

# AP-10

High-power supply terminal, high heat resistance board-to-board connection. Contribute to miniaturization of power electronics devices, height differences can be customized.

Product Specifications:

Mating type		Vertical
Wiping Length (mm)		2.55 (Plug: 7.5)
		4.80 (Plug 14.5)
Size (mm)	Height (mm)	13.6 ~ 16.1 (Plug: 7.5)
		16.1 ~ 23.1 (Plug: 14.5)
	Width (mm)	7.6 (Rece)
		3.4 (Plug: 7.5)
		5.2 (Plug: 14.5)
	Depth	3.4 +/- 0.2 (Rece)
		6.0 +/- 0.1 (Plug: 7.5)
		7.6 +/- 0.1 (Plug: 14.5)

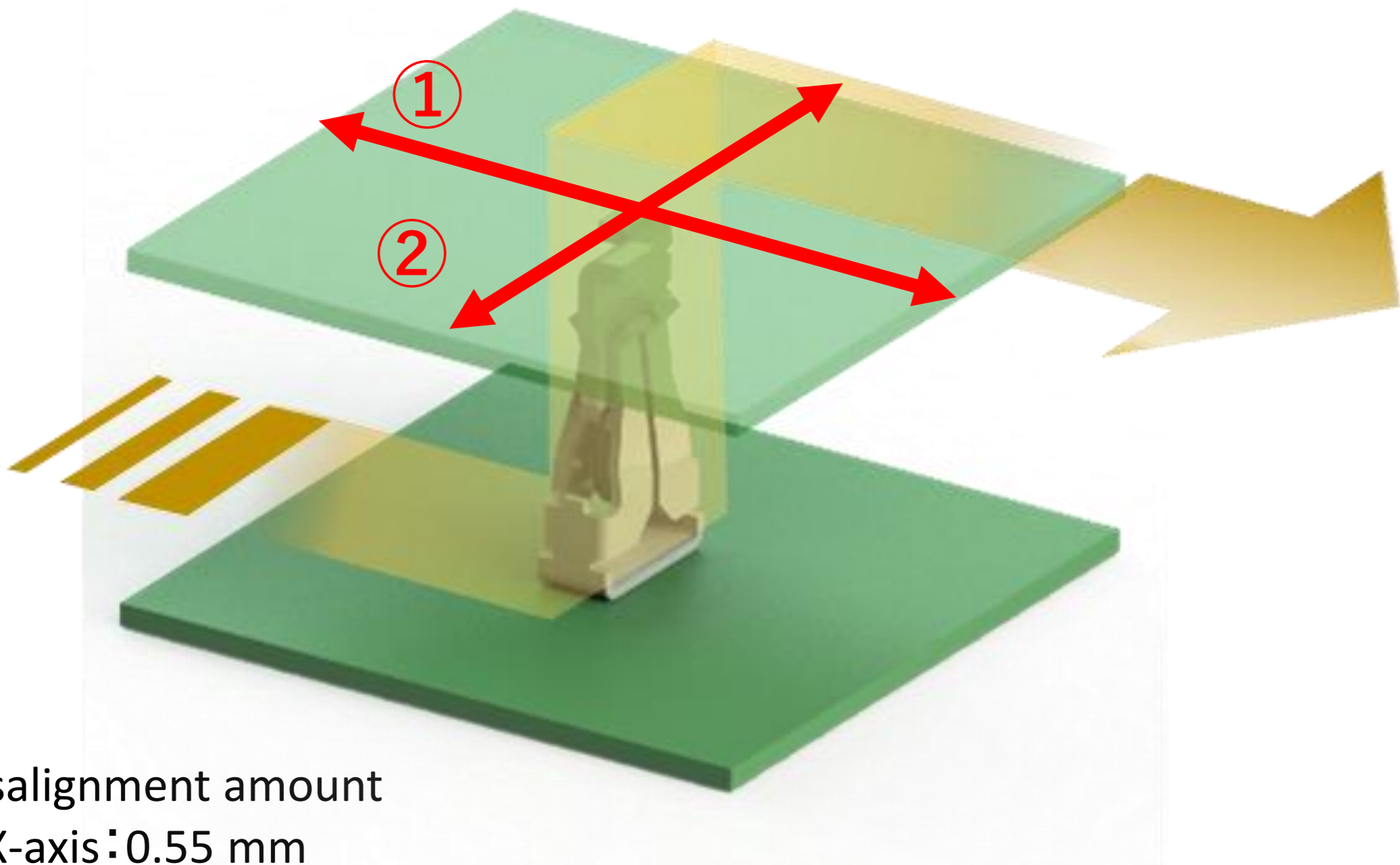
\* Please inquire for pin counts not listed or outside of the pin count range.

Product Specifications:

Operating Temperature	-40 - 105°C
Mating force	15N Max.
Contact resistance	1.0 mΩ Max.



