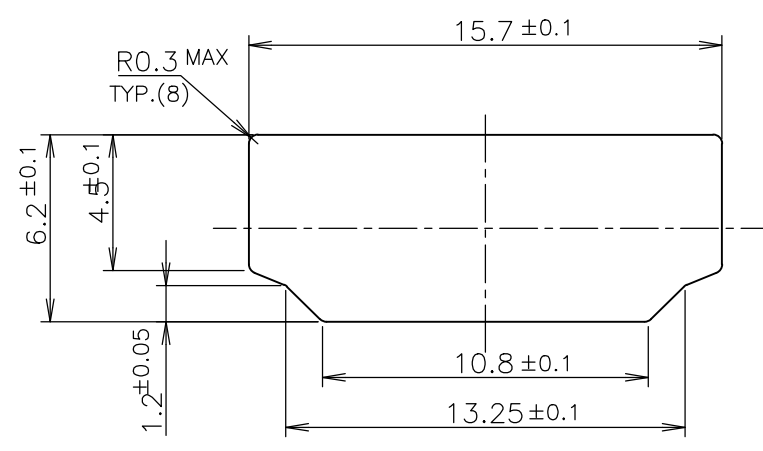
© COPYRIGHT 2005 By -

ALL RIGHTS RESERVED.

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	<b>STE</b> TE Connectivity	
DIMENSIONS: 單位: 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		WEIGHT	-LEAD FREE-	
3 PLC ± 0.2		CUSTOMER DRAWING	SIZE	RESTRICTED TO
4 PLC ± 0.2			A3	
ANGLES ±			CAGE CODE	DRAWING NO 番号
FINISH 仕上			00779	G-1747981
		SCALE 尺度	4:1	SHEET 6 of 8
		REV	F5	

