#### **Micro-Coaxial Connector**

# CABLINE<sup>®</sup>-CBL

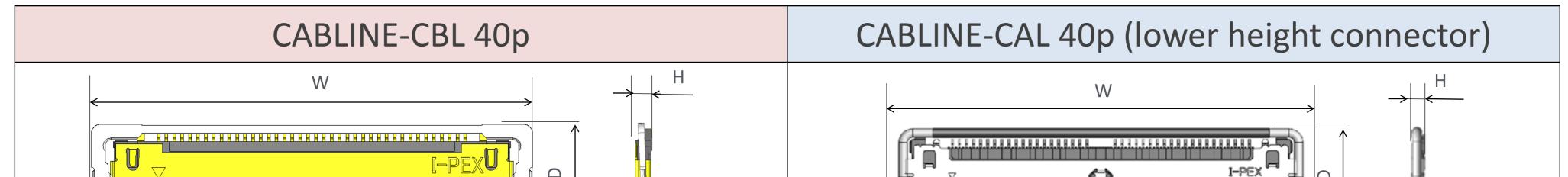
Low mating height (Height = 0.825 mm), Mechanical lock with shielding and multi-point ground, 0.4 mm pitch, Horizontal mating type Micro-coaxial connector

<b>Product Specif</b>	ications:		Applicable Cable Size:		
Matir	ng type	Horizontal	Maximum O.D. (mm) 0.4		
Board P	itch (mm)	0.4	Micro-Coaxial 45 ohm: #40 or smaller wire		
Wiping Le	ength (mm)	0.44	for Signal (AWG) 50 ohm: #40 or smaller wire		
	Height	0.825 +/- 0.15	Twinax (AWG) -		
Mated size (mm)	Width	Formula: 6.44 + (0.4*?p)	Discrete (AWG) #36 or smaller wire		
(11111)	Depth	5.44	Applicable Standards (Reference Only):		
Din Counte	Range	Up to 40	USB 3.1 Gen 1 (5 Gbps) V-By-One HS 1.4 (4 Gbps)		
Pin Counts	Available	30, 40	HDMI 1.3 (3.4 Gbps)		



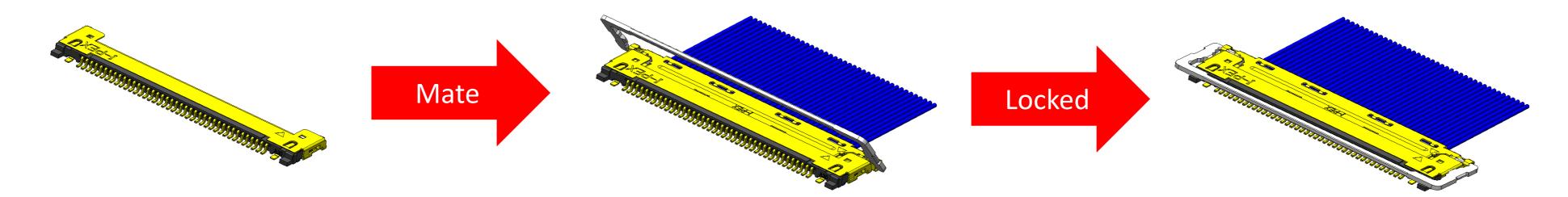
\*Please inquire for pin counts not listed or outside of the pin count range. \*Lower height connector CABLINE<sup>®</sup>-CAL (mating height: 0.8 mm max.) is also available.

#### Mating height: 0.975 mm max. (0.825 mm nominal)

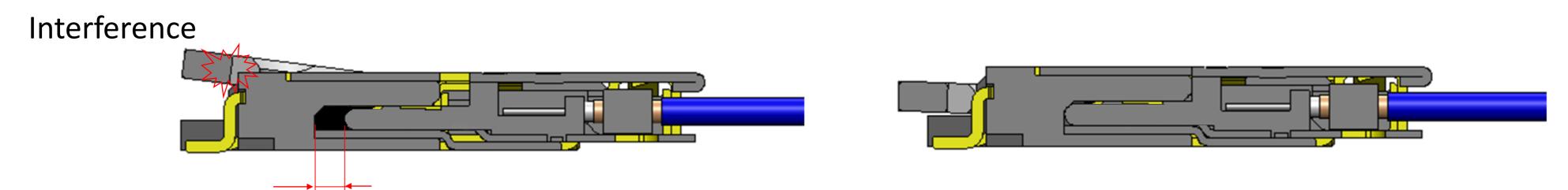


	CABLINE-CBL 40 d set dimensions					CABLINE-CAL 40		
W	D	Н			W	D	Н	
22.44	5.44	0.825 (0.975 max.)			24.05	5.50	0.70 (0.80 max.)	