## High current and temperature resistance, board-to-board power supply terminal

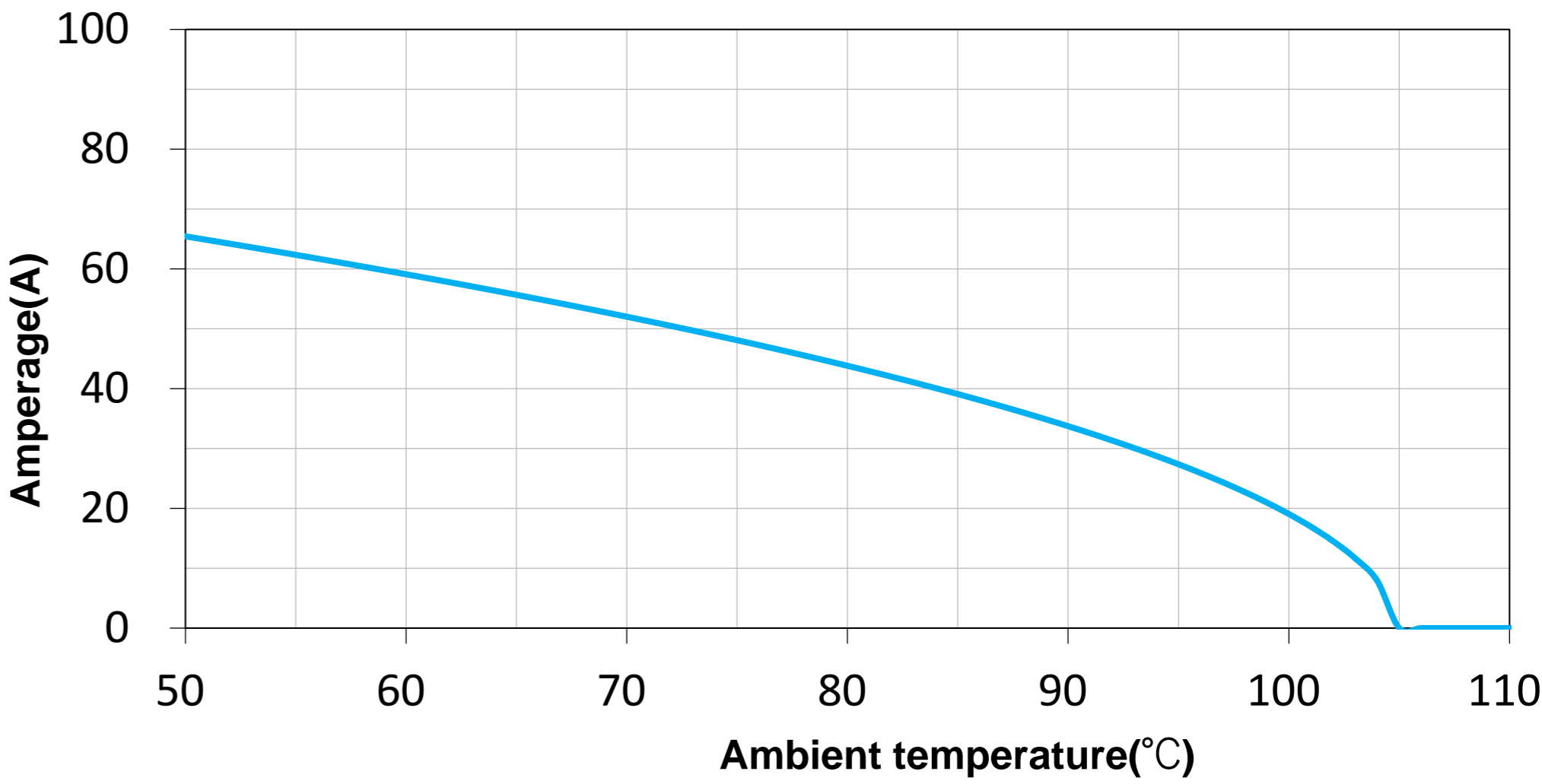


Misalignment amount

①X-axis:0.55 mm

②Y-axis:0.70 mm

AP-10 allowable current curve



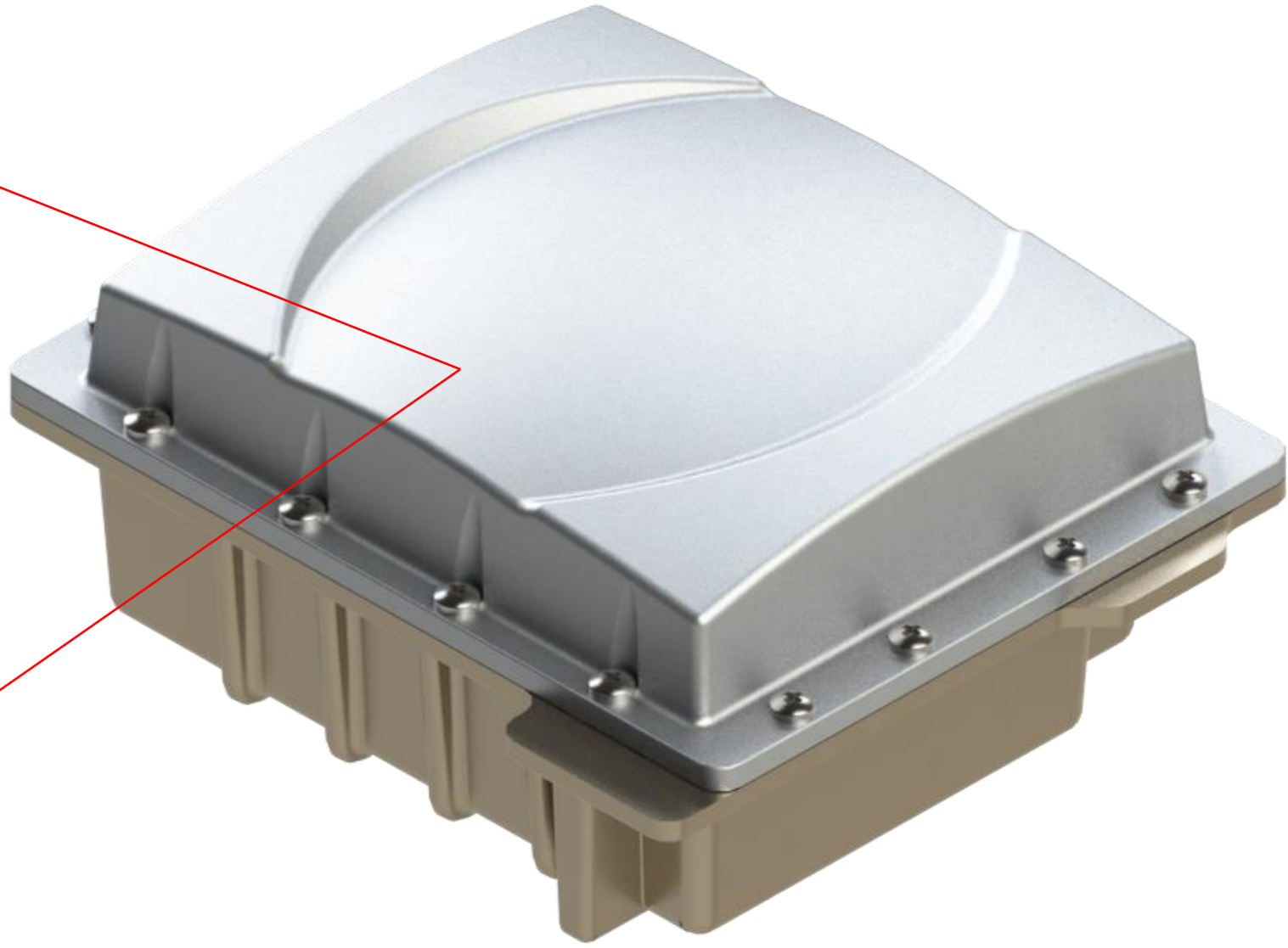
\*The above results are actual measurement results under the test conditions specified by I-PEX.

\*The results depend on the operating environment, so please contact us for details.

## Contribute space-saving design on PCB achieved by miniaturization of connector

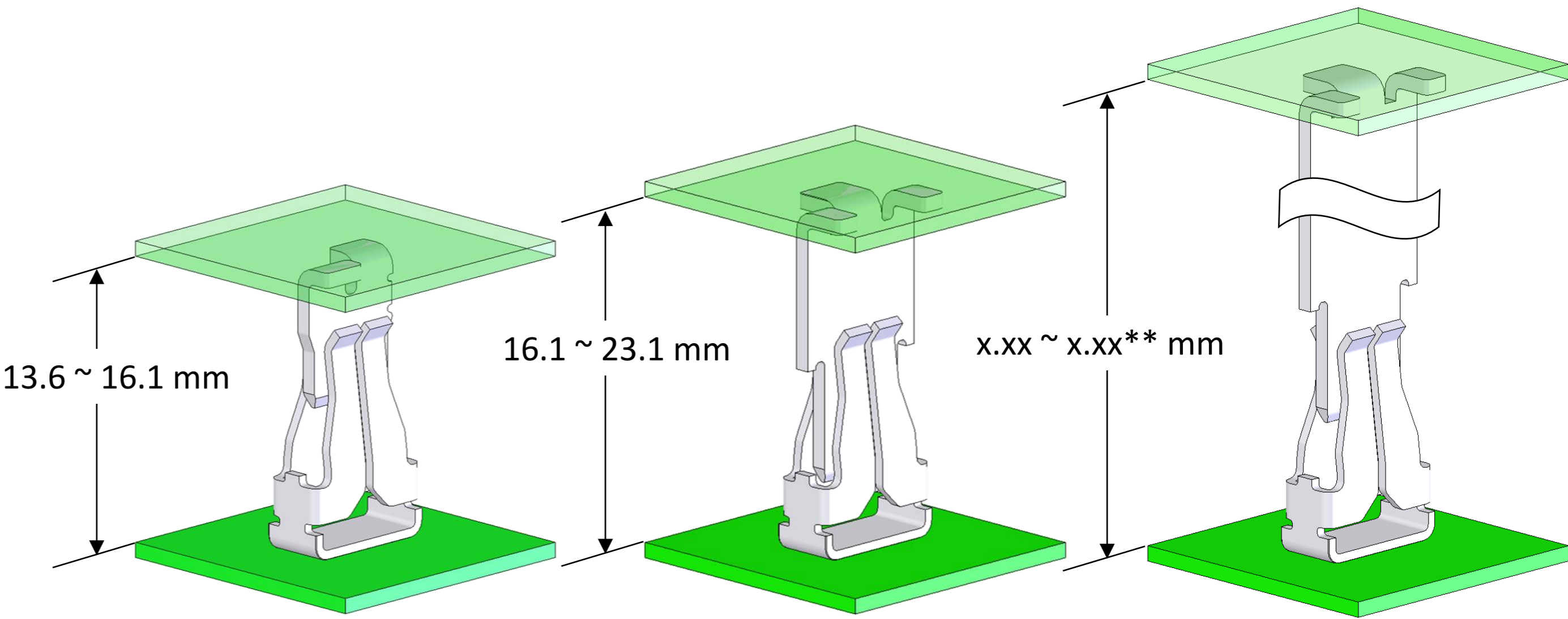
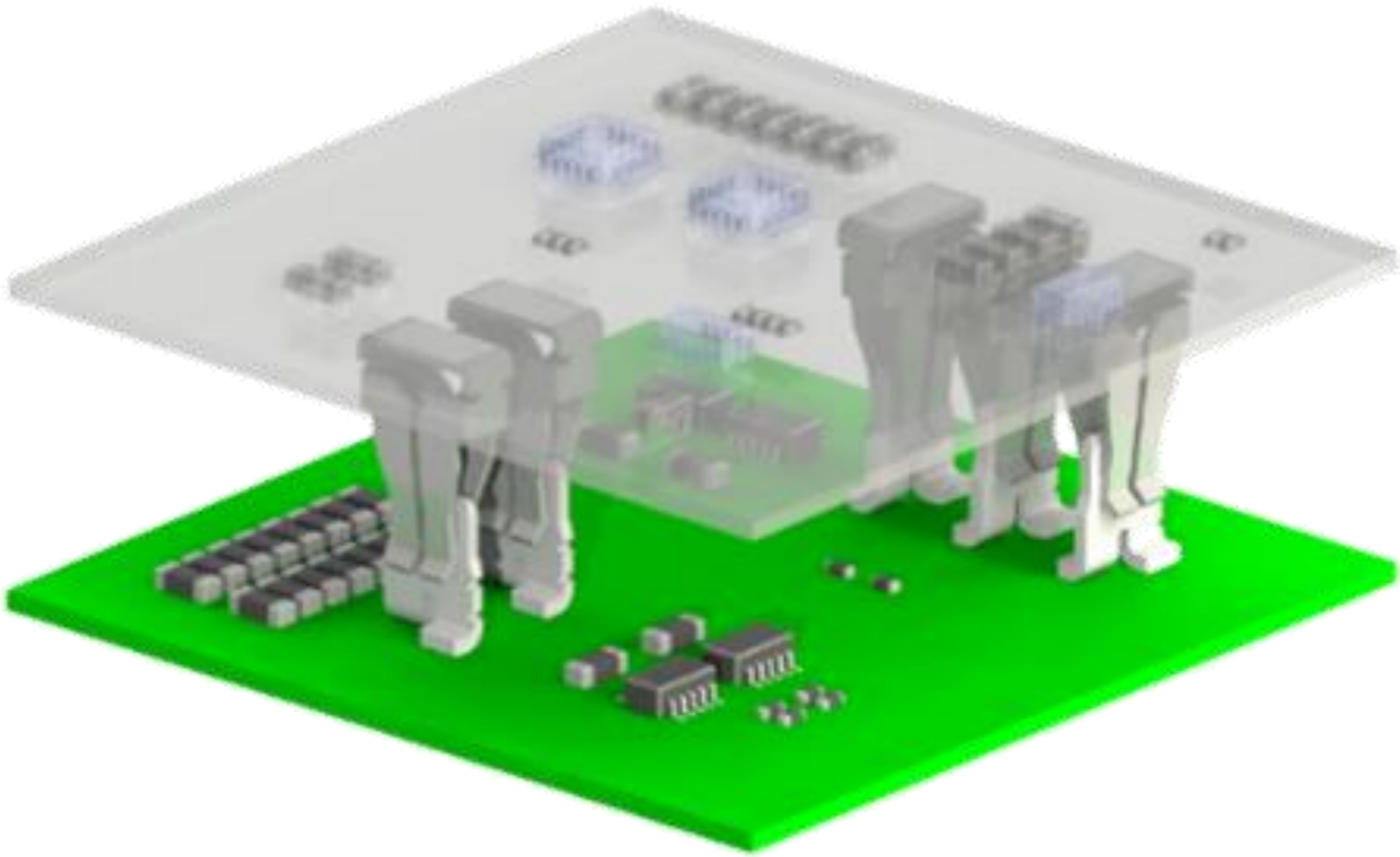
Comparison with traditional connect methods