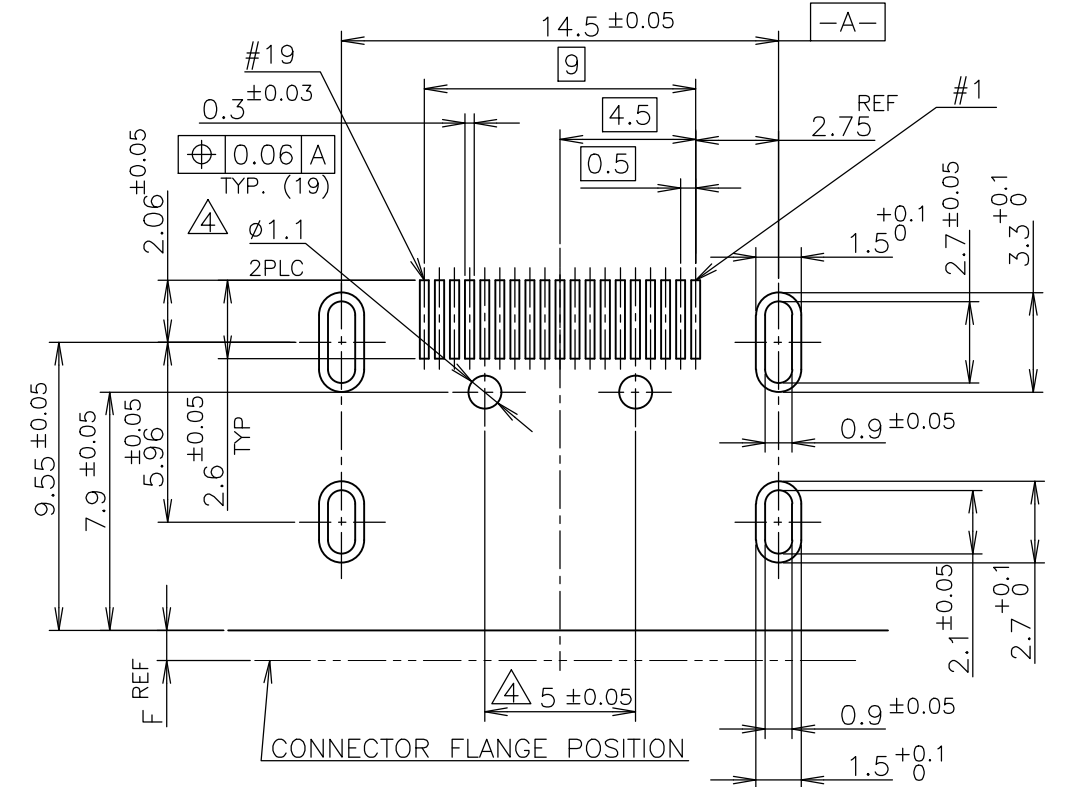
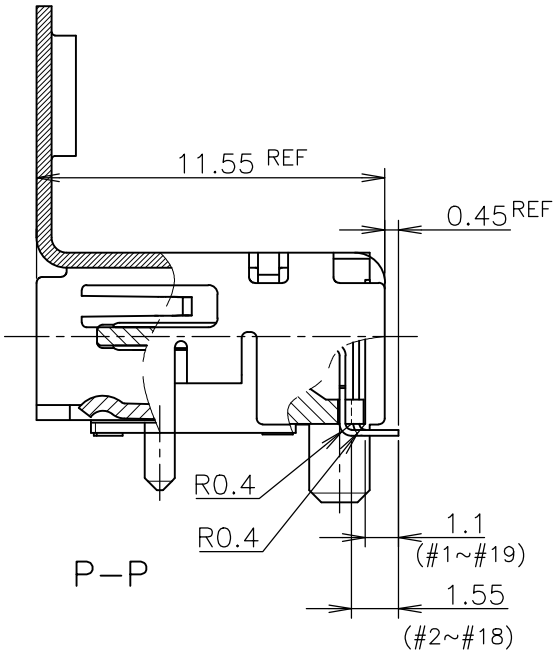
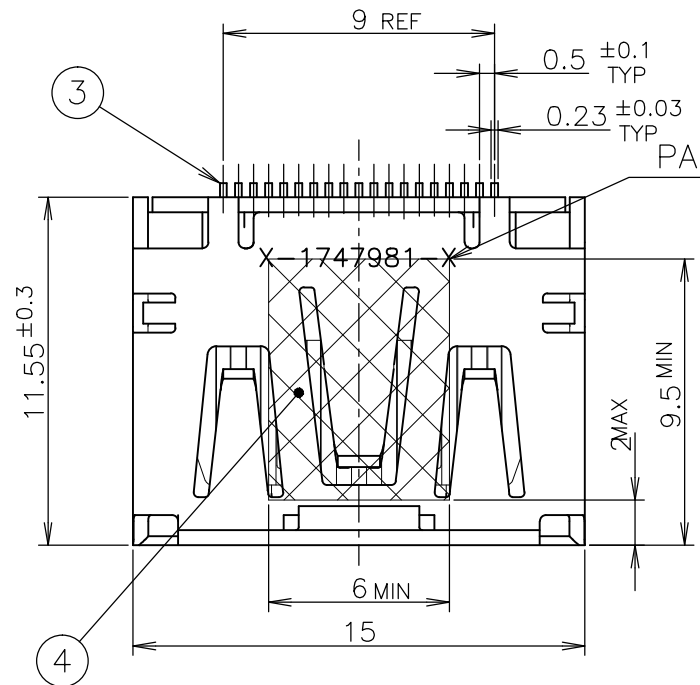
THIS DRAWING IS UNPUBLISHED.

RELEASED FOR PUBLICATION SEP. 2005.

