

EVAFLEX® 5-SE-G VT

One-handed auto-locking feature, high temperature (125°C), high-speed, vertical mate, 0.5 mm pitch shielded FFC/FFC connector



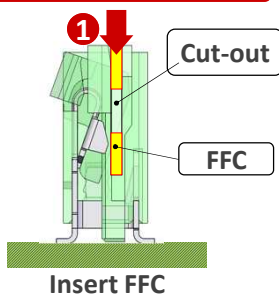
Product Specifications:

Board Pitch (mm)	0.5	FPC/FFC Type	Shielded FFC, Non-shielded FFC/FPC	
Wiping Length (mm)	1.2		FPC/FFC Contact Point	Signal contact tail side
Size (mm)	Height	6.6 +/- 0.30	FPC/FFC Thickness (mm)	0.30 +/- 0.03
	Width	Formula: 8.00 + (0.5*p)	Applicable Standards (Reference Only): eDP (2.7 Gbps) V-By-One HS 1.4 (4 Gbps)	
	Depth	3.90 +/- 0.20		
Pin counts	Range	20 - 60		
	Available	20, 30, 40, 50, 60		

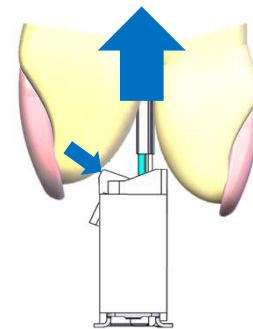
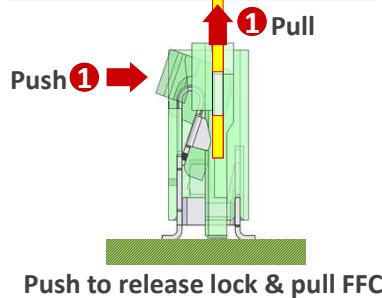
* Please inquire for pin counts not listed or outside of the pin count range.

► **One-handed operational auto-lock design, ideal for hand or robotic assembly**

One action FFC mating



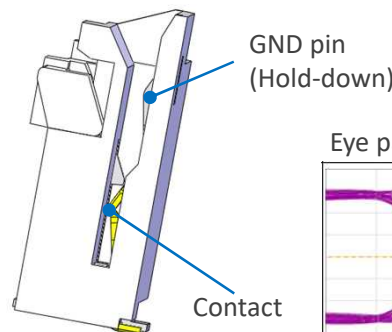
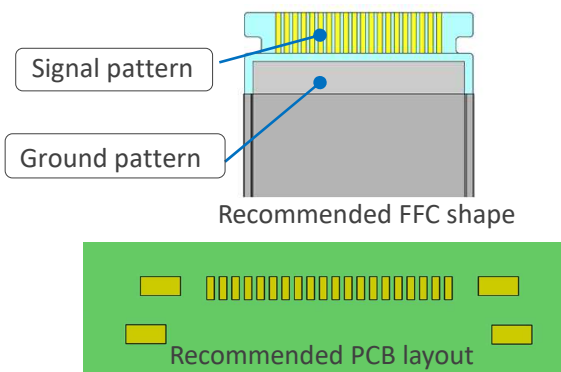
One action FFC removal



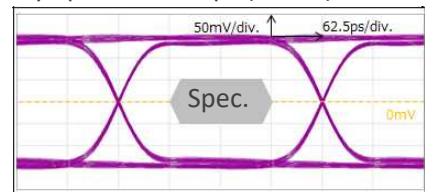
Release lock and pull FFC at same time for one-hand operation.