Category	Bus bar	BtoB connector
Drawing		
Size wise	X	O
Tact wise	△	O



Suitable for power electronics devices such as DC-DC converter or Inverter

## Flexible board to board spacing



I-PEX offers AP-10 in multiple heights.

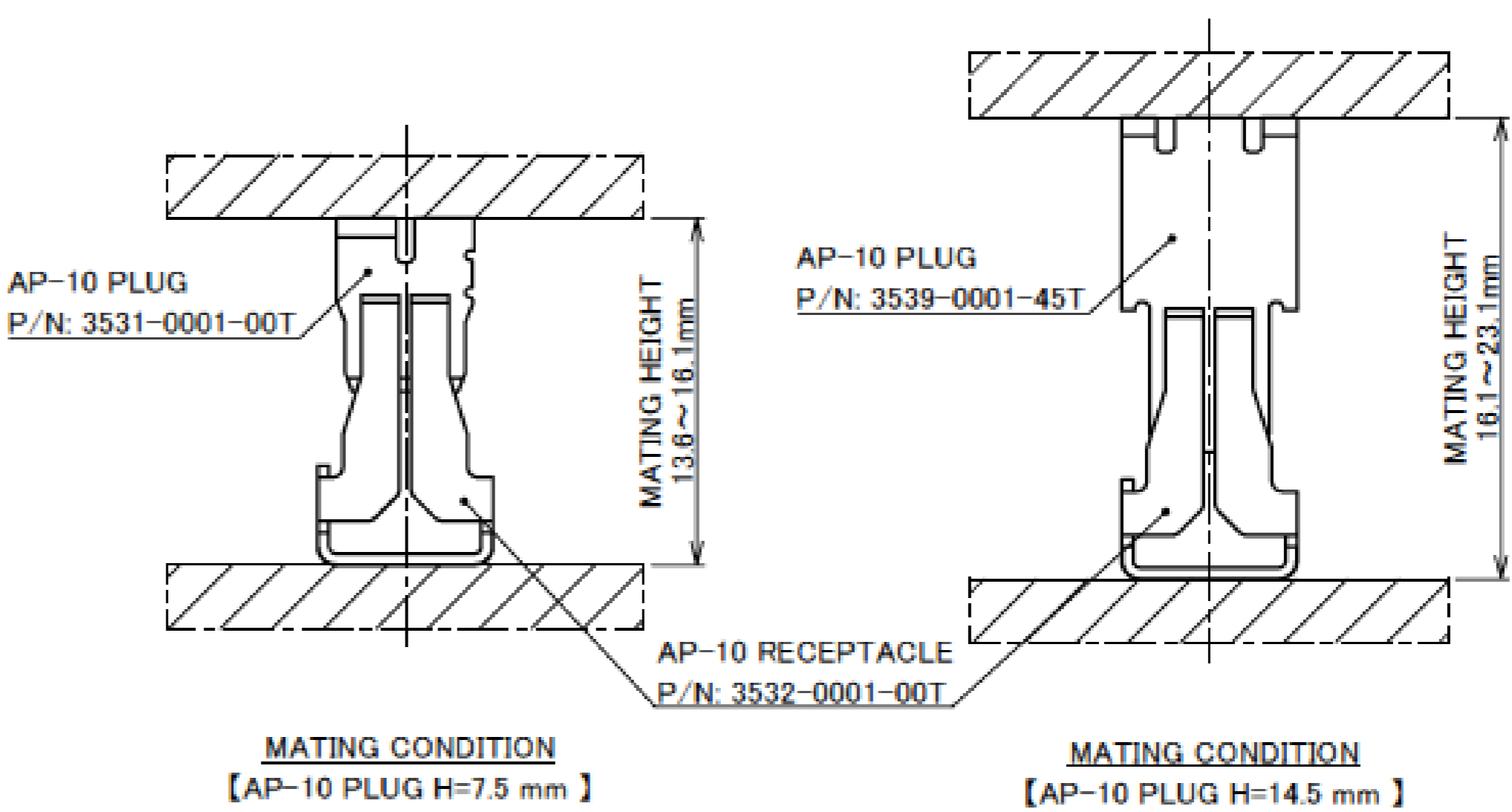
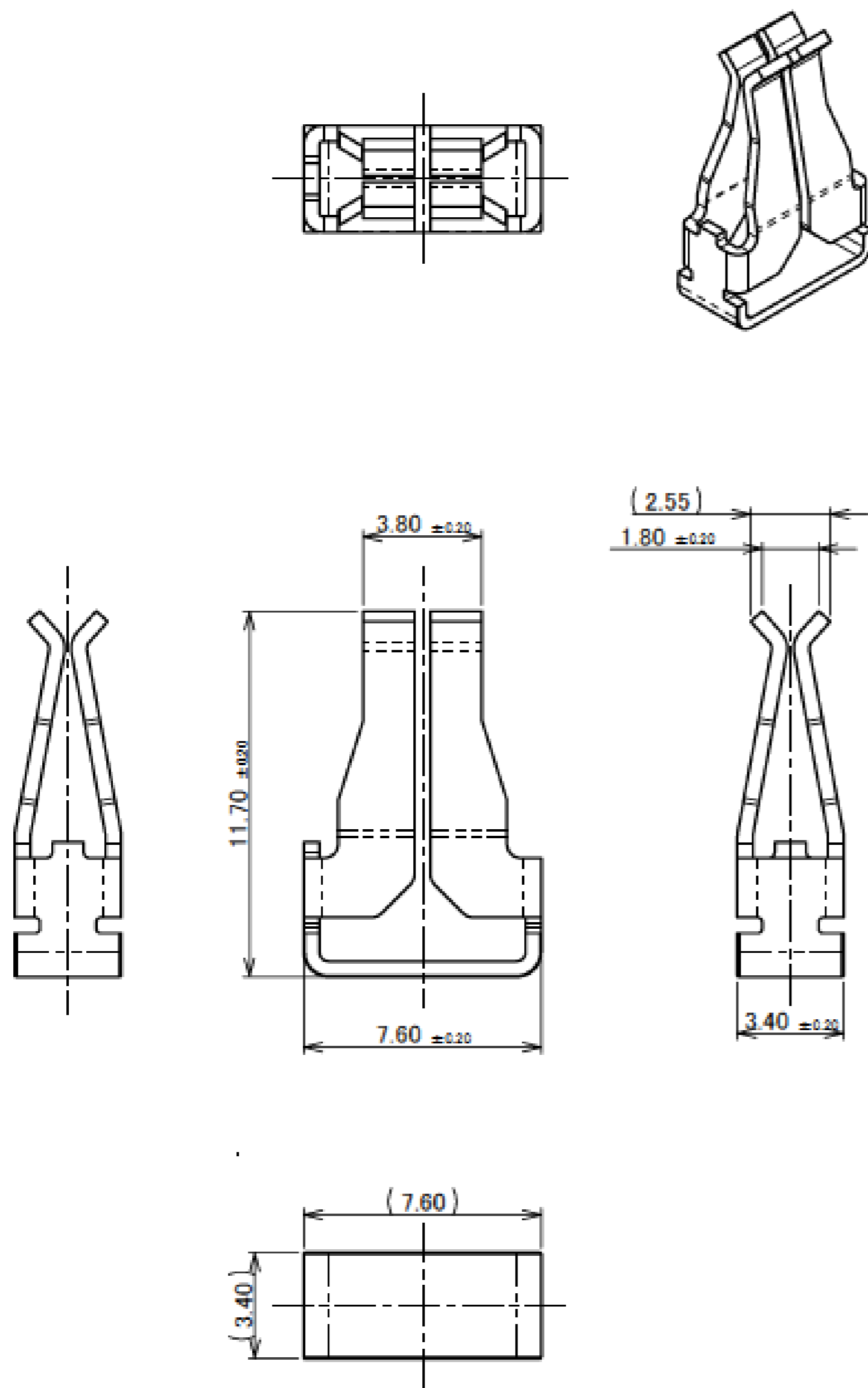
# Component Parts Details