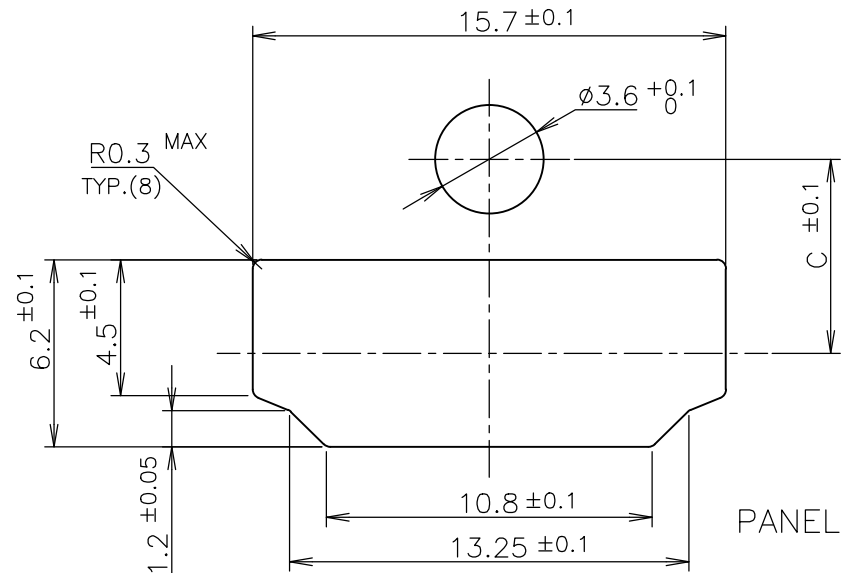
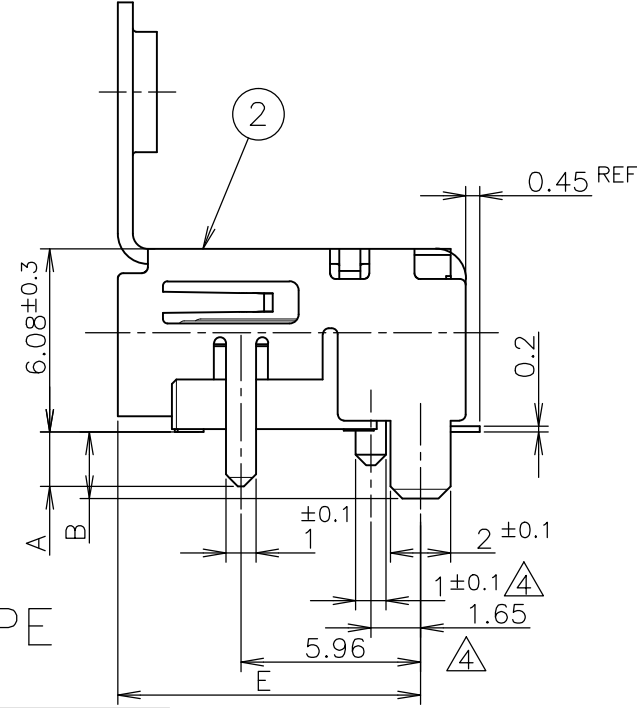
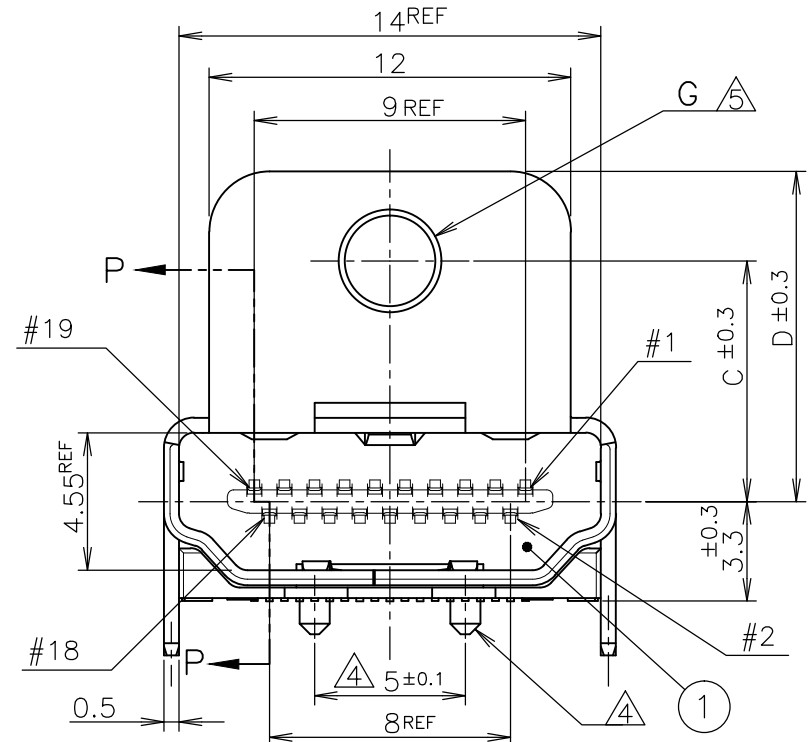
© COPYRIGHT 2005 By -

ALL RIGHTS RESERVED.

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
	COPPER ALLOY	19	CONTACT	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 ±
MATERIAL 材料	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

<b>STE</b> TE Connectivity			
NAME 名称 HDMI 19 POS RECEPTACLE ASSY SMT TYPE -LEAD FREE-			
SIZE	CAGE CODE	DRAWING NO 番号	RESTRICTED TO
A3	00779	C-1747981	-
SCALE 尺度 NTS		SHEET 7 of 8	REV F5

4

3

2

1

THIS DRAWING IS UNPUBLISHED.

