

- ✓ Designed for high-speed transmission (16 + Gbps V-By-One® US)
- ✓ Operator friendly auto-lock design, ideal for hand or robotic assembly
- ✓ Scalable EVAFLEX® family : Auto-lock connector with many other options available

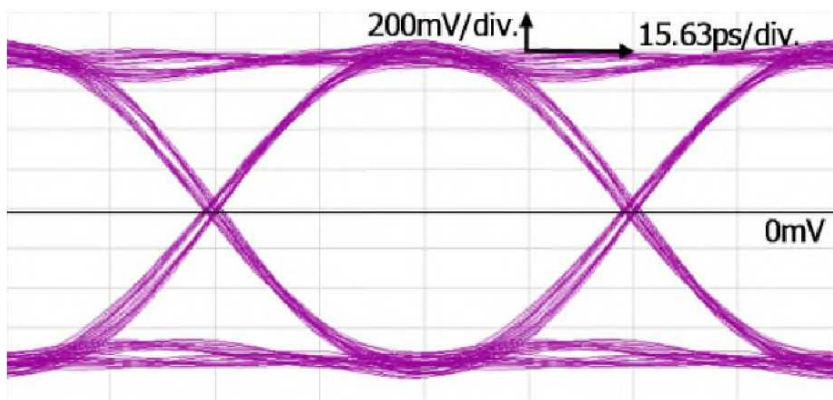
Pin counts:

Range	Up to 51
Available	41, 51

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

Part number	20818
Board pitch (mm)	0.5
Height (mm)	4.75 +/- 0.15
Width formula (mm)	12.35 + (0.5 * P)
Depth (mm)	5.95
Wiping length (mm)	1.75
FFC/FPC insertion depth (mm)	4.3
FFC/FPC type	Shielded / Non-shielded FFC/FPC
FFC/FPC thickness (mm)	0.33 +/- 0.03
Contact point	Signal: Bottom / GND: Top
Compatibility (Footprint pattern)	FI-R
Current rating	0.3A/pin
Supportable standard (Reference only)	eDp / HBR2 (5.4+Gbps) / V-by-one US (16+Gbps)
Operating condition	233 to 358(-40°C to 85°C) 85%RH max.

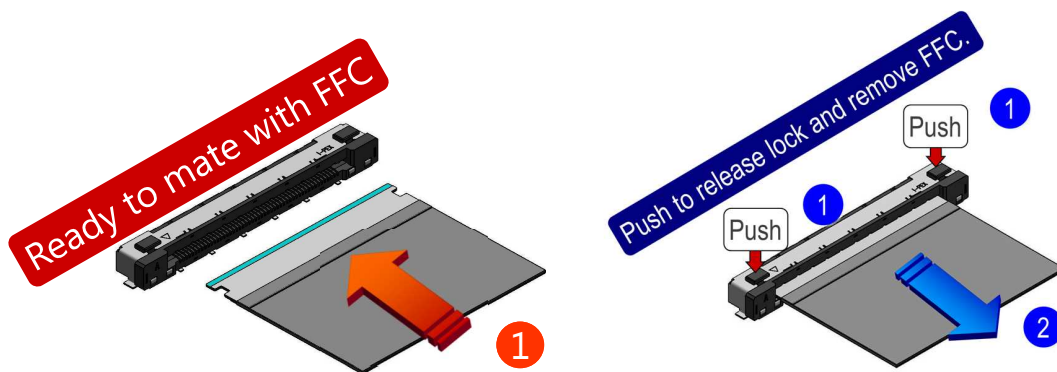
Designed for high-speed transmission (16+ Gbps V-By-One® US)



Eye pattern (Differential)
Bit rate : 16Gbps
Rise time : 24ps (10% - 90%)
Input Voltage : 800mVp-p

*Please contact I-PEX connectors for more test details.

