



- ✓ オートロック機構による簡単で信頼性の高い嵌合操作
- ✓ 高速伝送設計 (4+Gbps)
- ✓ 独自のW-Pointコンタクト構造による高い接触信頼性

Pin counts:

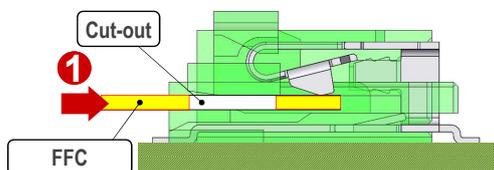
Range	20 - 60
Available	40, 50

*記載のない極数の対応状況についてはお問い合わせください。

Part number	20899
Board pitch (mm)	0.5
Height (mm)	3.65 +/- 0.1
Width formula (mm)	8.0+(0.5*?P)
Depth(mm)	7.0
Wiping length(mm)	1.2
FFC/FPC insertion depth (mm)	4.3
FFC/FPC type	Shield /Non-shielded FFC/FPC
FFC/FPC thickness(mm)	0.3 +/- 0.03
Contact point	Back
Compatibility (Footprint pattern)	Original
Current rating	0.5A/pin (7.5A/conn)
Supportable standard (Reference only)	V-by-One (4+ Gbps)
Operating condition	233~398 (-40°C~125°C) 85%RH max.

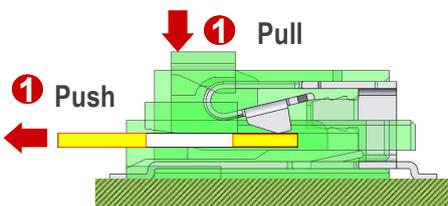
オートロック機構による簡単で信頼性の高い嵌合操作

ワンアクションFFC嵌合

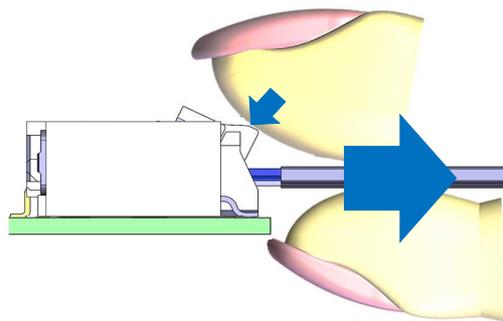


FFC 挿入

ワンアクションFFC抜去



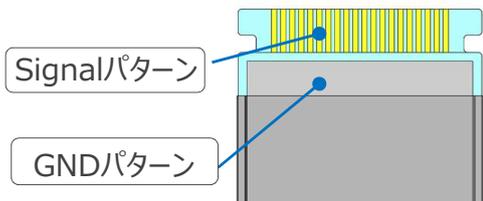
ロック解除とFFC抜去



FFCを掴む操作とロック解除操作が同時に行える

高速伝送設計 (4+Gbps)

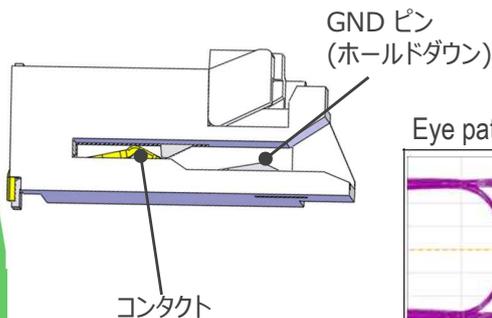
ホールダウンにGNDピンを設置しており、GND接続が可能
伝送速度ターゲット：4+Gbps(V-by-One対応)