Mechanical locking bar prevents incomplete mating and back-out/un-mating

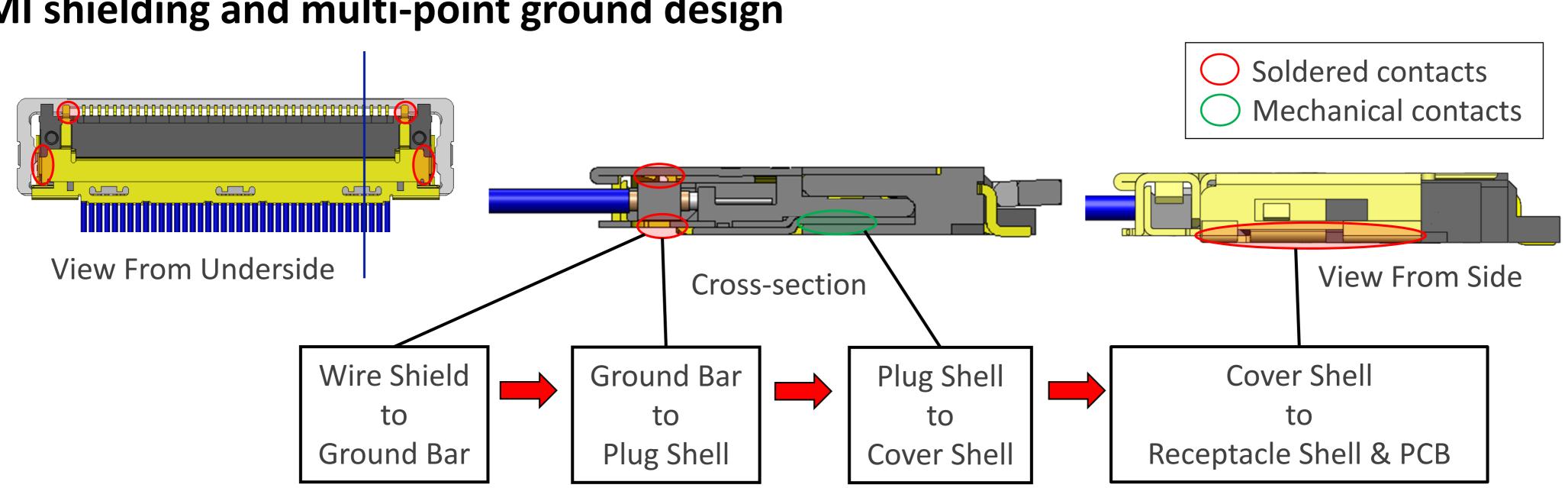


Mechanical locking bar only locks when plug is fully mated to receptacle.



Incomplete mating

Complete mating



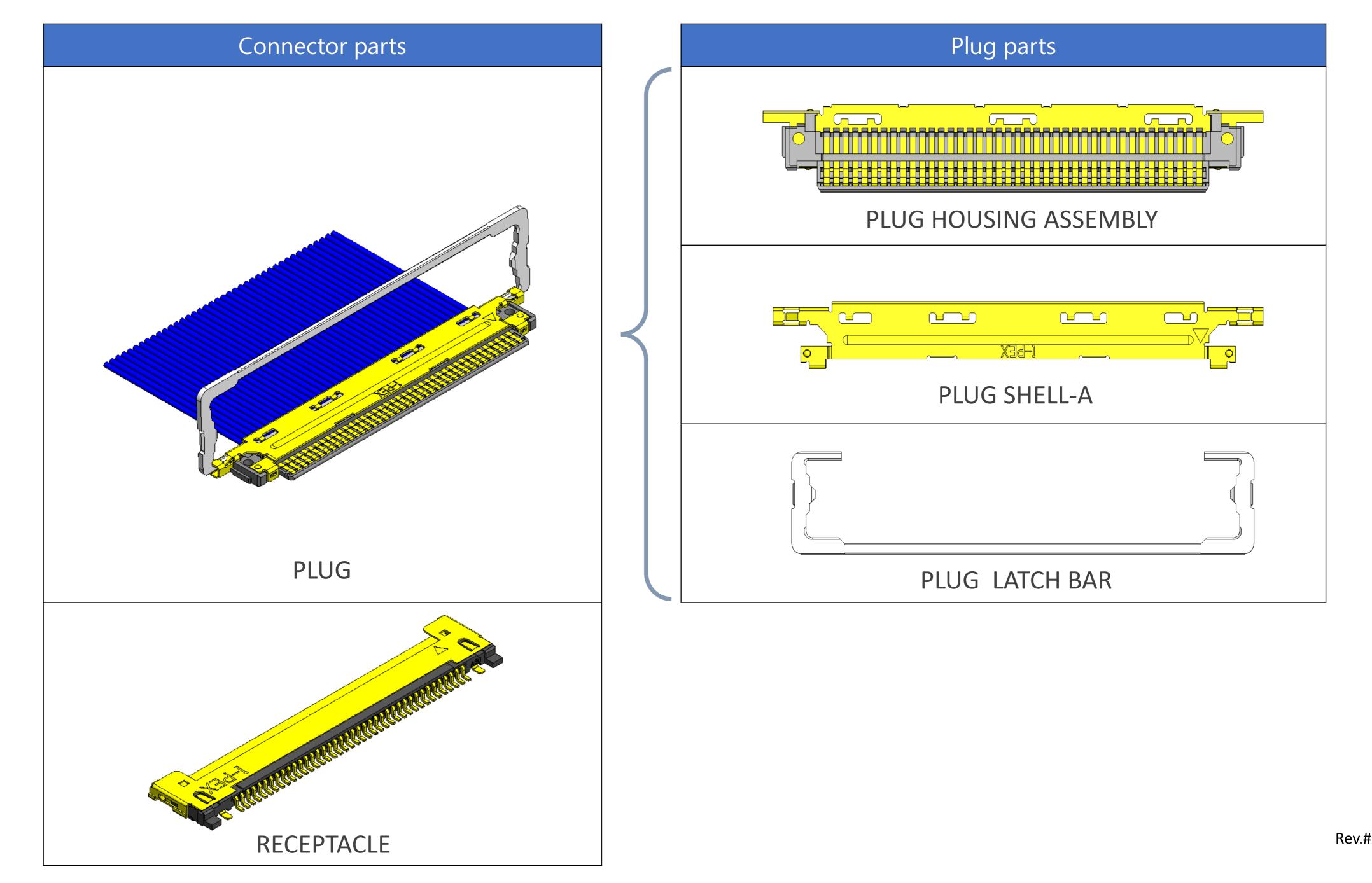
#### EMI shielding and multi-point ground design



Contact your sales representative for more detailed information. <u>www.i-pex.com</u>