► **Designed for high-speed transmission with grounding contacts (4+ Gbps V-By-One® HS)**

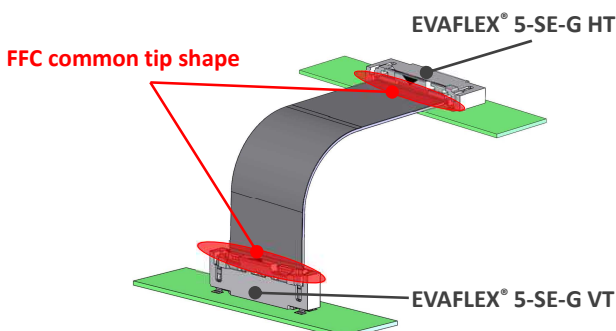
Extended hold down with GND pin for GND connection
Target speed : up to 4+ Gbps (V-By-One® HS)



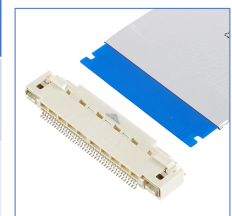
Eye pattern 4 Gbps (actual)



► **Horizontal mate type using same FFC option as EVAFLEX® 5-SE-G HT**



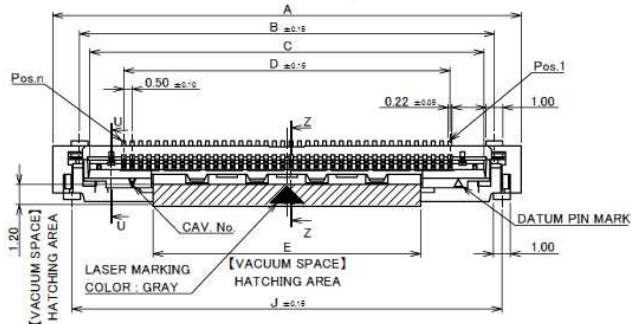
	EVAFLEX® 5-SE-G HT
Height (mm)	3.65 +/- 0.1
Depth (mm)	7.0



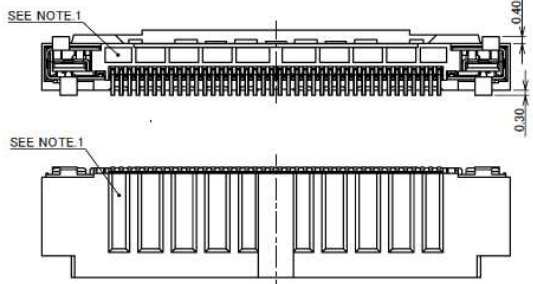
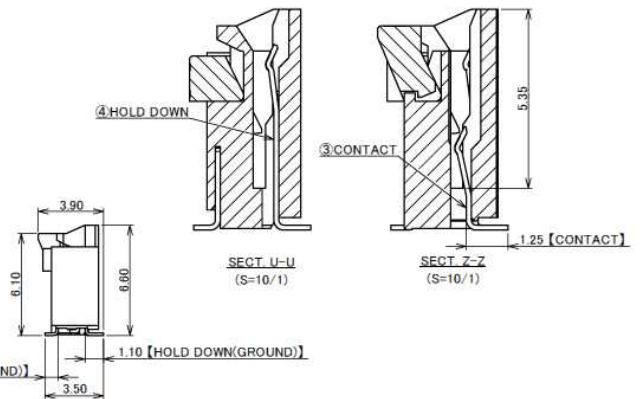
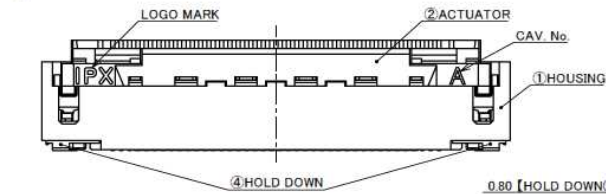
Component Parts Details

Connector Assembly

Recommended P/N 20799-0**E-01



PART No.	A	B	C	D	E	J
20799-020E-01	18.00	14.80	13.56	9.50	6.00	15.70
20799-030E-01	23.00	19.80	18.56	14.50	11.00	20.70
20799-040E-01	28.00	24.80	23.56	19.50	16.00	25.70
20799-050E-01	33.00	29.80	28.56	24.50	21.00	30.70
20799-060E-01	38.00	34.80	33.56	29.50	26.00	35.70