推奨FFC形状

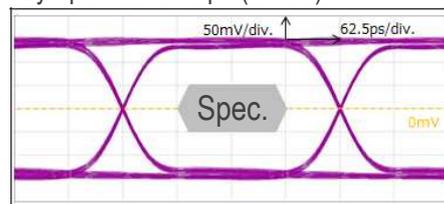


推奨基板パターン

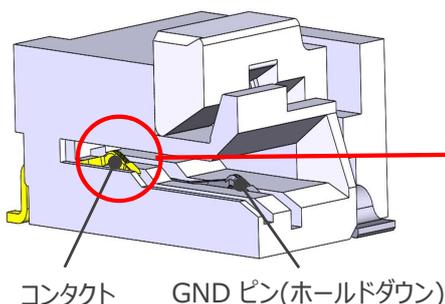


コンタクト

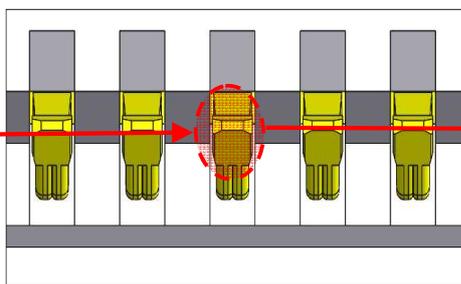
Eye pattern 4 Gbps (actual)



独自のW-Pointコンタクト構造による高い接触信頼性



コンタクト GNDピン(ホールダウン)



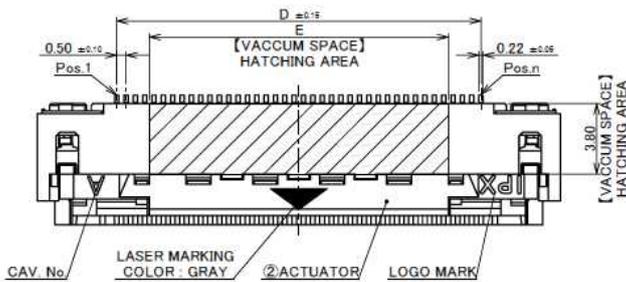
W-Pointコンタクト

W-Point コンタクト技術は、劣悪な接点環境下でもコンタクトとFFC/FPCの導体間の良好な接触抵抗値を維持可能です。一般的な単接点方式と比較して、より安定的な接触抵抗を維持可能です。

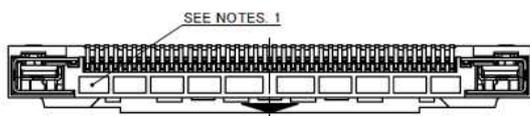
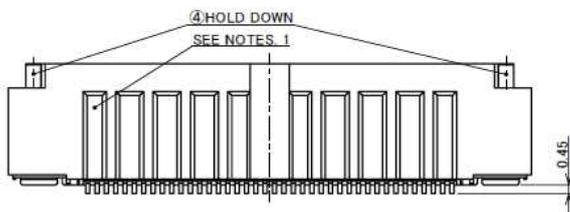
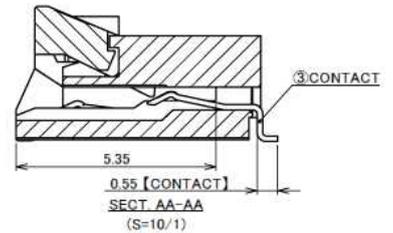
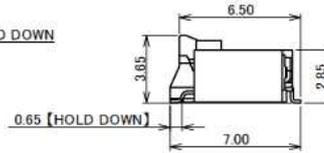
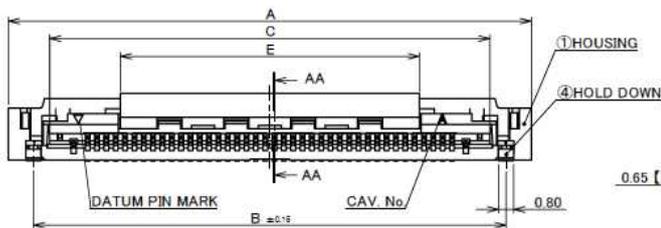
EVAFLEX[®] 5-SE-GHT

Component Parts Detail

Connector Assembly :



Recommended P/N	20899-0**E-01				
PART No.	A	B	C	D	E
20899-020E-01	18.00	15.30	13.56	9.50	6.00
20899-030E-01	23.00	20.30	18.56	14.50	11.00
20899-040E-01	28.00	25.30	23.56	19.50	16.00
20899-050E-01	33.00	30.30	28.56	24.50	21.00
20899-060E-01	38.00	35.30	33.56	29.50	26.00



NOTES.

- DENT SHAPE SHOWN ON DRAWING IS JUST FOR REFERENCE. DENT SHAPE AND QUANTITY MIGHT CHANGE FROM DIFFERENT PIN COUNT AND DIFFERENT TOOLING.