# **Component Parts Details**

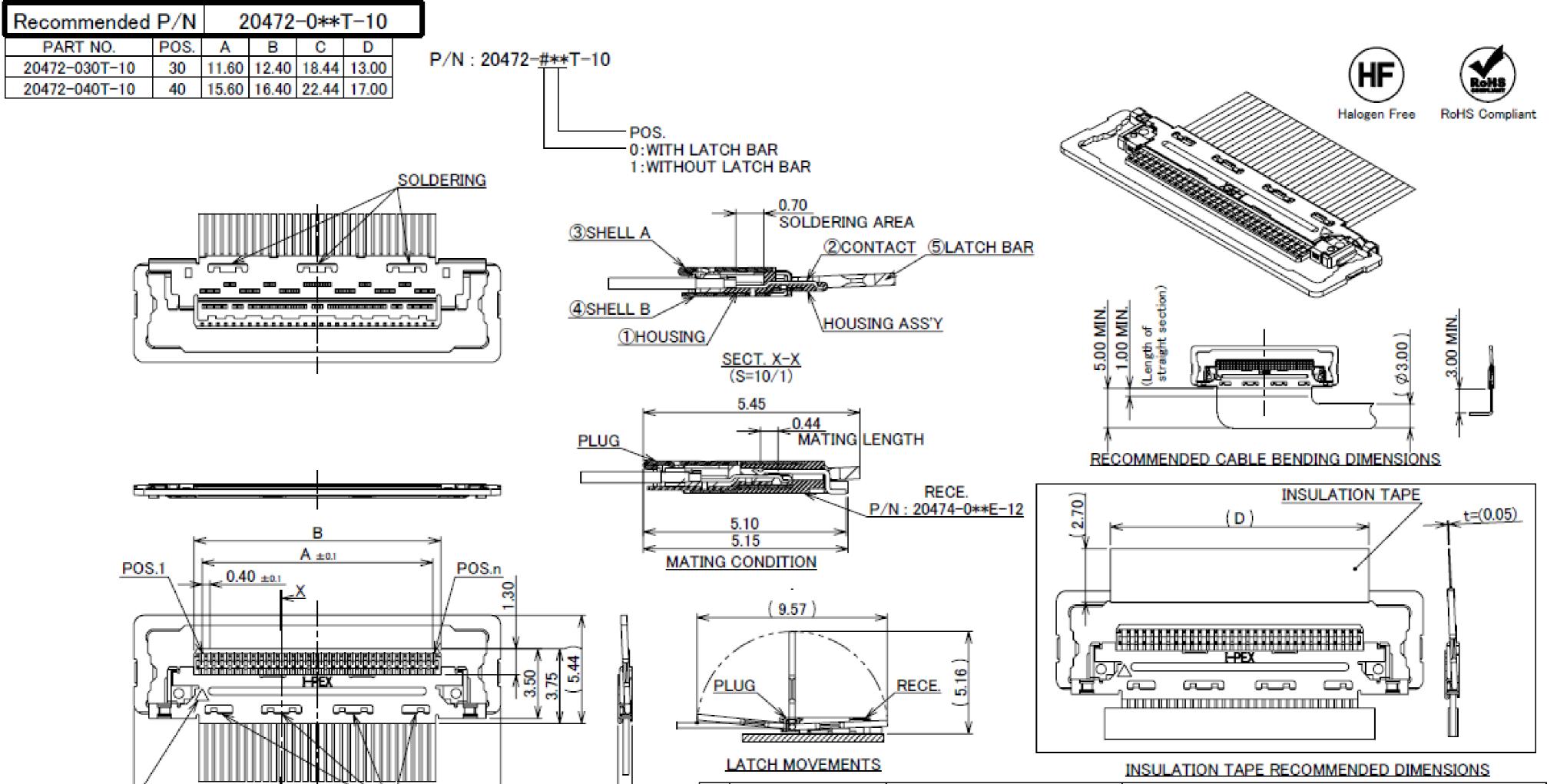
#### **Component Parts**

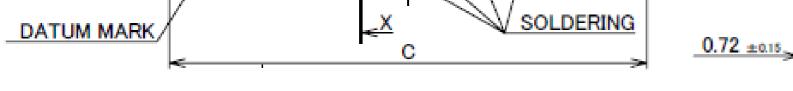


## I-PEX

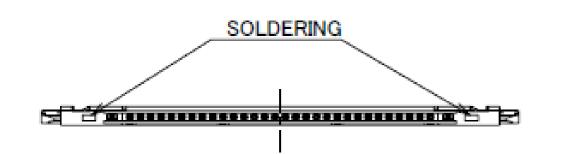
Contact your sales representative for more detailed information. <u>www.i-pex.com</u>