## AP Series Receptacle

Recommended P/N	3532-0001-00T
PART NO.	
3532-0001-00T	



IATF 16949 Cetified [Planned]

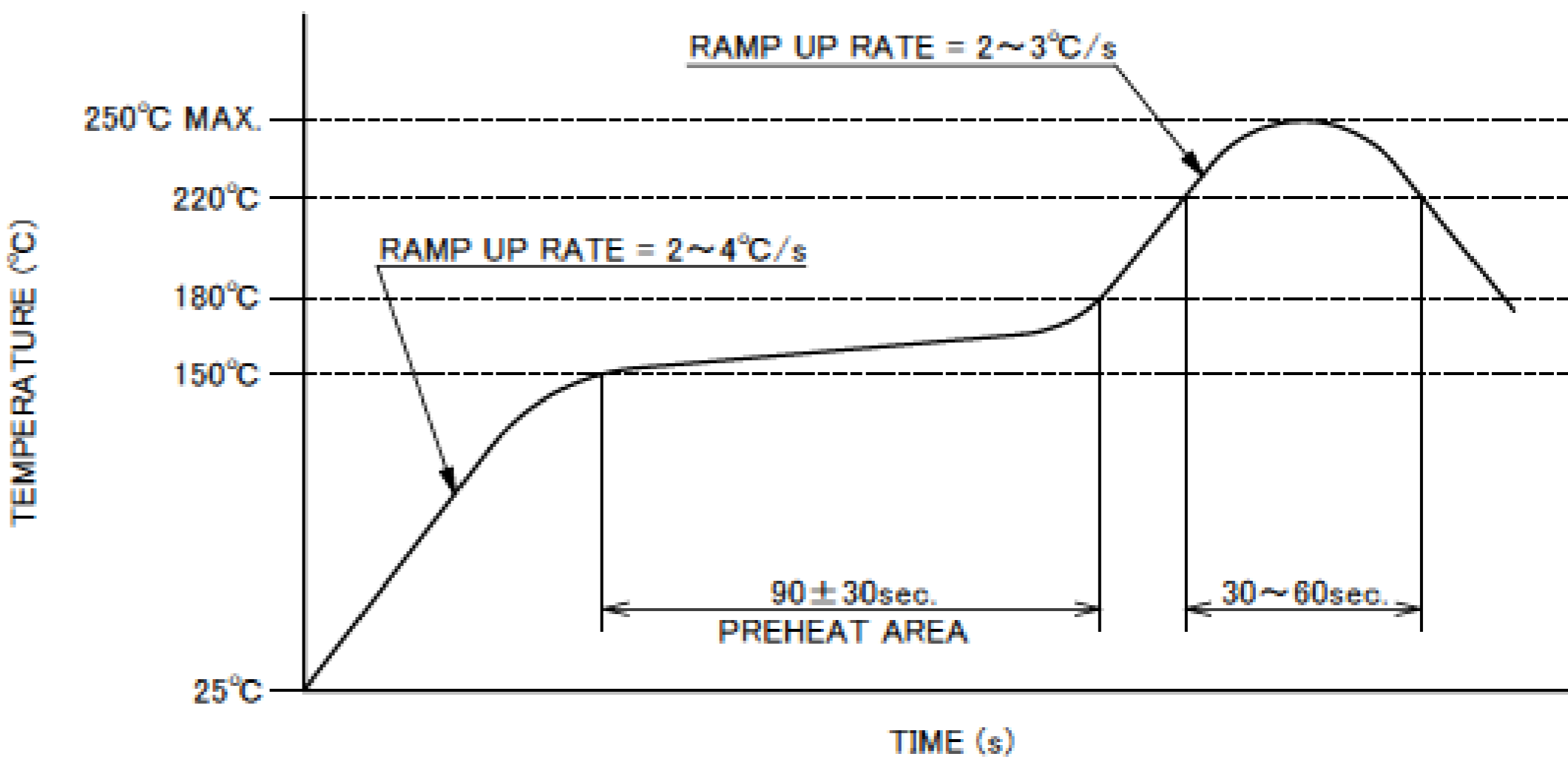
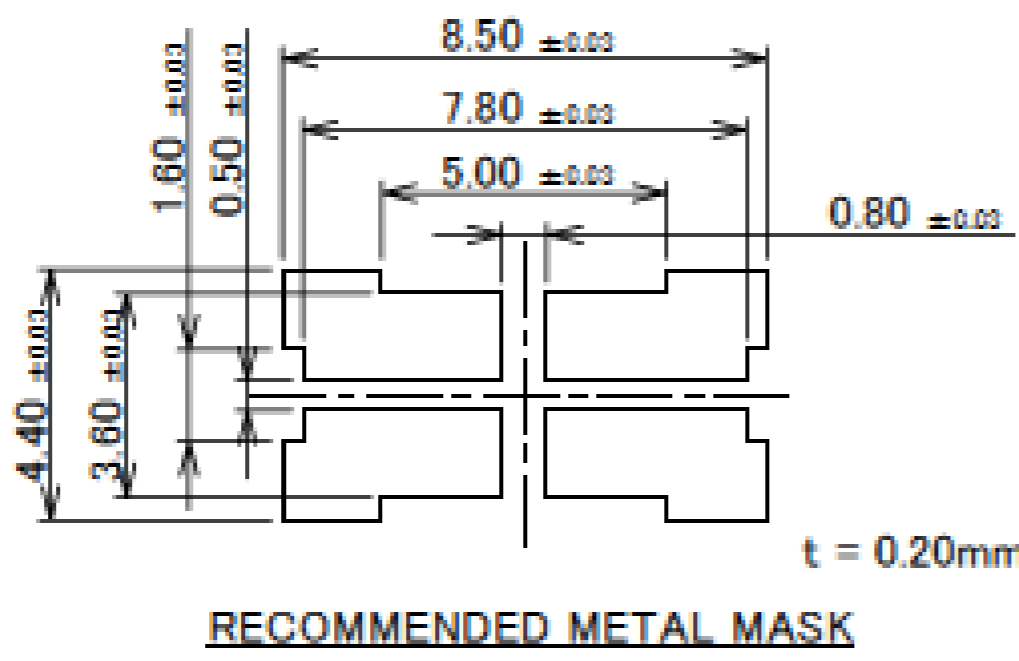
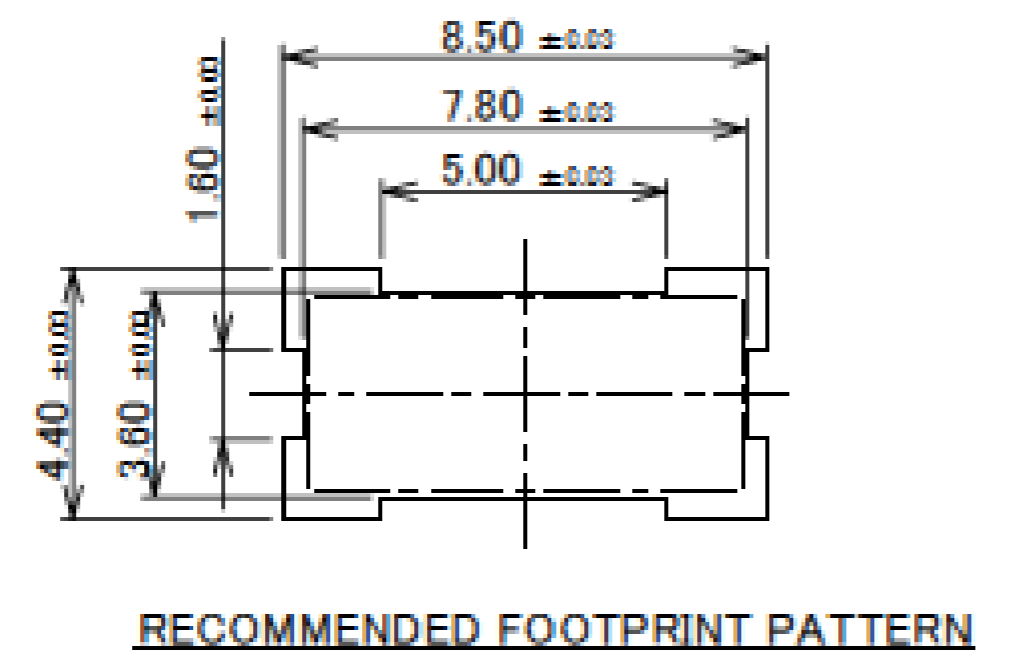