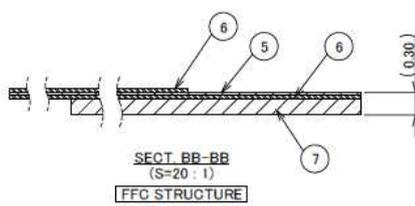
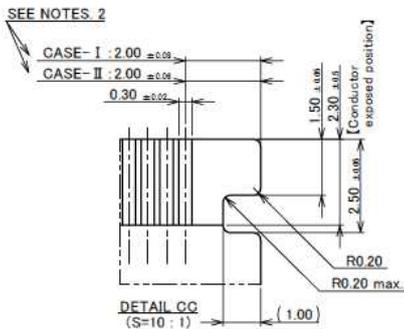
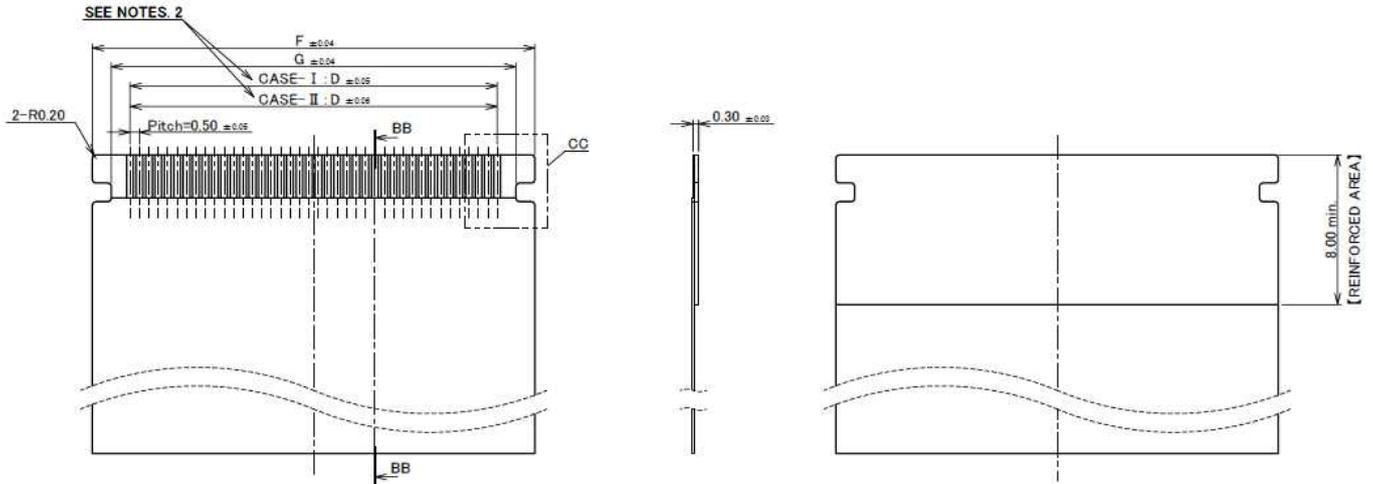
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
4	HOLD DOWN	CORSON ALLOY	SOLDERING AREA : Au 0.03 μ m MIN. OVER Ni 1.00 μ m MIN.
3	CONTACT	CORSON ALLOY	CONTACT AREA AND SOLDERING AREA : Au 0.03 μ m MIN. OVER Ni 1.00 μ m MIN.
2	ACTUATOR	LCP	UL94V-0. BEIGE
1	HOUSING	LCP	UL94V-0. BEIGE

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Connector Assembly :

PART No.	D	F	G
20899-020E-01	9.50	13.50	11.50
20899-030E-01	14.50	18.50	16.50
20899-040E-01	19.50	23.50	21.50
20899-050E-01	24.50	28.50	26.50
20899-060E-01	29.50	33.50	31.50