#### **Plug for Cable Assembly**



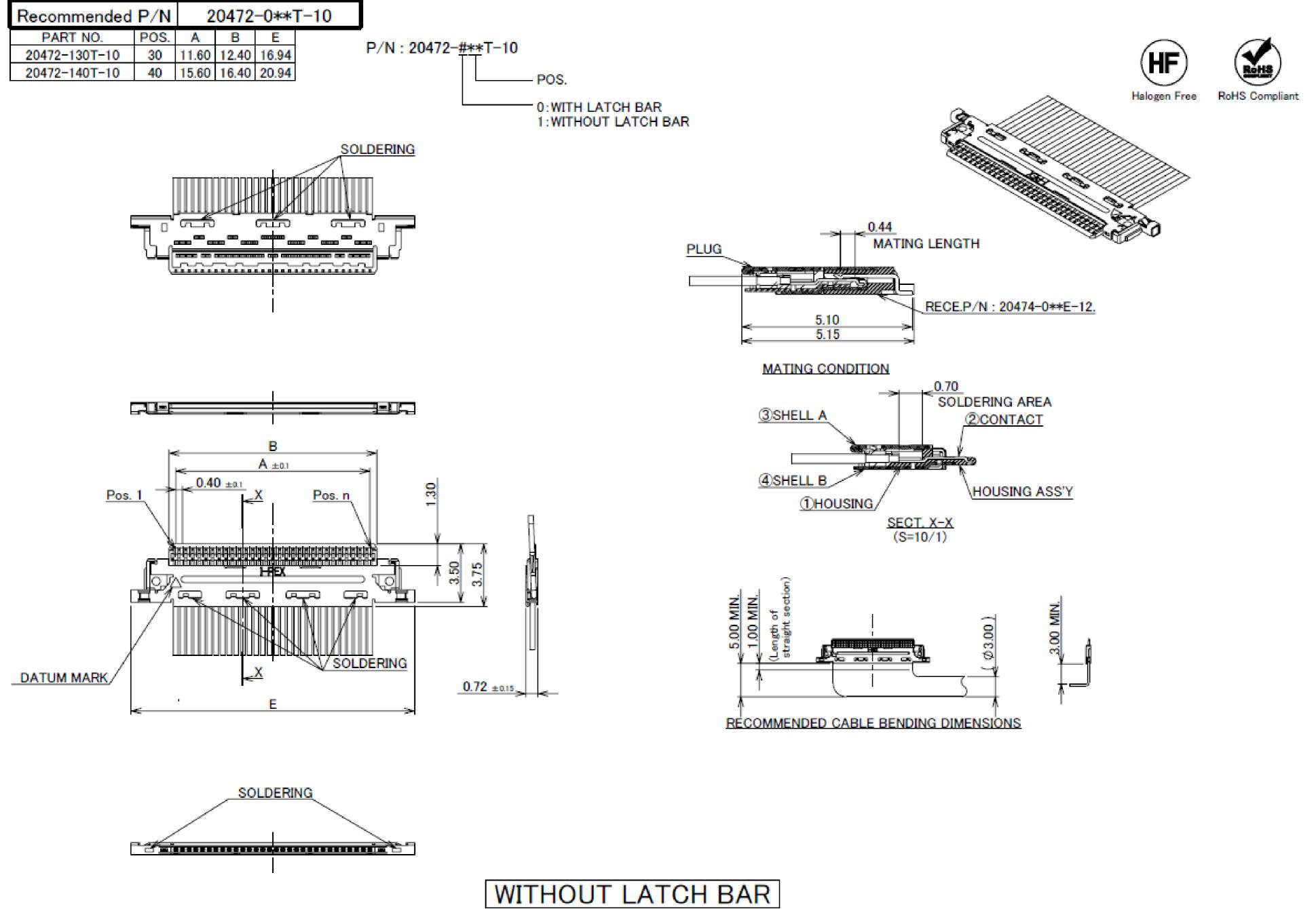


5	LATCH BAR	SUS	
4	SHELL B	PHOSPHOR BRONZE	Au 0.05 μ m MIN. OVER Ni 1.00 μ m MIN.
3	SHELL A	PHOSPHOR BRONZE	Au 0.05 μ m MIN. OVER Ni 1.00 μ m MIN.
2	CONTACT	PHOSPHOR BRONZE	Au 0.1 $\mu$ m MIN. OVER Ni 1.00 $\mu$ m MIN.
1	HOUSING	LCP	UL94V-0, BLACK
NC	DISCRIPTION	MATERIAL	FINISH , REMARKS