NOTES.  
1. APPLICABLE CONNECTOR  
AP-10 PLUG H=7.5 mm (P/N: 3531-0001-00T)  
AP-10 PLUG H=14.5 mm (P/N: 3539-0001-45T)

1	RECEPTACLE	COPPER ALLOY	Sn 1.00~4.50 μm OVER Ni 1.00~4.50 μm
NO.	DESCRIPTION	MATERIAL	FINISH , REMARKS

# AP Series Receptacle

PART NO.
3532-0001-00T



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

Rev.5

ITEMS	SPECIFICATION
APPLICABLE CONNECTOR PART No.	3531-0001-00T 3539-0001-45T
RATING AMPERAGE	16A DC
TEMPERATURE RISE	Δ15.0°C Max.
COMPONENT TEMPERATURE(ENERGIZATION)	233~378K(-40°C~+105°C)
OPERATING HUMIDITY	85% MAX.(NON-CONDENSING)
CONTACT RESISTANCE	INITIAL : 1.0 mohm MAX. / AFTER TEST : 1.0 mohm MAX.
DURABILITY	3 CYCLES
MATING FORCE	15.0 N MAX.
COPLANARITY	0.10mm MAX.
PRODUCT SPECIFICATION	PRS-2616
TEST REPORT	TR-19063
PACKING STANDARD	PST-17121
APPEARANCE CRITERIA No.	QLS-A***

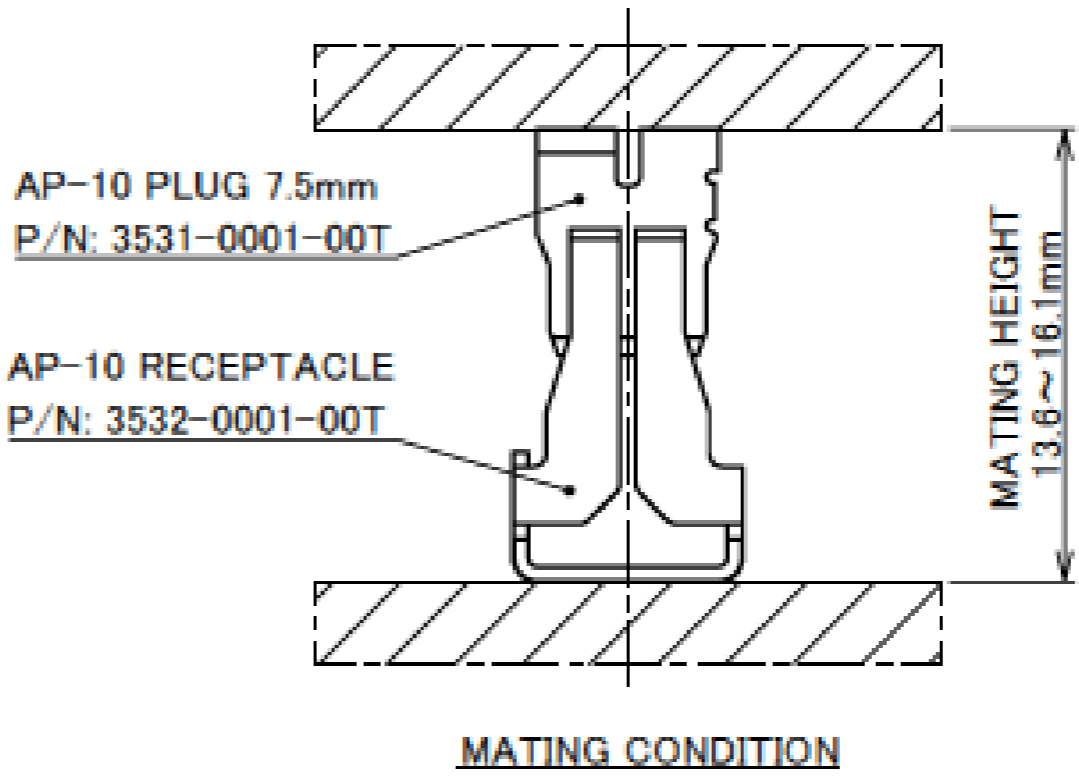
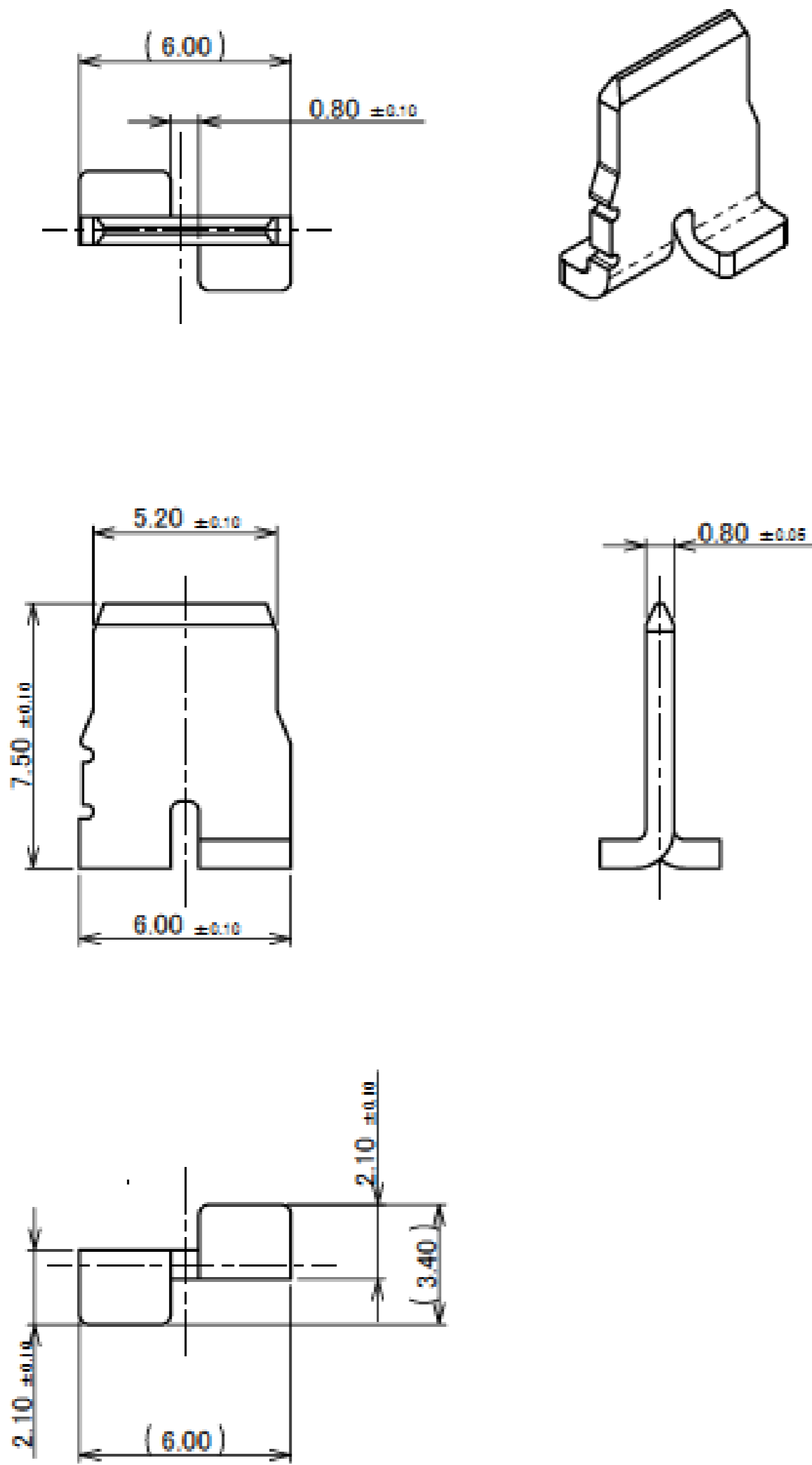
Rev.5

AP Series Plug

Recommended P/N	3531-0001-00T
PART NO.	
3531-0001-00T	



IATF 16949 Cetified [Planned]

