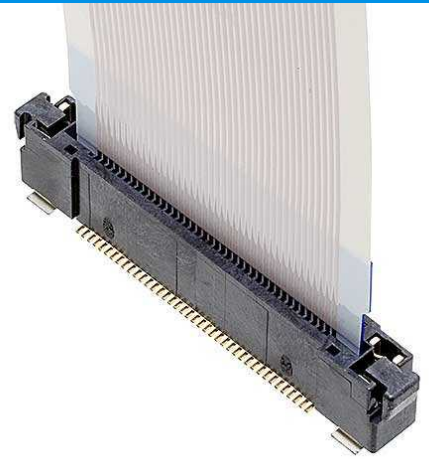


# EVAFLEX® 5-SE VT

Auto-Lock, 수직 결합, 0.5 mm Pitch, FFC/FPC 커넥터



## Product Specifications:

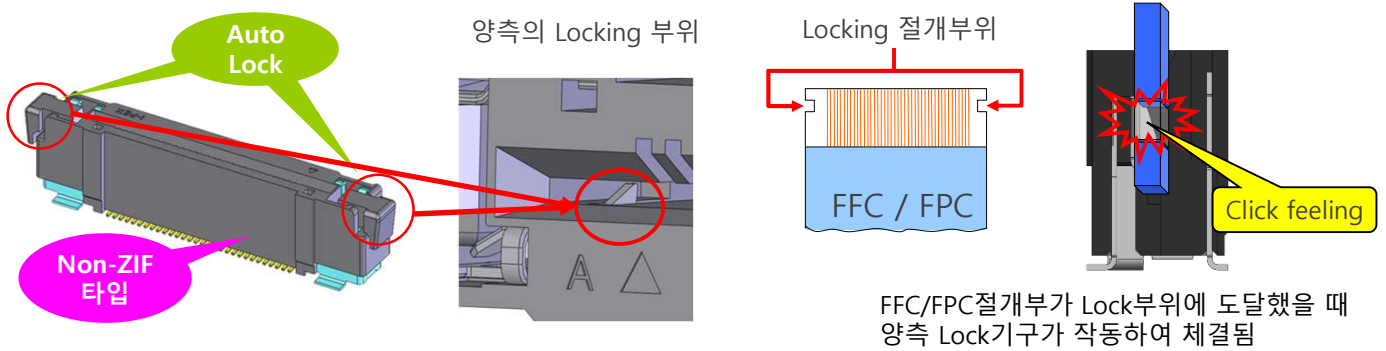
Board Pitch (mm)	0.5	
Wiping Length (mm)	1.2	
Size (mm)	Height	6.00 +/- 0.30
	Width	Formula: 11.5 + (0.5*?p)
	Depth	4.50 +/- 0.20
Pin counts	Range	10 - 80
	Available	16, 22, 24, 26, 30, 40, 45, 50, 60, 80

## Applicable FPC/FFC:

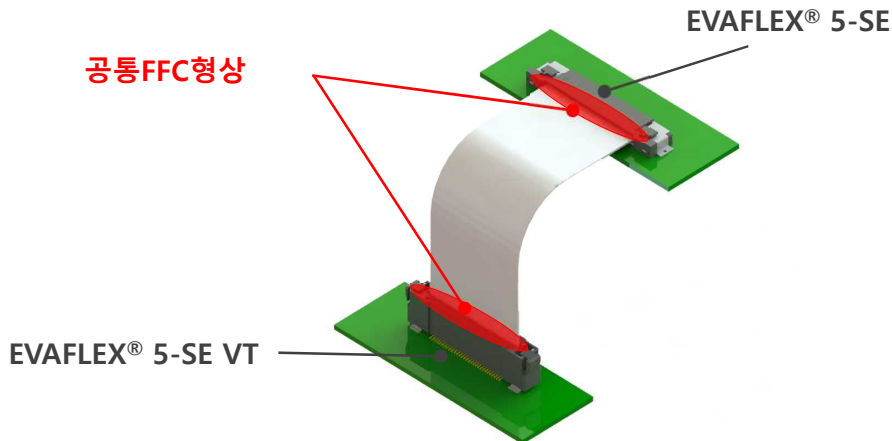
FPC/FFC Type	Non-shielded FFC/FPC
FPC/FFC Contact Point	Signal contact tail side
FPC/FFC Thickness (mm)	0.30 +/- 0.05

\*기재가 되어있지 않은 핀 수의 대응 여부에 대해서는 문의해 부탁드립니다.