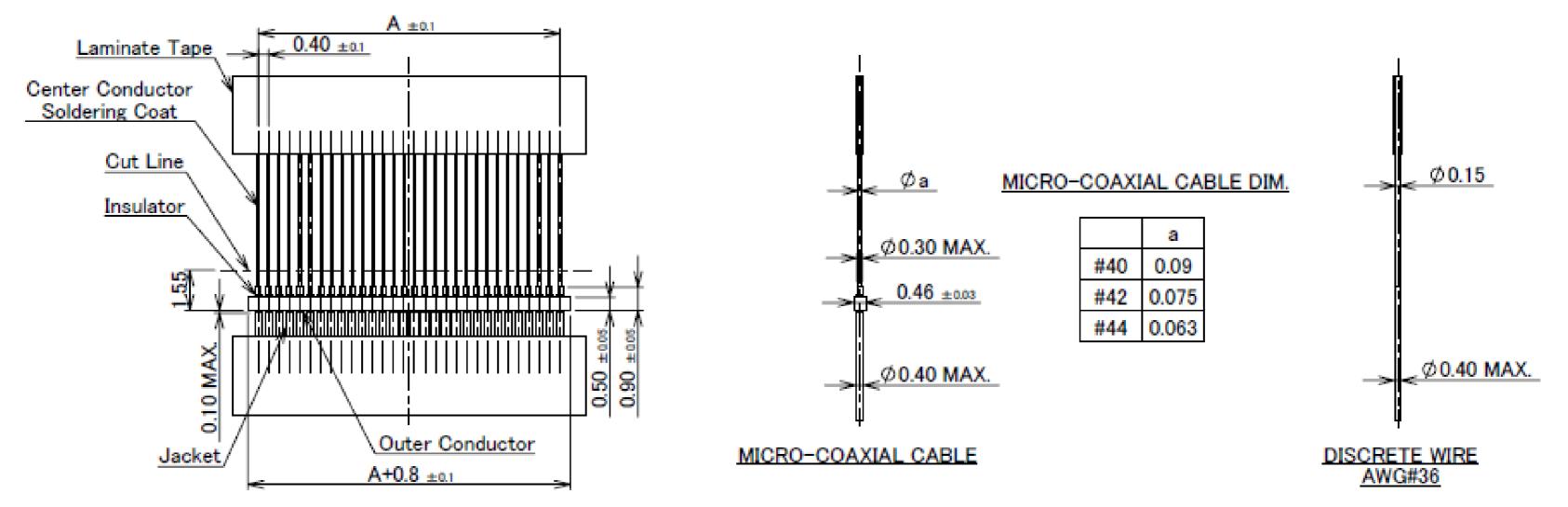
Rev.13



Contact your sales representative for more detailed information. www.i-pex.com

#### **Plug for Cable Assembly**

PART NO.	POS.	Α
20472-#30T-10	30	11.60
20472-#40T-10	40	15.60

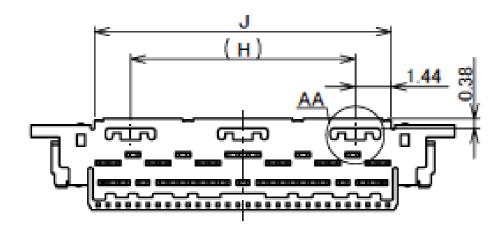


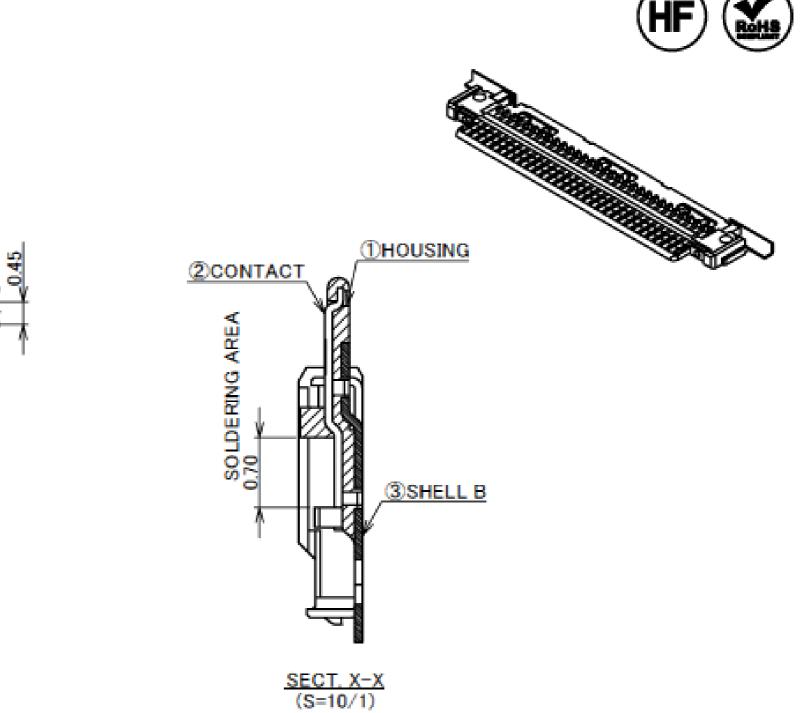
DEALWEIDER LUARA AALVUL ALDE BUL

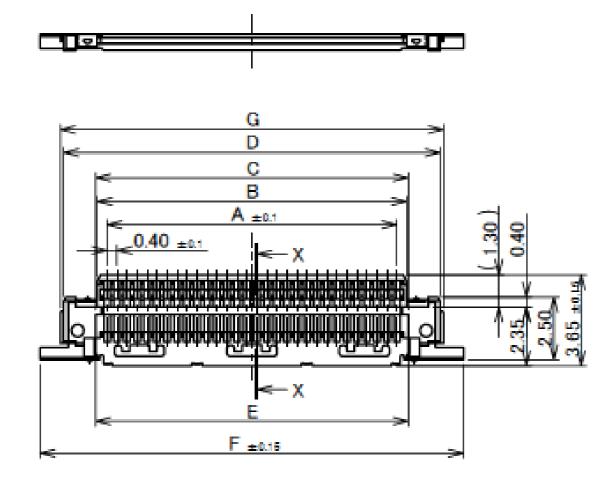
RECOMMENDED MICRO-COAXIAL CABLE DIM.

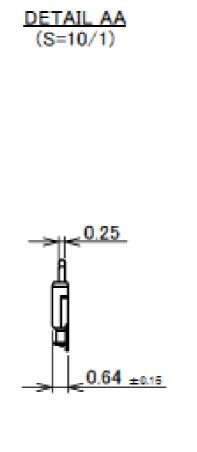
## **Plug Housing Assembly**

Recommended	20473-0**T-10									
PART NO.	POS.	Α	В	С	D	Е	F	G	Н	J
20473-030T-10	30	11.60	12.40	12.65	15.08	12.65	16.94	15.34	9.00	11.88
20473-040T-10	40	15.60	16.40	16.65	19.08	16.65	20.94	19.34	13.00	15.88









0.80

NOTES

1. THIS PART IS ASSEMBLED WITH SHELL A(P/N 2618-0\*\*1) AND LATCH BAR(P/N 2619-#\*\*0) AFTER SOLDERED THE CABLE, AND IT BECOMES P/N 20472-0\*\*T-10

3	SHELL B	PHOSPHOR BRONZE	Au 0.05 μ m MIN. OVER Ni 1.00 μ m MIN.		
2	CONTACT	PHOSPHOR BRONZE	Au $0.1 \mu$ m MIN. OVER Ni $1.00 \mu$ m MIN.		
1	HOUSING	LCP	UL94V-0, BLACK		
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS		



Contact your sales representative for more detailed information. <u>www.i-pex.com</u>

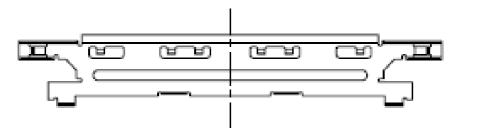
#### **Plug Shell-A**

Recommended	2618-0**1				
PART NO.	POS.	Α	В	С	
2618-0301	30	16.94	3.60	11.88	
2618-0401	40	20.94	5.60	15.88	

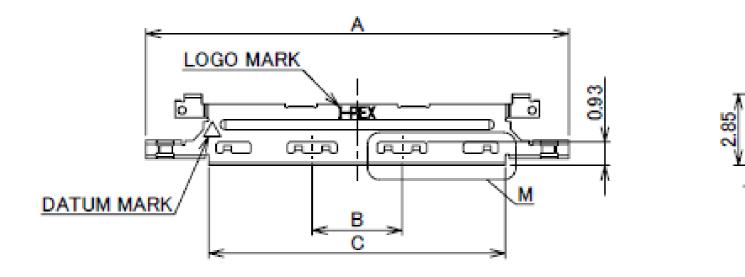
P/N:2618- 0\*\*1

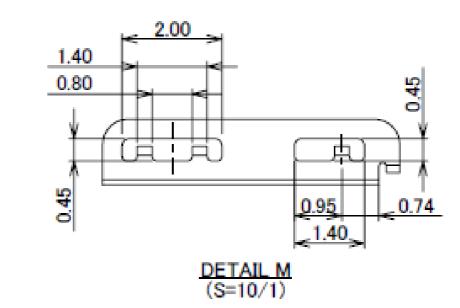
- POS.

0.72

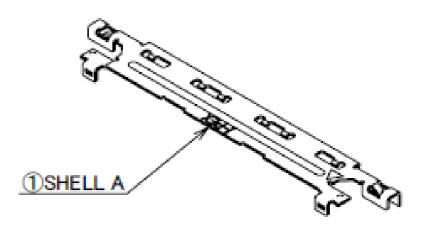




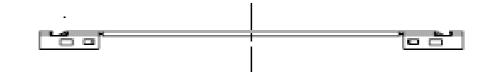












1	SHELL A	PHOSPHOR BRONZE	Au 0.05 μ m MIN. OVER Ni 1.00 μ m MIN.
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS

## Plug Latch Bar

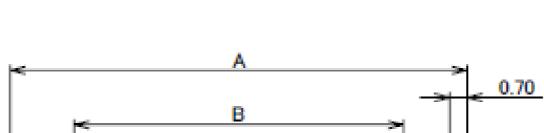
Recommended		261	9-0**0	
PART NO.	POS.	Α	В	
2619-0300	30	18.44	13.00	
2619-0400	40	22,44	17,00	