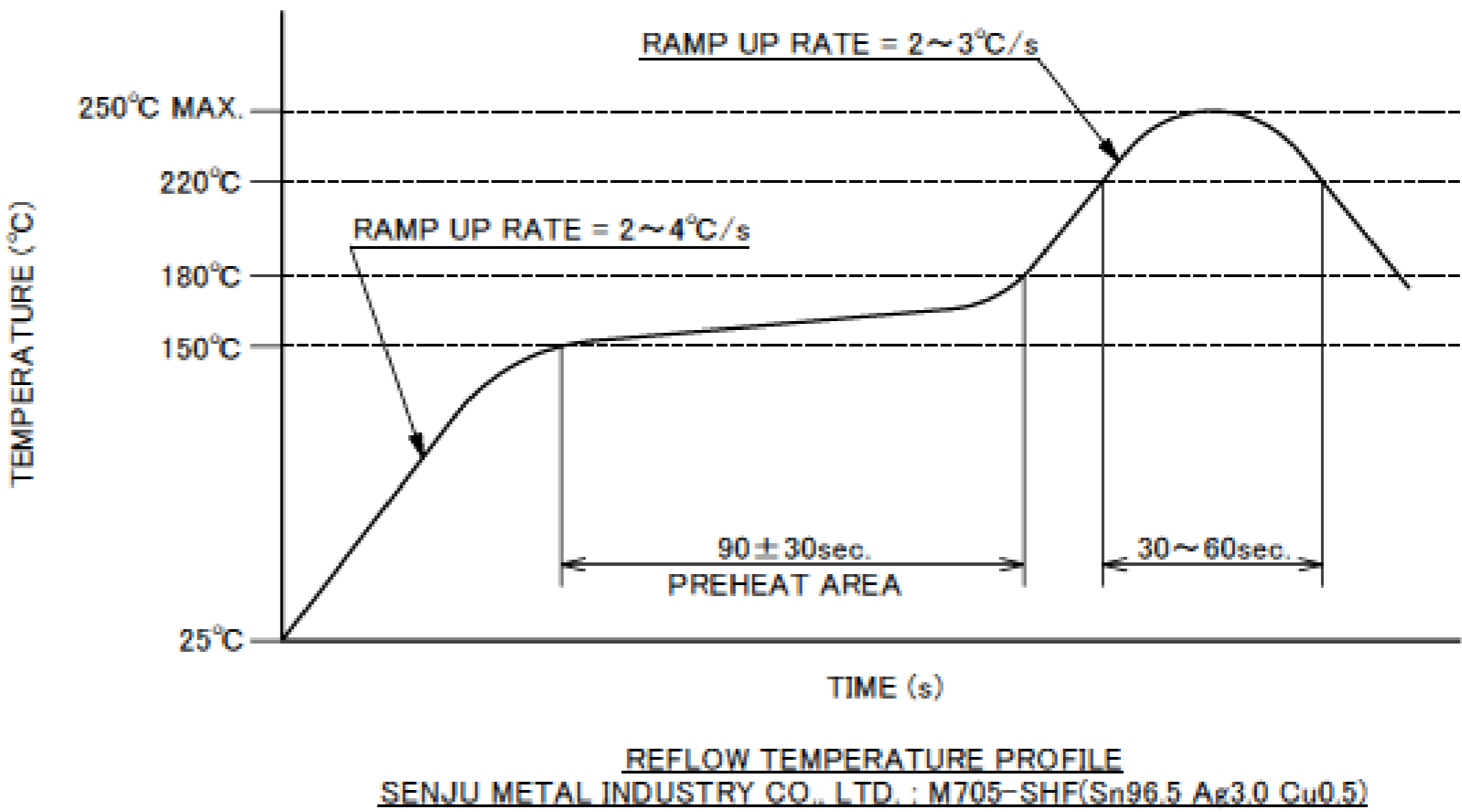
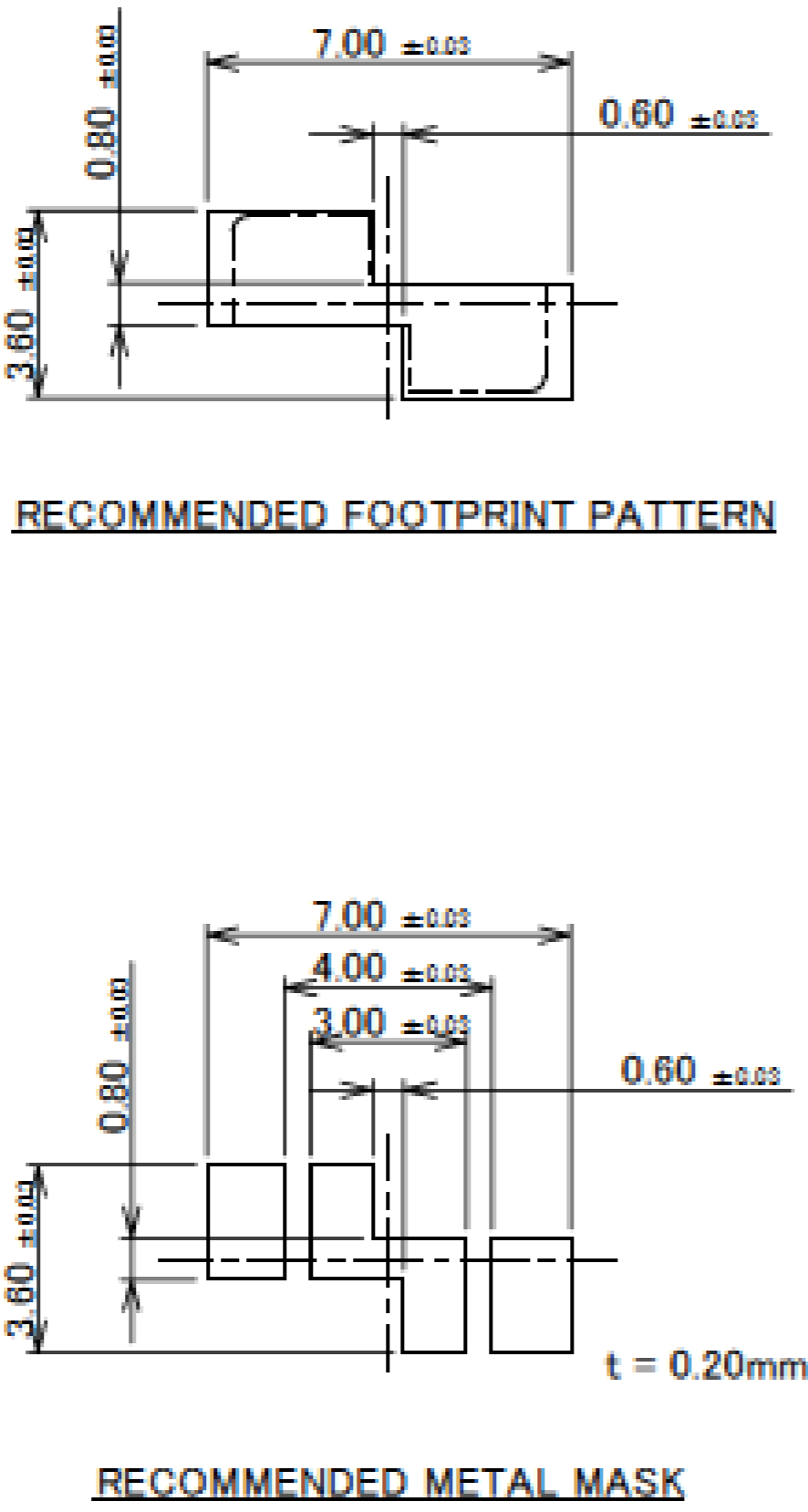


NOTES.  
1. APPLICABLE CONNECTOR  
AP-10 RECEPTACLE (P/N: 3532-0001-00T)