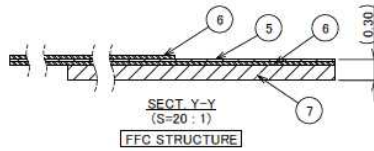
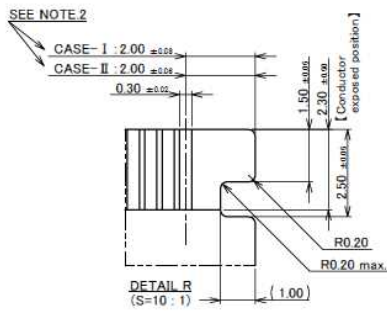
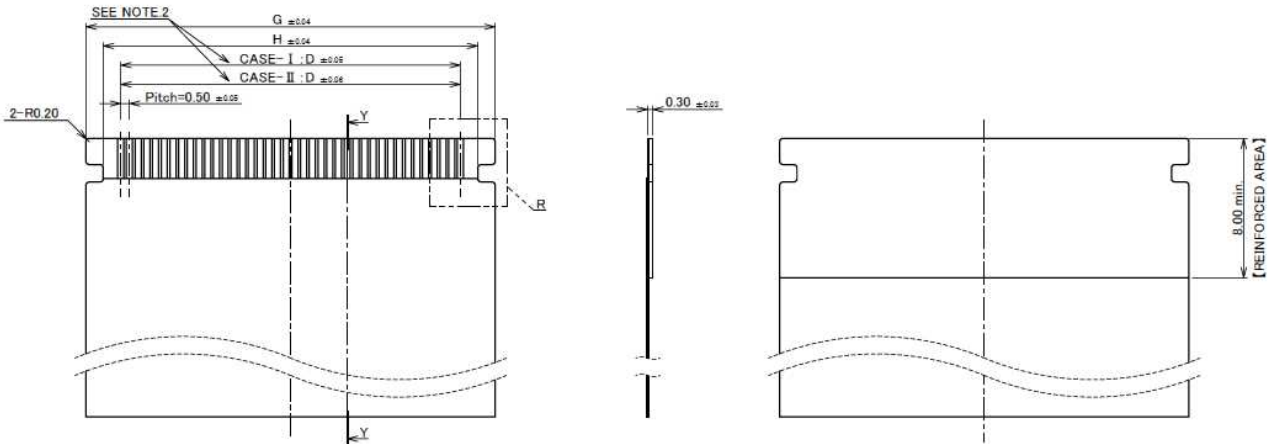
NOTES.
1. DENT SHAPE SHOWN ON DRAWING IS JUST FOR REFERENCE.
DENT SHAPE AND QUANTITY MIGHT CHANGE FROM DIFFERENT PIN COUNT AND DIFFERENT TOOLING.

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

Connector Assembly

PART No.	D	G	H
20799-020E-01	9.50	13.50	11.50
20799-030E-01	14.50	18.50	16.50
20799-040E-01	19.50	23.50	21.50
20799-050E-01	24.50	28.50	26.50
20799-060E-01	29.50	33.50	31.50