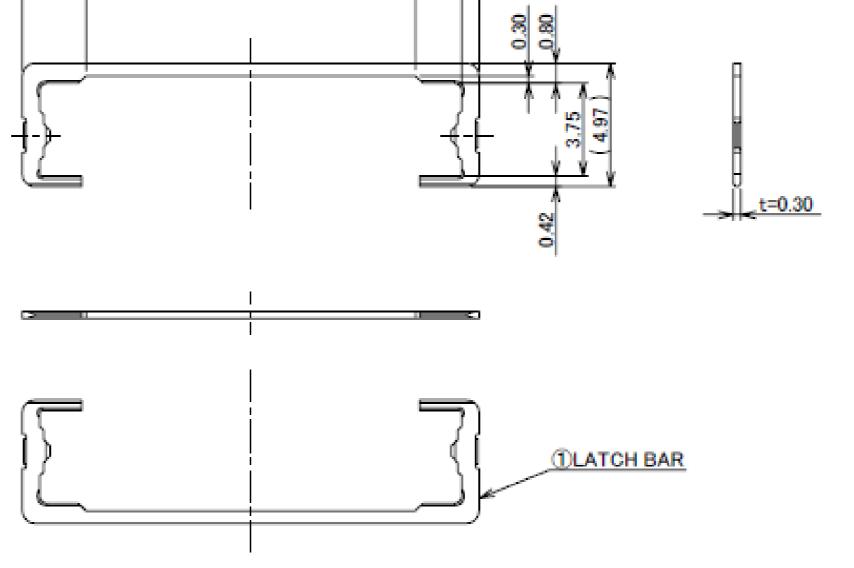
•

2619-0\*\*0

POS.







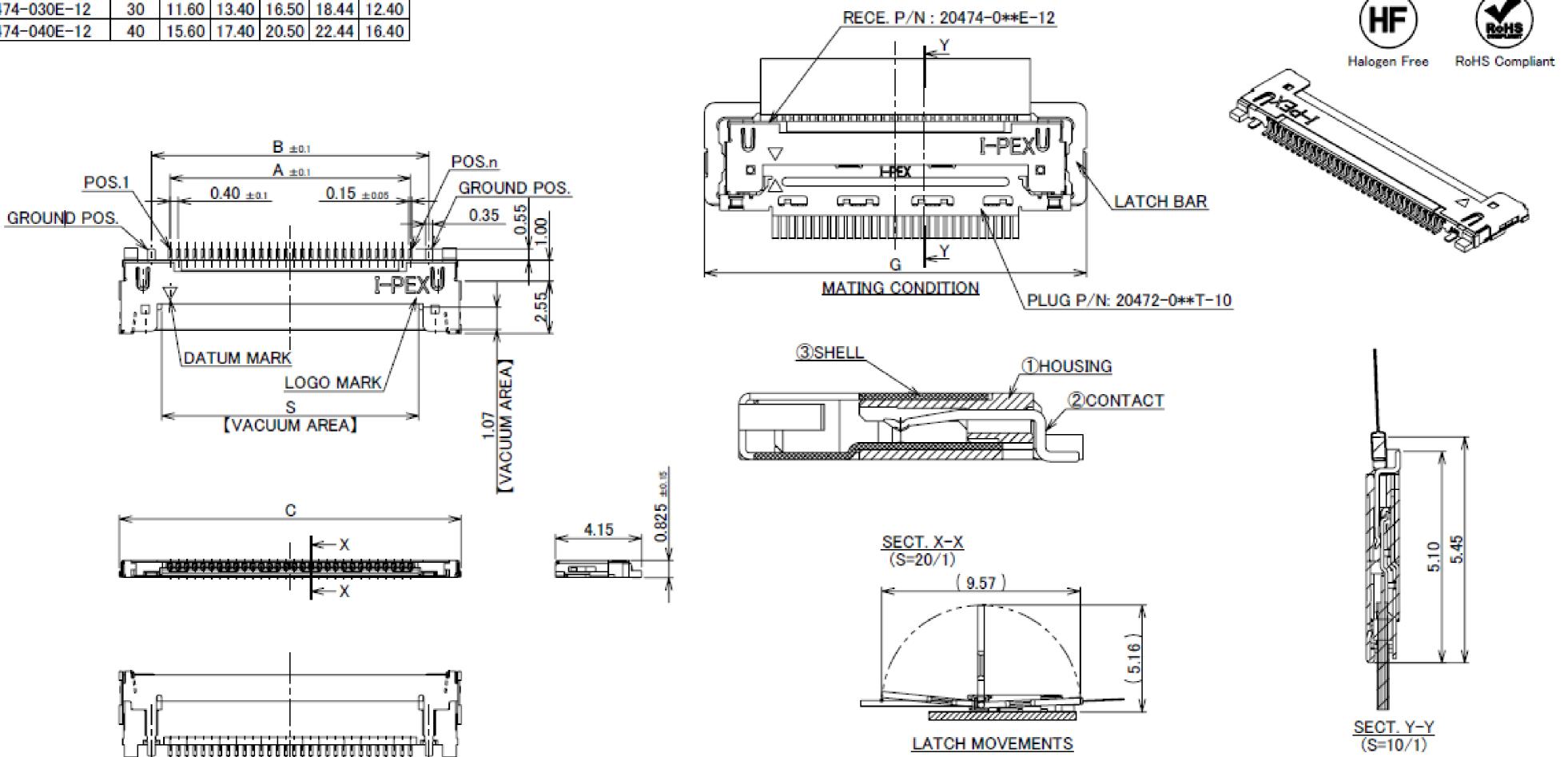
1	LATCH BAR	SUS	
NO.	DISCRIPTION	MATERIAL	FINISH, REMARKS

Contact your sales representative for more detailed information. <u>www.i-pex.com</u>