1	PLUG	BRASS	Sn 1.00 μm~4.50 μm OVER Ni 1.00 μm~4.50 μm
NO.	DESCRIPTION	MATERIAL	FINISH , REMARKS

Rev.5

PART NO.
3531-0001-00T



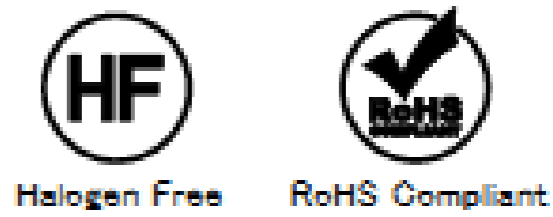
Rev.5

AP Series Plug

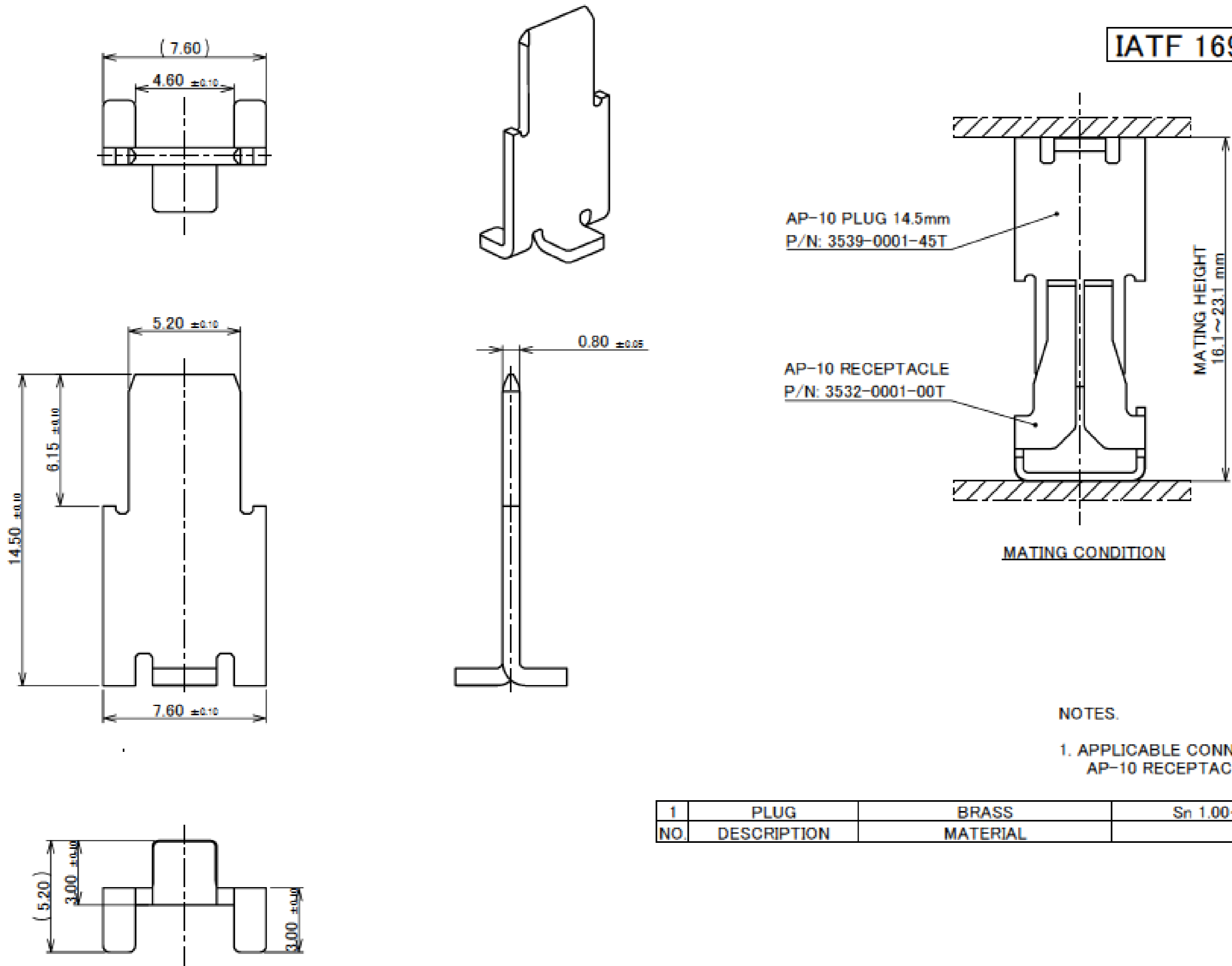
ITEMS	SPECIFICATION
APPLICABLE CONNECTOR PART No.	3532-0001-00T
RATING AMPERAGE	16A DC
TEMPERATURE RISE	Δ15.0°C MAX.
COMPONENT TEMPERATURE(ENERGIZATION)	233~378K(-40°C~+105°C)
OPERATING HUMIDITY	85% MAX.(NON-CONDENSING)
CONTACT RESISTANCE	INITIAL : 1.0 mohm MAX. / AFTER TEST : 1.0 mohm MAX.
DURABILITY	3 CYCLES
MATING FORCE/UNMATING FORCE	15.0 N MAX./15.0 N MAX.
COPLANARITY	0.10mm MAX.
PRODUCT SPECIFICATION	PRS-2616
TEST REPORT	TR-19063
PACKING STANDARD	PST-17120
APPEARANCE CRITERIA No.	QLS-A***

Rev.5

Recommended P/N		3539-0001-45T
PART NO.	PACKING	
3539-0001-45T	TRAY	
3539-0001-45E	EMBOSS	



IATF 16949 Cetified [Planned]



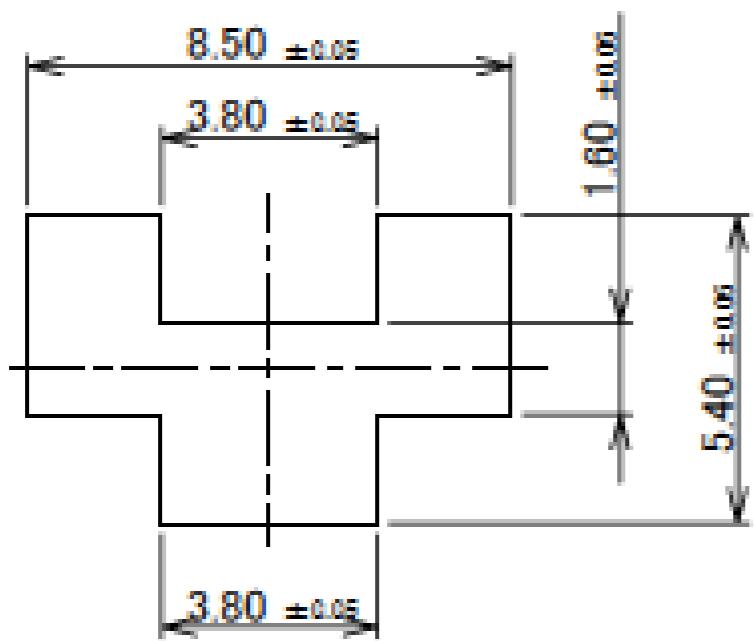
NOTES.  
1. APPLICABLE CONNECTOR  
AP-10 RECEPTACLE (P/N: 3532-0001-00T)

1	PLUG	BRASS	Sn 1.00~4.50 μm OVER Ni 1.00~4.50 μm
NO.	DESCRIPTION	MATERIAL	REMARKS, FINISH

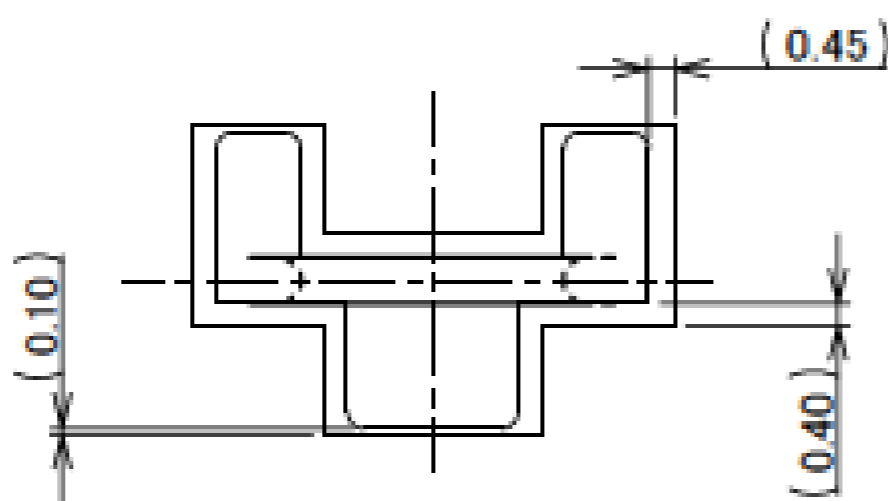
Rev.3

AP Series Plug

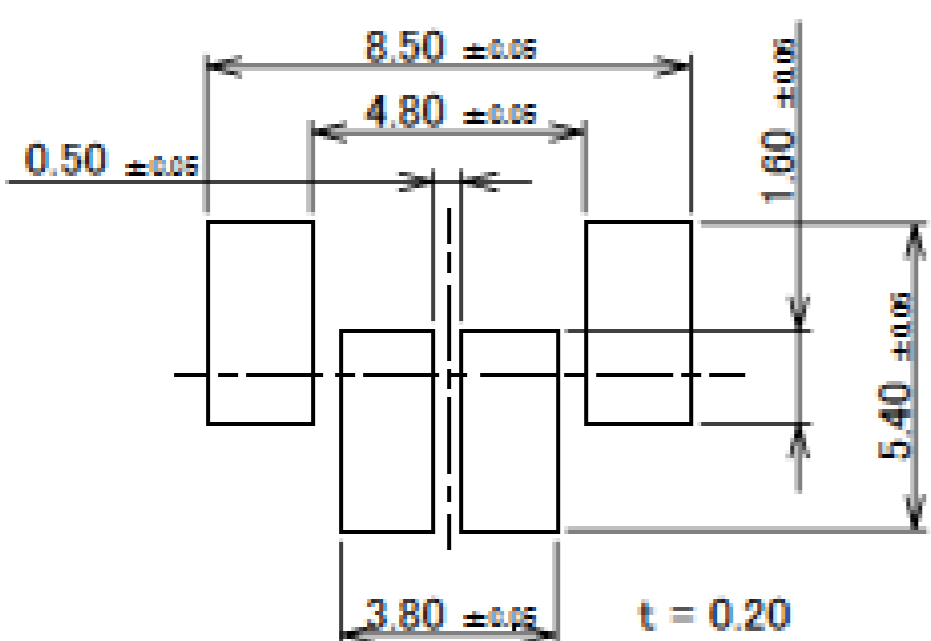
PART NO.	PACKING
3539-0001-45T	TRAY
3539-0001-45E	EMBOSS