Operator friendly auto-locking design, ideal for hand or robotic assembly



One action mating with auto lock mechanism to improve productivity

Scalable EVAFLEX® family : Auto-lock connector with many other options available

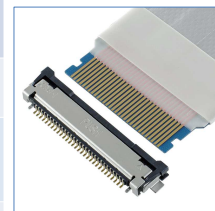
Full EMI shield and smaller size

	EVAFLEX® 5-HD
Height (mm)	2.00 +/- 02
Reference Performance	USB 3.1 Gen2 (10+ Gbps)
Special Feature	360-degree fully-shielded with multi-point grounds to prevent EMI leakage



Smaller size and durable to high temp (105°C)

	EVAFLEX® 5-VS
Height (mm)	1.90 +/- 01
Depth (mm)	4.95
Reference Performance	PCIe Gen 3 (8+ Gbps)
Operation Temperature	~ 105°C

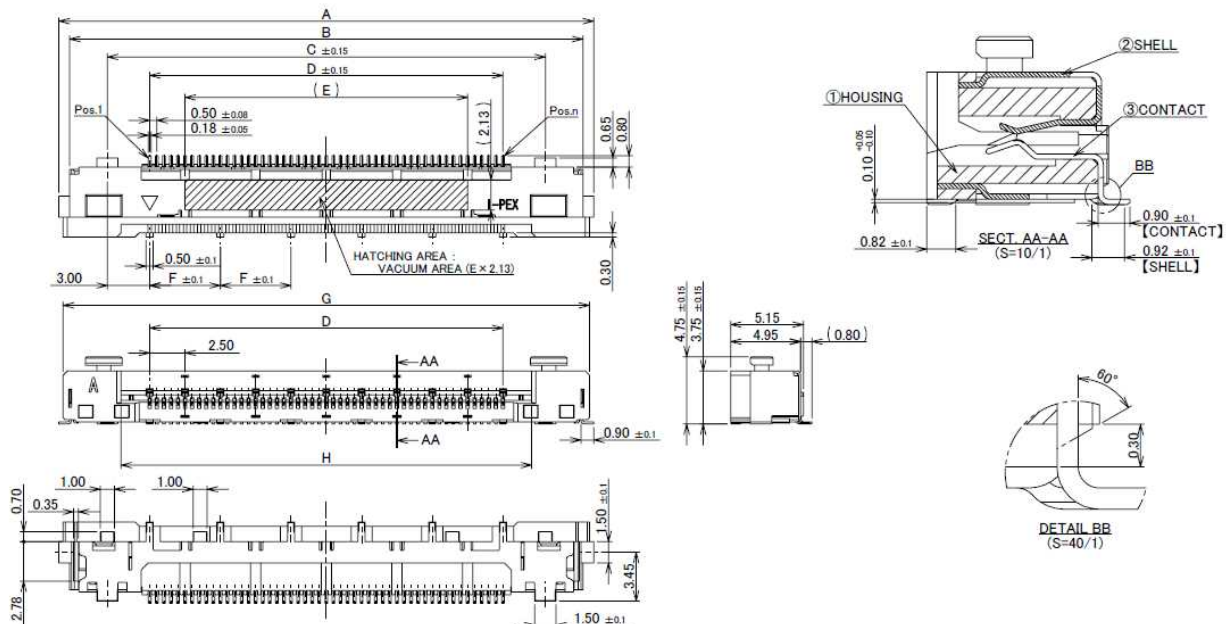


EVAFLEX® 5

Component Parts Detail

Connector Assembly :

Recommended P/N		20818-0**E							
PART NO.	Pos.	A	B	C	D	E	F	G	H
20818-041E	41P	32.85	31.35	26.00	20.00	15.00	4.00	32.25	24.06
20818-051E	51P	37.85	36.35	31.00	25.00	20.00	5.00	37.25	29.06



3	CONTACT	PHOSPHOR BRONZE	Au 0.03 μ m MIN. OVER Ni 1.00 μ m MIN.
2	SHELL	PHOSPHOR BRONZE	Sn 1.00 μ m MIN. OVER Ni 1.00 μ m MIN.
1	HOUSING	LCP	UL94V-0, BLACK
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS



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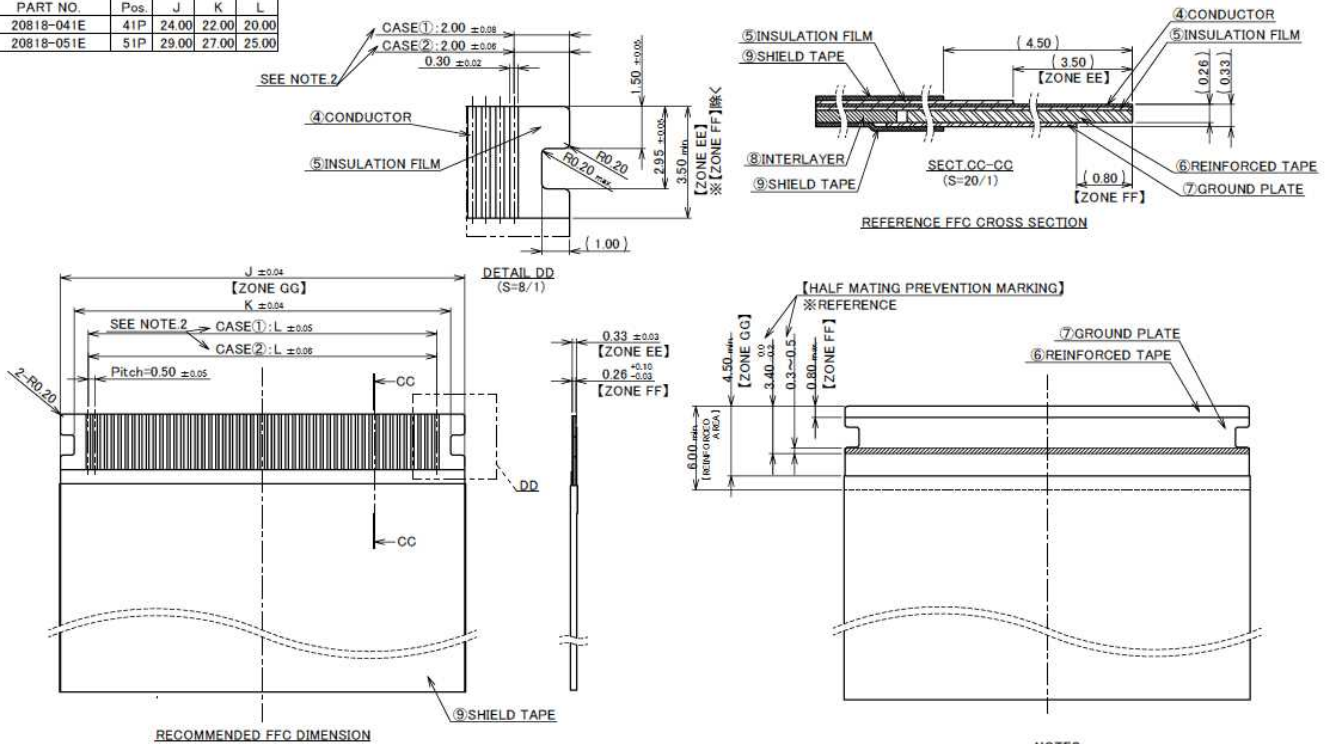
Connector Assembly :

ITEMS	SPECIFICATION
RATING VOLTAGE	200V AC/DC (PER A CONTACT)
RATING AMPERAGE	0.3A AC/DC (PER A CONTACT)
OPERATING TEMPERATURE	233~358K(-40°C~+85°C)
OPERATING HUMIDITY	85% MAX.(NON-CONDENSING)
CONTACT RESISTANCE	INITIAL : 60mohm MAX. / AFTER TEST : \triangle 140mohm MAX.
INSULATION RESISTANCE	100Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC250V 1min
DURABILITY	30 CYCLES
MATING FORCE (INITIAL / 30 CYCLES)	41P : 29.2N MAX. / 51P : 30.0N MAX.
UNMATING FORCE (INITIAL / 30 CYCLES)	41P : 4.25N MIN. / 51P : 5.00N MIN.
FFC RETENTION FORCE	41P : 22N MIN. / 51P : 25N MIN.
COPLANARITY	0.10mm MAX.
PRODUCT SPECIFICATION	PRS-2671
TEST REPORT	TR-20035
PACKING STANDARD	300-980
INSTRUCTION MANUAL	HIM-12001
APPEARANCE CRITERIA No.	QLS-A***