Rev.7

#### **Receptacle Assembly**

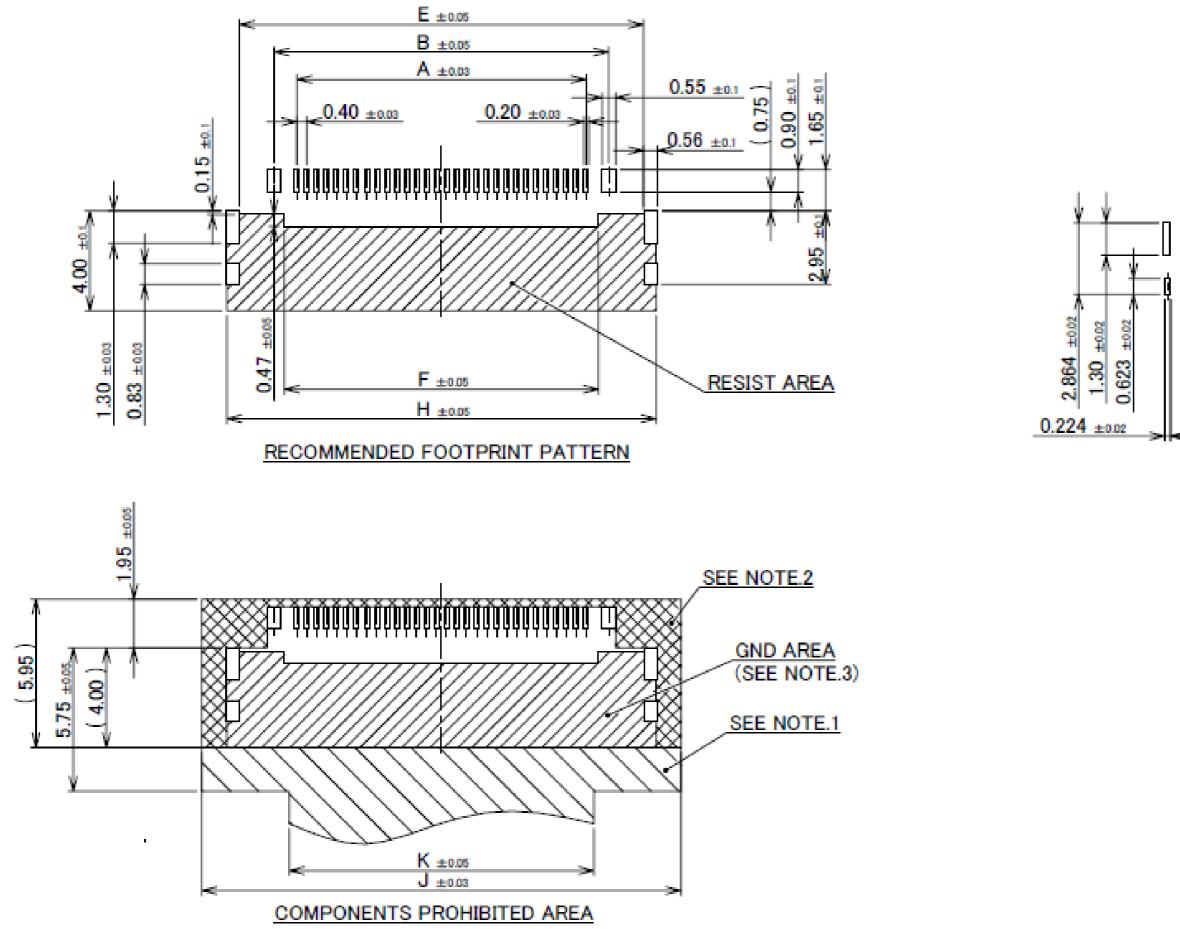
Recommended	2	0474	-0**	E-12		
PART NO.	POS.	Α	В	С	G	S
20474-030E-12	30	11.60	13.40	16.50	18.44	12.40
20474-040E-12	40	15.60	17.40	20.50	22.44	16.40

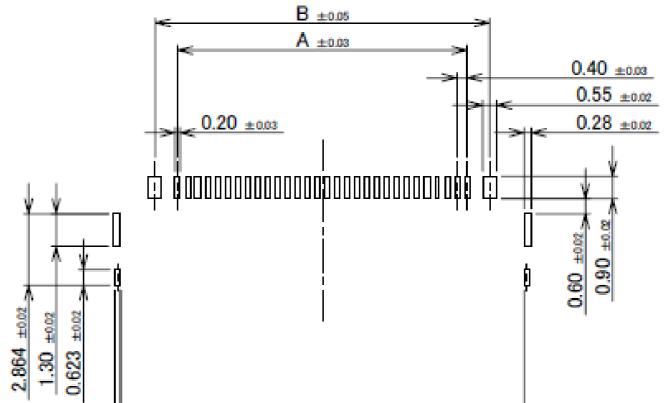


3	SHELL	PHOSPHOR BRONZE	Au 0.05 μ m MIN. OVER Ni 1.00 μ m MIN.
2	CONTACT		CONTACT AREA : Au 0.1 $\mu$ m MIN. OVER Ni 1.00 $\mu$ m MIN. SOLDERING AREA : Au 0.03 $\mu$ m MIN. OVER Ni 1.00 $\mu$ m MIN.
1	HOUSING	LCP	UL94V-0, BLACK
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS

Rev.13

PART NO.	POS.	Α	В	Е	F	Н	J	К
20474-030E-12	30	11.60	13.40	16.18	12.59	17.20	19.20	12.20
20474-040E-12	40	15.60	17.40	20.18	16.59	21.20	23.20	16.20





E ±0.05

RECOMMENDED METAL MASK LAYOUT METAL MASK THICKNESS : t=0.1 mm

#### NOTES. 1. DO NOT MOUNT ANOTHER COMPONENT IN THIS AREA. 2. IN CASE OF PLUG WITH LATCH BAR(20472-0\*\*T-10), DO NOT MOUNT ANOTHER COMPONENT IN THIS AREA.

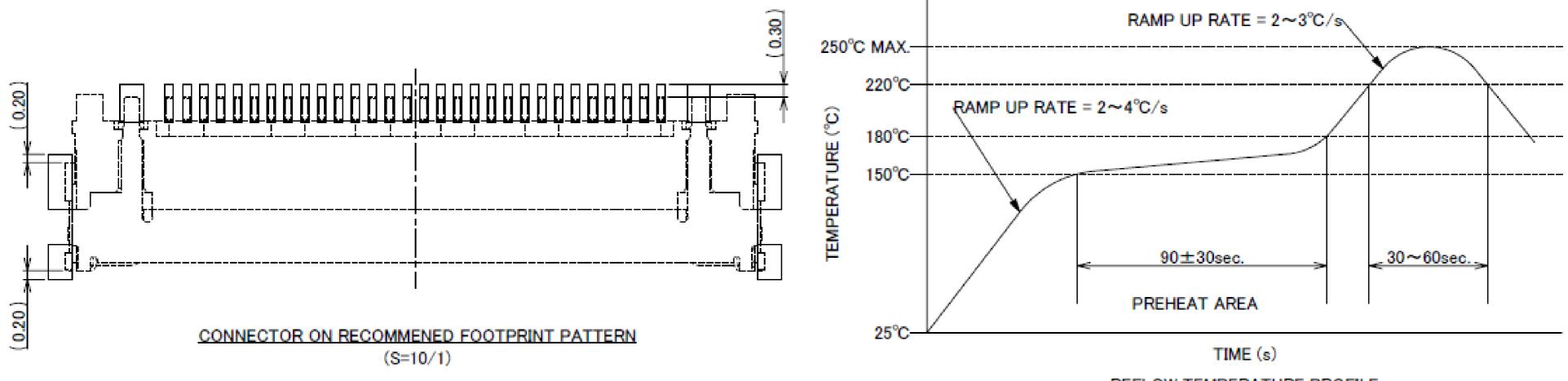
3. SODLER RESIST MUST BE APPLIED TO THIS AREA.