## ▶ 체결 작업이 용이한 Auto Lock 디자인. 수작업 또는 로봇에 의한 조립 작업에 최적



## ▶ 동일한 FFC가 사용 가능한 Horizontal 타입(EVAFLEX® 5-SE) 옵션도 보유



## ▶ 확장성이 높은 EVAFLEX® 시리즈로 Auto-Lock을 비롯한 다양한 옵션에 대응 고속전송 & 고온대응커넥터 (125°C) : EVAFLEX® 5-SE-G VT

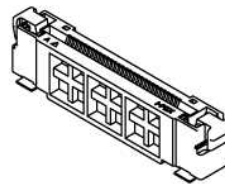
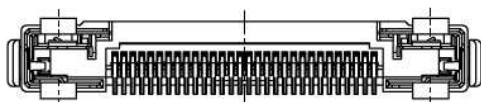
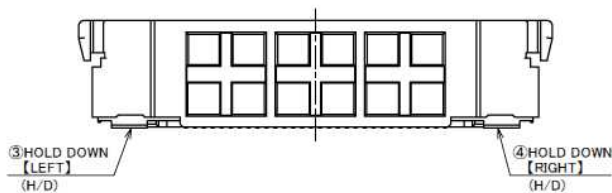
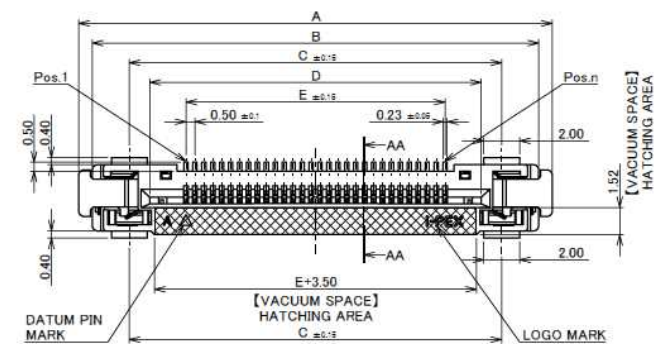
	EVAFLEX® 5-SE-G VT
Height (mm)	6.60 +/- 01
Operation Temperature	up to 125°C
Reference Performance	V-by-one HS 1.4 (4+ Gbps)



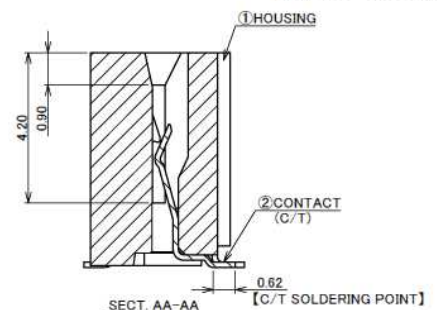
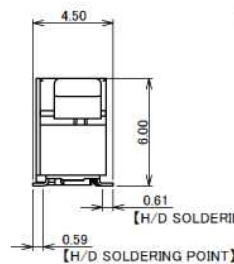
# Component Parts Details