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Connector Assembly :

PART NO.	Pos.	J	K	L
20818-041E	41P	24.00	22.00	20.00
20818-051E	51P	29.00	27.00	25.00



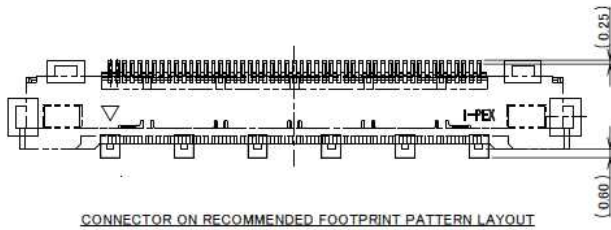
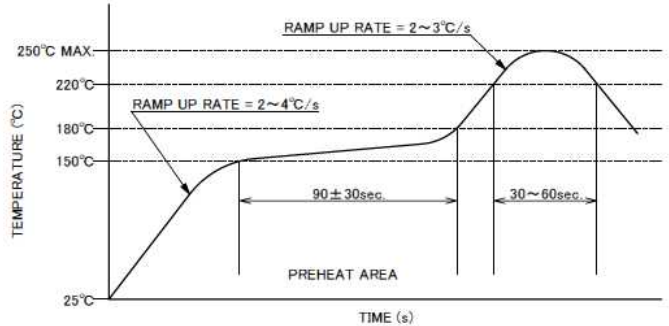
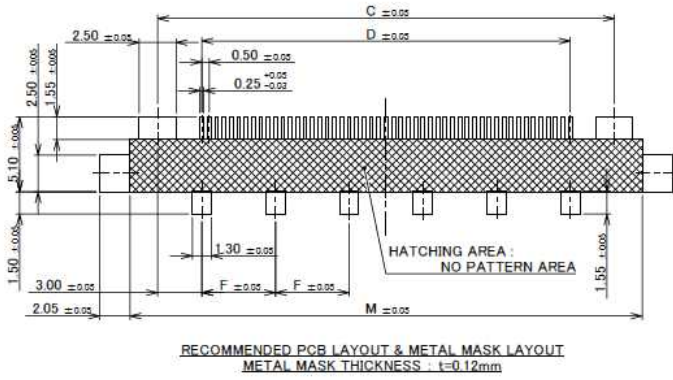
NOTES
 1 DIFFERENTIAL IMPEDANCE : 100 ± 10Ω
 2 MANUFACTURE CASE① or CASE②

NO	DISCRPTION	MATERIAL	FINISH . REMARKS
9	SHIELD TAPE	METALIC FILM	
8	INTERLAYER	ARBITRARY	
7	GROUND PLATE	METALIC FILM	POLISH or HALF POLISH Sn PLATING
6	REINFORCED TAPE	ARBITRARY	
5	INSULATION FILM	ARBITRARY	
4	CONDUCTOR	COPPER ALLOY	CONTACT AREA: Au 0.05 μm MIN. OVER Ni 0.5 μm MIN.

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Connector Assembly :

PART NO.	Pos.	C	D	F	M
20818-041E	41P	26.00	20.00	4.00	29.75
20818-051E	51P	31.00	25.00	5.00	34.75



- NOTES.
3. THIS AREA CANNOT MOUNT ANOTHER COMPONENTS.
 4. SOLDER RESIST SHALL BE APPLIED TO PREVENT SHORT CIRCUITS WHEN PLACING SIGNAL LINES ON GROUND AREA.

Rev.0



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