Contact your sales representative for more detailed information. <u>www.i-pex.com</u>

Rev.13

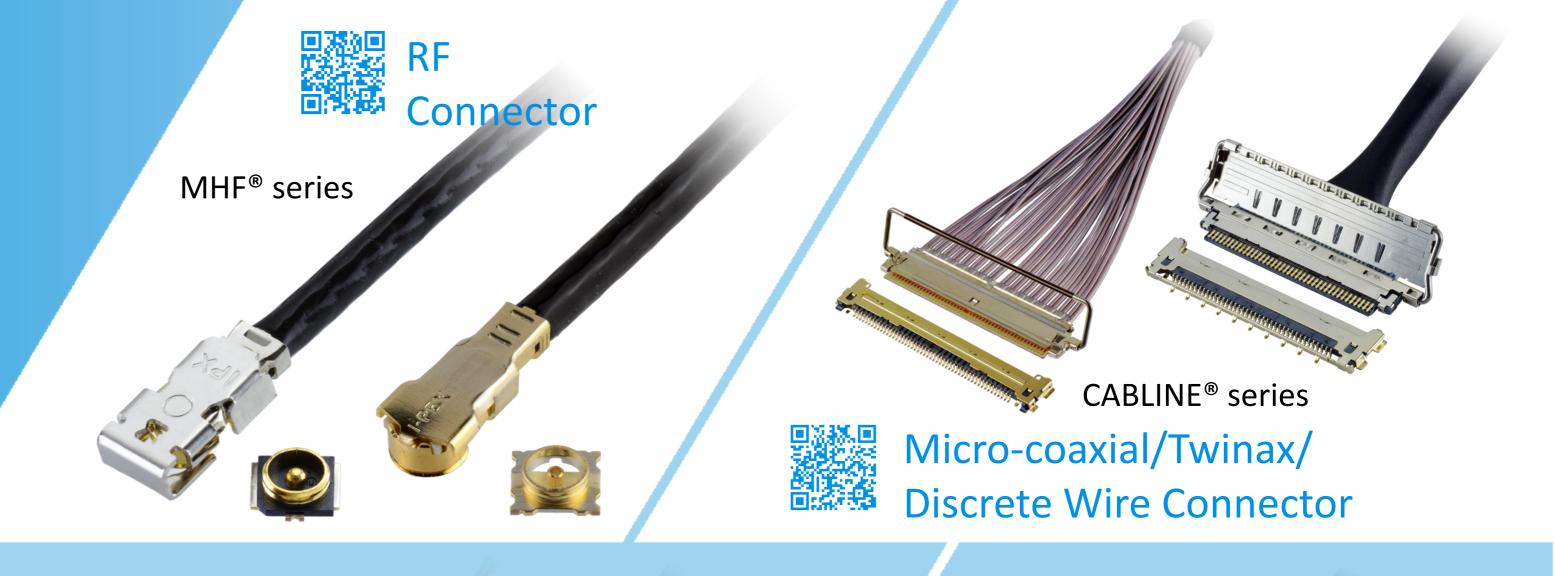
#### **Receptacle Assembly**



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

ITEMS	SPECIFICATION				
APPLICABLE CABLE	MICRO-COAXIAL CABLE : AWG# 40, 42, 44 DISCRETE WIRE : AWG# 36				
RATING VOLTAGE	100V AC (PER CONTACT PIN)				
RATING AMPERAGE (FOR CONTACT)	0.1A AC/DC [AWG#44] PER CONTACT PIN 0.24A AC/DC [AWG#42] PER CONTACT PIN 0.3A AC/DC [AWG#40] PER CONTACT PIN 0.8A AC/DC [AWG#36] PER CONTACT PIN				
OPERATING TEMPERATURE	233~358K(-40°C~+85°C)				
OPERATING HUMIDITY	85% MAX.(NON-CONDENSING)				
CONTACT RESISTANCE	INITIAL : 275mohm MAX. (AWG#36)/ AFTER TEST : ⊿40mohm MAX. 600mohm MAX. (AWG#40) 700mohm MAX. (AWG#42) 1080mohm MAX. (AWG#44)				
GROUND SHELL RESISTANCE	INITIAL : 50mohm MAX. / AFTER TEST : ⊿40mohm MAX.				
INSULATION RESISTANCE	INITIAL : 1000Mohm MIN. / AFTER TEST : 500Mohm MIN.				
DIELECTRIC WITHSTANDING VOLTAGE	AC250V 1min				
DURABILITY	30 CYCLES				
MATING FORCE (INITIAL / AFTER TEST)	30P : 10N MAX. 40P : 12N MAX.				
UNMATING FORCE (INITIAL / AFTER TEST)	30P : 3.0N MIN. 40P : 4.0N MIN.				
CABLE RETENTION FORCE	30P : 14.70N MIN. 40P : 19.60N MIN.				
PRODUCT SPECIFICATION	PRS-1421				
TEST REPORT	TR-08030				
INSTRUCTION MANUAL	HIM-09002				
ASSEMBLY MANUAL	ASM-09002				
APPEARANCE CRITERIA No.	QLS-A***				

## Custom Connectors Available





LIGHTPASS<sup>®</sup> series



Board-to-Board Connector



**Power Connector/ 道深段** Terminal



MINIFLEX<sup>®</sup> series

NOVASTACK<sup>®</sup> series

EVAFLEX<sup>®</sup> series



I-PEX, MHF, CABLINE, LIGHTPASS, NOVASTACK, ISH, IARPB, MINIFLEX, EVAFLEX, MINIDOCKS 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 Inc. 2024 All rights reserved