## Connector Assembly

Recommended P/N 20539-0\*\*E-01



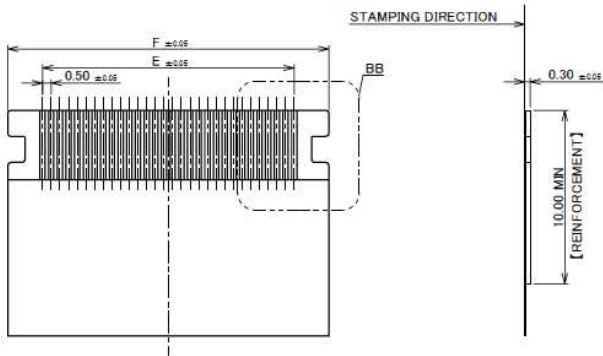
PART NO.	Pos.	A	B	C	D	E
20539-016E-01	16	19.50	17.98	13.84	11.56	7.50
20539-022E-01	22	22.50	20.98	16.84	14.56	10.50
20539-024E-01	24	23.50	21.98	17.84	15.56	11.50
20539-026E-01	26	24.50	22.98	18.84	16.56	12.50
20539-030E-01	30	26.50	24.98	20.84	18.56	14.50
20539-040E-01	40	31.50	29.98	25.84	23.56	19.50
20539-045E-01	45	34.00	32.48	28.34	26.06	22.00
20539-050E-01	50	36.50	34.98	30.84	28.56	24.50
20539-060E-01	60	41.50	39.98	35.84	33.56	29.50
20539-080E-01	80	51.50	49.98	45.84	43.56	39.50



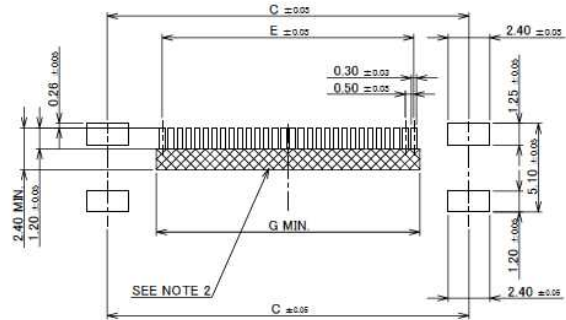
4	HOLD DOWN [RIGHT]	PHOSPHOR BRONZE	Sn 2.00 $\mu$ m MIN. OVER Ni 1.00 $\mu$ m MIN.
3	HOLD DOWN [LEFT]	PHOSPHOR BRONZE	Sn 2.00 $\mu$ m MIN. OVER Ni 1.00 $\mu$ m MIN.
2	CONTACT	PHOSPHOR BRONZE	CONTACT AREA: Au 0.10 $\mu$ m MIN. OVER Ni 1.00 $\mu$ m MIN. SOLDERING AREA: Au 0.03 $\mu$ m MIN. OVER Ni 1.00 $\mu$ m MIN.
1	HOUSING	LCP	UL94V-0, BLACK
NO.	DISCRIPTION	MATERIAL	FINISH, REMARKS

# Connector Assembly

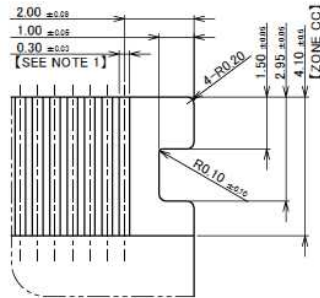
PART NO.	Pos.	C	E	F	G
20539-016E-01	16	13.84	7.50	11.50	8.20
20539-022E-01	22	16.84	10.50	14.50	11.20
20539-024E-01	24	17.84	11.50	15.50	12.20
20539-026E-01	26	18.84	12.50	16.50	13.20
20539-030E-01	30	20.84	14.50	18.50	15.20
20539-040E-01	40	25.84	19.50	23.50	20.20
20539-045E-01	45	28.34	22.00	26.00	22.70
20539-050E-01	50	30.84	24.50	28.50	25.20
20539-060E-01	60	35.84	29.50	33.50	30.20
20539-080E-01	80	45.84	39.50	43.50	40.20