RECOMMENDED FFC LAYOUT 【NON SHIELDED TYPE】



NOTES.
2. MANUFACTURE CASE-I or II

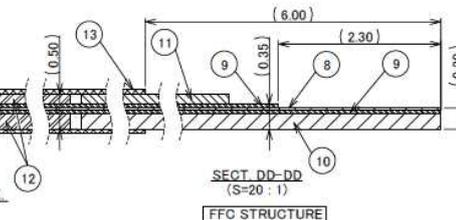
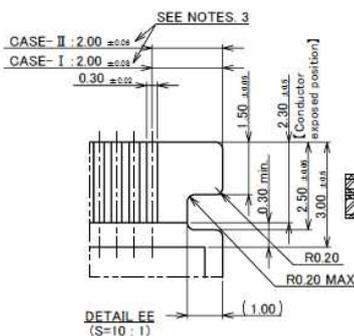
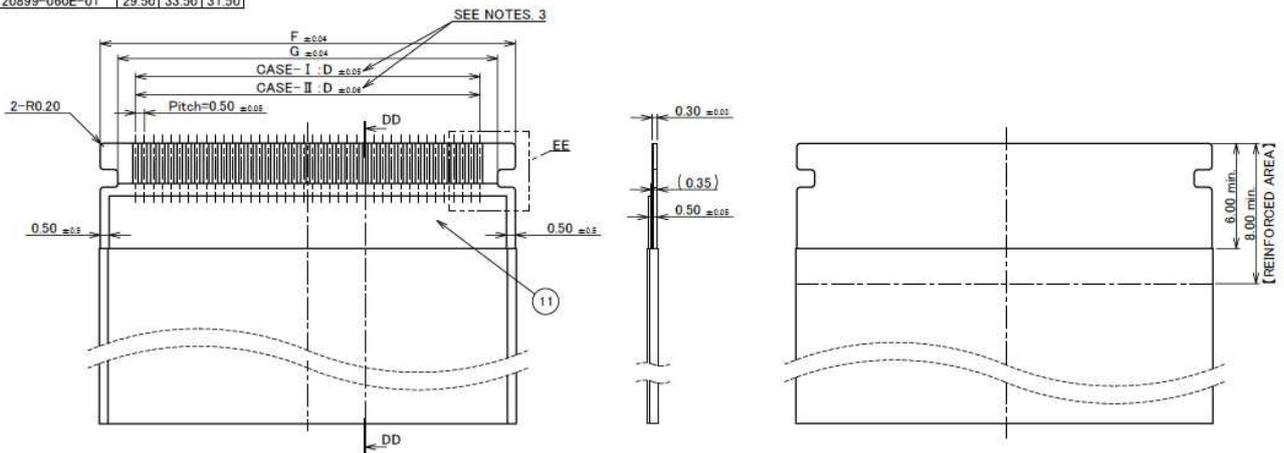
NO.	COMPONENTS	MATERIAL	FINISH
7	REINFORCED TAPE	ARBITRARY	
6	INSULATION FILM	ARBITRARY	
5	CONDUCTOR	COPPER ALLOY	CONTACT AREA : Au 0.05 μm MIN. OVER Ni 0.5 μm MIN.

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Connector Assembly :

PART No.	D	F	G
20899-020E-01	9.50	13.50	11.50
20899-030E-01	14.50	18.50	16.50
20899-040E-01	19.50	23.50	21.50
20899-050E-01	24.50	28.50	26.50
20899-060E-01	29.50	33.50	31.50

RECOMMENDED FFC LAYOUT 【SHIELDED TYPE】



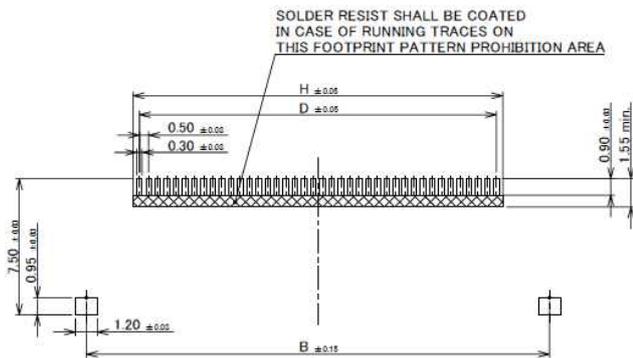
NOTES.
3. MANUFACTURE CASE-I or II
4. DIFFERENTIAL IMPEDANCE : 100 ± 10 Ω

NO.	COMPONENTS	MATERIAL	FINISH
13	SHIELD TAPE	METALLIC FILM	
12	INTERLAYER	ARBITRARY	
11	GROUND PLATE	METALLIC FILM	POLISH or HALF POLISH Sn PLATING
10	REINFORCED TAPE	ARBITRARY	
9	INSULATION FILM	ARBITRARY	
8	CONDUCTOR	COPPER ALLOY	CONTACT AREA : Au 0.05 μm MIN. OVER Ni 0.5 μm MIN.