RECOMMENDED FFC LAYOUT 【NON SHIELDED TYPE】



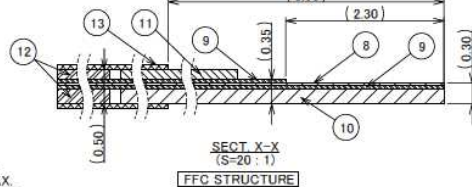
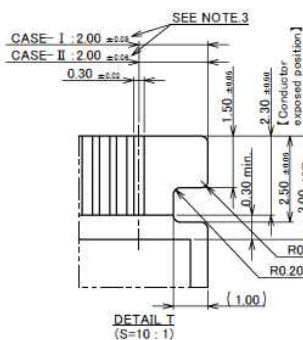
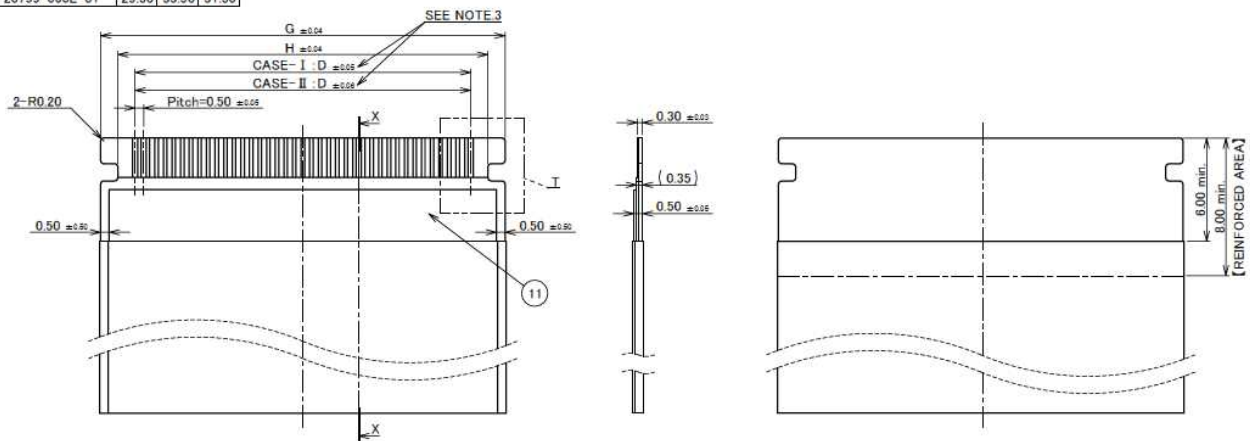
NOTES.
2. MANUFACTURE CASE-I or II

NO.	COMPONENTS	MATERIAL	FINISH
7	REINFORCED TAPE	ARBITRARY	
6	INSULATION FILM	ARBITRARY	
5	CONDUCTOR	COPPER ALLOY	CONTACT AREA : $A_{cu} \geq 0.05 \mu m$ MIN. OVER N : $0.5 \mu m$ MIN.

3v.8

PART No.	D	G	H
20799-020E-01	9.50	13.50	11.50
20799-030E-01	14.50	18.50	16.50
20799-040E-01	19.50	23.50	21.50
20799-050E-01	24.50	28.50	26.50
20799-060E-01	29.50	33.50	31.50