RECOMMENDED FPC/FFC LAYOUT



RECOMMENDED PCB LAYOUT & METAL MASK LAYOUT  
METAL MASK THICKNESS  $t=0.12\text{mm}$



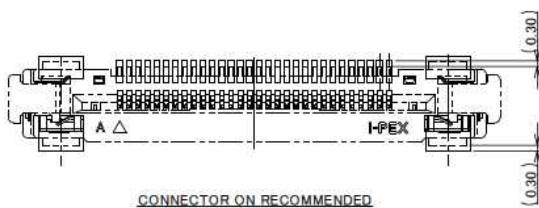
DETAIL BB  
(S = 10 : 1)

NOTES

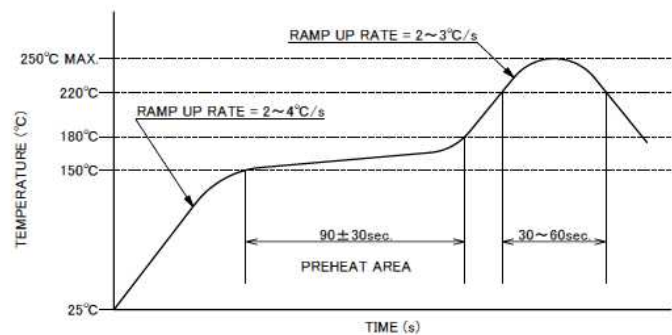
- CONTROL DIMENSION OF [ZONE CC] WITHIN  $0.30 \pm 0.03$ .
- SOLDER RESIST MUST BE APPLIED TO THIS AREA.
- SELECT A MATERIAL WITH A SOFTENING TEMPERATURE OF  $85^{\circ}\text{C}$  OR HIGHER FOR THE PATTERN ADHESIVE PART OF FFC.

Rev.12

# Plug Housing Assembly



CONNECTOR ON RECOMMENDED  
FOOTPRINT PATTERN LAYOUT



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

Rev.12

# Connector Assembly

ITEMS	SPECIFICATION
RATING VOLTAGE	50V AC/DC (PER CONTACT PIN)
RATING AMPERAGE (AVAILABLE UP TO 15PIN)	0.50A AC/DC (PER CONTACT PIN)
RATING AMPERAGE (AVAILABLE FOR ALL PIN)	0.35A AC/DC (PER CONTACT PIN)
OPERATING TEMPERATURE	233~358K(-40°C~+85°C)
OPERATING HUMIDITY	85%RH MAX.
CONTACT RESISTANCE	INITIAL : 70mohm MAX. / AFTER TEST : $\leq$ 40mohm MAX.
INSULATION RESISTANCE	500Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC250V 1min
DURABILITY	30 CYCLES
MATING FORCE (INITIAL / 30 CYCLES)	16P: 9.6N MAX., 22P: 13.2N MAX., 24P: 14.4N MAX., 26P: 15.6N MAX., 30P: 18.0N MAX., 40P: 24.0N MAX., 45P: 27.0N MAX., 50P: 30.0N MAX., 60P: 36.0N MAX., 80P: 48.0N MAX.
UNMATING FORCE (INITIAL / 30 CYCLES)	16P: 1.44N MIN., 22P: 1.98N MIN., 24P: 2.16N MIN., 26P: 2.34N MIN., 30P: 2.70N MIN., 40P: 3.60N MIN., 45P: 4.05N MIN., 50P: 4.50N MIN., 60P: 5.40N MIN., 80P: 7.20N MIN.
FPC/FFC RETENTION FORCE	25.0N MIN.
COPLANARITY	0.10mm MAX.
PRODUCT SPECIFICATION	PRS-1620
TEST REPORT	TR-12047
PACKING STANDARD	300-967
INSTRUCTION MANUAL	HIM-11002
APPEARANCE CRITERIA No.	QLS-A***

Rev.12

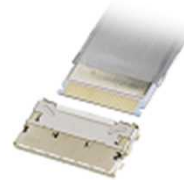
Board to Board



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, EVAFFLEX, 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](http://www.i-pex.com)



I-PEX

© I-PEX Inc. 2022  
All rights reserved.