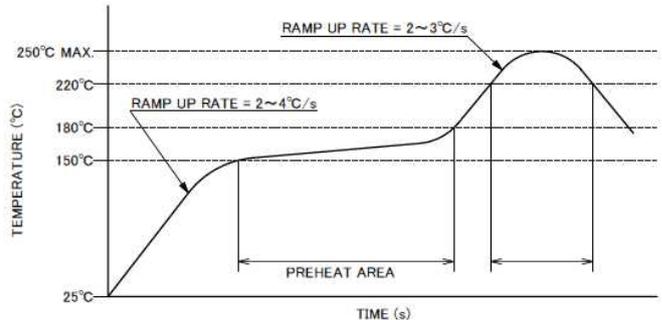
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Connector Assembly :

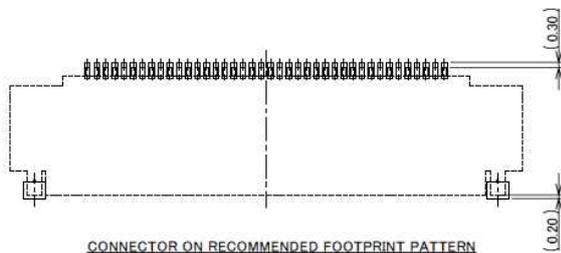
PART No.	B	D	H
20899-020E-01	15.30	9.50	10.20
20899-030E-01	20.30	14.50	15.20
20899-040E-01	25.30	19.50	20.20
20899-050E-01	30.30	24.50	25.20
20899-060E-01	35.30	29.50	30.20



RECOMMENDED PCB & METAL MASK LAYOUT
METAL MASK THICKNESS : t=0.12mm



REFLOW TEMPERATURE PROFILE
SENJU METAL INDUSTRY CO., LTD. M705-SHF(Sn96.5 Ag3.0 Cu0.5)



CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN

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Connector Assembly :

ITEMS	SPECIFICATION
RATING VOLTAGE	50V AC/DC (PER CONTACT)
RATING AMPERAGE	0.35A AC/DC (PER CONTACT) AVAILABLE FOR ALL CONTACTS 0.5A AC/DC (PER CONTACT) AVAILABLE UP TO 15 CONTACTS
OPERATING TEMPERATURE	233~398K(-40°C~+125°C)
OPERATING HUMIDITY	85% MAX.(NON-CONDENSING)
CONTACT RESISTANCE	INITIAL : 60mohm MAX. / AFTER TEST : \triangle 40mohm MAX.
INSULATION RESISTANCE	500Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC250V 1min
DURABILITY	50TH CYCLES
FPC/FFC MATING FORCE (INITIAL / 50TH CYCLES)	20P : 15.00 N MAX. 30P : 22.00 N MAX. 40P : 29.00 N MAX. 50P : 36.00 N MAX. 60P : 43.00 N MAX.
FPC/FFC UNMATING FORCE (INITIAL / 50TH CYCLES)	20P : 2.00 N MIN. 30P : 2.70 N MIN. 40P : 3.40 N MIN. 50P : 4.10 N MIN. 60P : 4.80 N MIN.
FPC/FFC RETENTION FORCE (INITIAL / AFTER TEST)	20P : 11.00 N MIN. 30P : 11.70 N MIN. 40P : 12.40 N MIN. 50P : 13.10 N MIN. 60P : 13.80 N MIN.
COPLANARITY	0.10 MAX.
PRODUCT SPECIFICATION	PRS-2470
TEST REPORT	TR-18020
PACKING STANDARD	PST-19019
INSTRUCTION MANUAL	HIM-18018

※ "n" IS THE NUMBER OF PIN

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