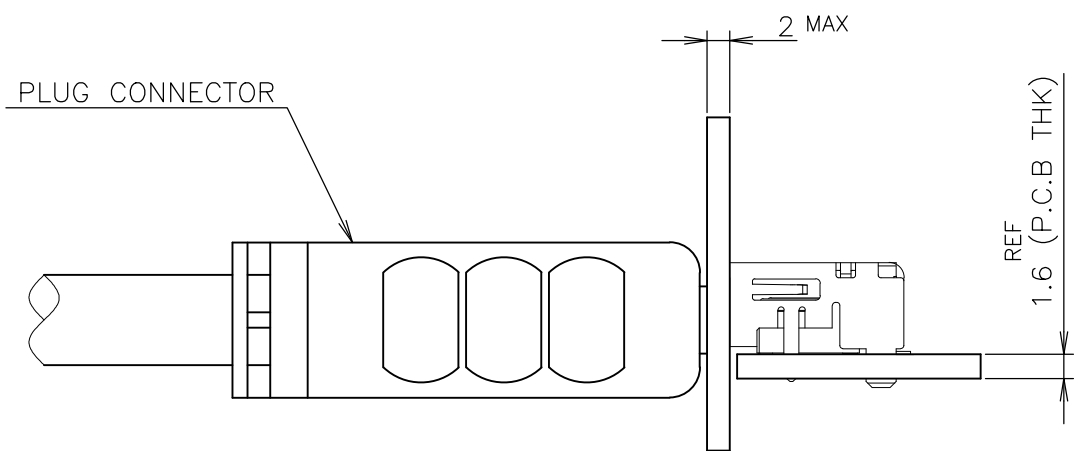
RELEASED FOR PUBLICATION SEP , 2005.

© COPYRIGHT 2005 By -

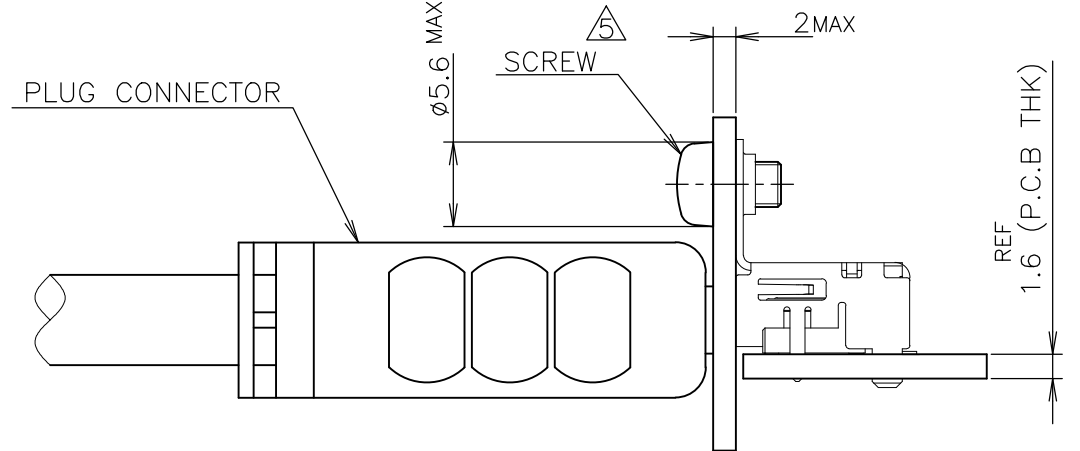
ALL RIGHTS RESERVED.

LOC	DIST	REVISIONS			DATE	DWN	APVD
J	/	P	LTR	DESCRIPTION			
		-		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					
DIMENSIONS: 単位: 耗 mm		CHK				NAME 名称		
TOLERANCES UNLESS OTHERWISE SPECIFIED: 一般公差		APVD				HDMI 19 POS RECEPTACLE ASSY SMT TYPE -LEAD FREE-		
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				SIZE	CAGE CODE	DRAWING NO 番号
MATERIAL 材料		WEIGHT	A3	00779	C-1747981			
FINISH 仕上		CUSTOMER DRAWING	SCALE 尺度 2:1		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](mailto:ocean@oceanchips.ru)

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

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