RECOMMENDED FFC LAYOUT 【SHIELDED TYPE】



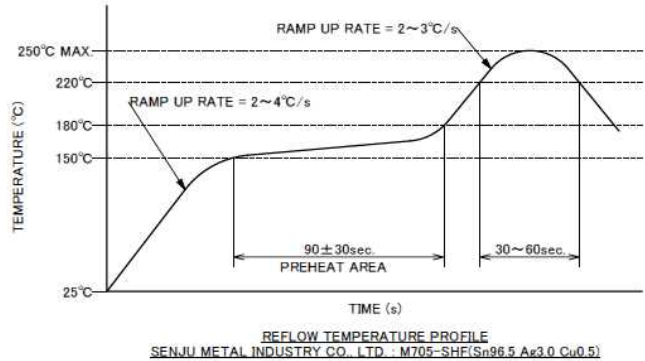
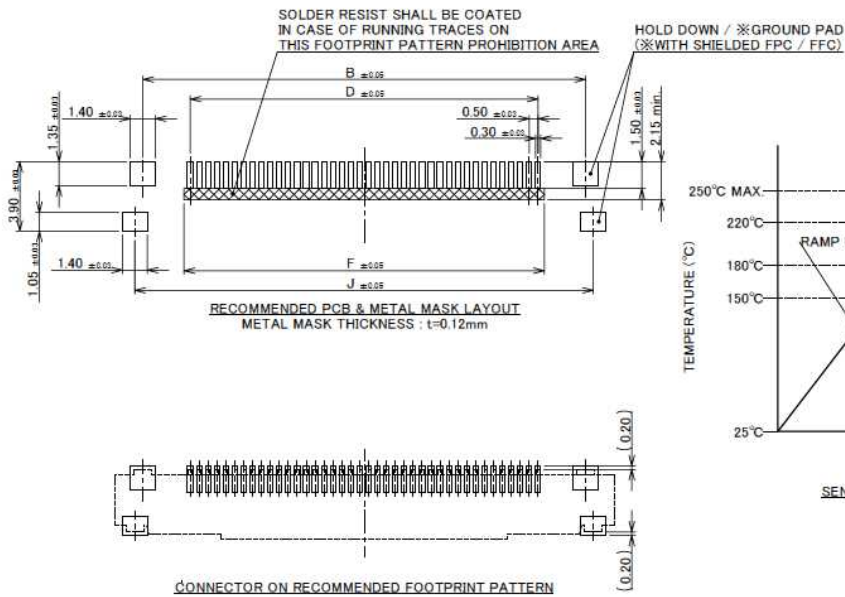
NOTES.
3. MANUFACTURE CASE-I or II
4. DIFFERENTIAL IMPEDANCE : $100 \pm 10 \Omega$

NO.	COMPONENTS	MATERIAL	FINISH
13	SHIELD TAPE	METALLIC FILM	
12	INTERLAYER	ARBITRARY	
11	GROUND PLATE	METALLIC FILM	POLISH or HALF POLISH S_n PLATING
10	REINFORCED TAPE	ARBITRARY	
9	INSULATION FILM	ARBITRARY	
8	CONDUCTOR	COPPER ALLOY	CONTACT AREA : $A_{cu} \geq 0.05 \mu m$ MIN. OVER N : $0.5 \mu m$ MIN.

Rev.8

Connector Assembly

PART No.	B	D	F	J
20799-020E-01	14.80	9.50	10.20	15.70
20799-030E-01	19.80	14.50	15.20	20.70
20799-040E-01	24.80	19.50	20.20	25.70
20799-050E-01	29.80	24.50	25.20	30.70
20799-060E-01	34.80	29.50	30.20	35.70



Rev.#

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 : \triangleleft40mohm 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-2305
TEST REPORT	TR-17100
PACKING STANDARD	PST-18002
INSTRUCTION MANUAL	HIM-16039
APPEARANCE CRITERIA No.	QLS-A***

Rev.8

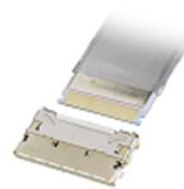
Board to Board



High-Density



Autolocking FPC/FFC



High-Density



FPC/FFC



Micro-Coaxial / Discrete Cable



High-Speed



RF



High-Frequency



Optical Module



High-Speed



Power



High-Power



I/O (Input/Output)



Quick charge



Effector



Custom Connectors Available

Inquiry



I-PEX, MHF, CABLINE, NOVASTACK, EVAFLEX, MINIFLEX, ISH, IARPB, IASLP, ESTORQ, ISFIT, i-Fit and ZenShield are registered trademarks of I-PEX Inc. Please note that the contents in the catalog might be changed without prior notification. I-PEX Inc. assumes no responsibility for any inaccuracies or obligation to update information on these documents. Please be sure to read and understand the latest "Precautions for Use" and "Instruction Manual" before you use our products. We shall not be responsible for any defects, damages or troubles in case you use our products without following the precautions for use. Please feel free to contact our sales representatives when you use our products for any applications that require very high reliability and safety, or that relate to human life (ex. nuclear power control, aerospace, transportation, medical equipment, safety equipment etc.).

Contact your sales representative or more detailed information.

www.i-pex.com



I-PEX

© I-PEX Inc. 2022
All rights reserved.