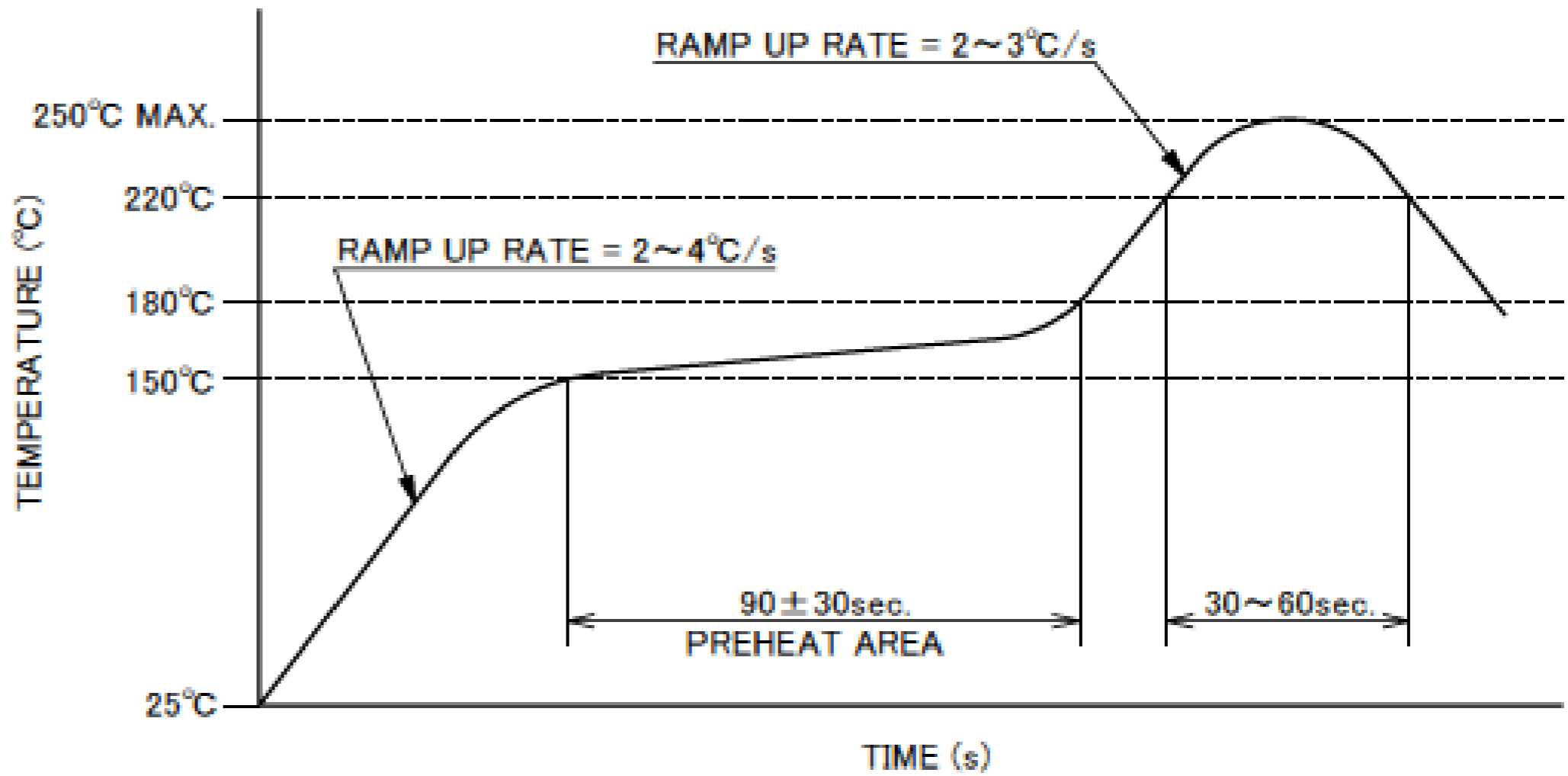
RECOMMENDED PATTERN LAYOUT



CONNECTOR ON RECOMMENDED PATTERN



RECOMMENDED METAL MASK LAYOUT



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

Rev.3

ITEMS	SPECIFICATION
APPLICABLE CONNECTOR PART No.	3532-0001-00T
RATING AMPERAGE	16A DC
TEMPERATURE RISE	Δ15.0°C MAX
COMPONENT TEMPERATURE (ENERGIZATION)	233~378K(-40°C~105°C)
OPERATING HUMIDITY	85% MAX.(NON-CONDENSING)
CONTACT RESISTANCE	INITIAL : 1.0 mohm MAX. / AFTER TEST : 1.0 mohm MAX.
DURABILITY	3 CYCLES
MATING FORCE/UNMATING FORCE	15.0 N MAX./15.0 N MAX.
COPLANARITY	0.10mm MAX.
PRODUCT SPECIFICATION	PRS-2616
TEST REPORT	TR-19063
PACKING STANDARD	PST-22010(TRAY) PST-23067(EMBOSS)
APPEARANCE CRITERIA No.	QLS-A***

Rev.3

# Custom Products Available

## RF Connector

MHF® series



CABLINE® series

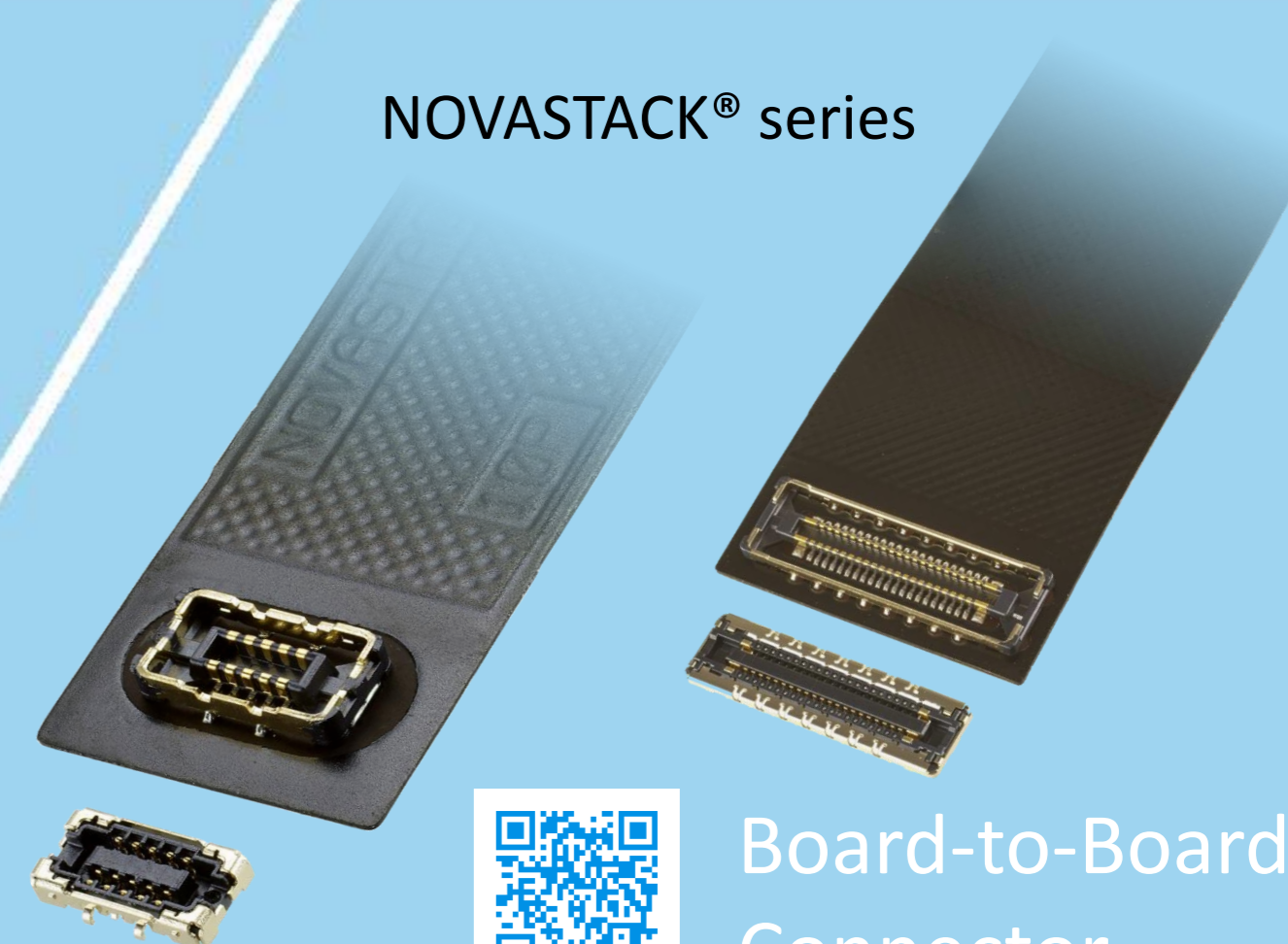
## Micro-coaxial/Twinax/ Discrete Wire Connector

## Optical Module

LIGHTPASS® series



NOVASTACK® series



## Board-to-Board Connector

## Power Connector/ Terminal

AP series

ISH® series



MINIFLEX® series

EVAFLEX® series



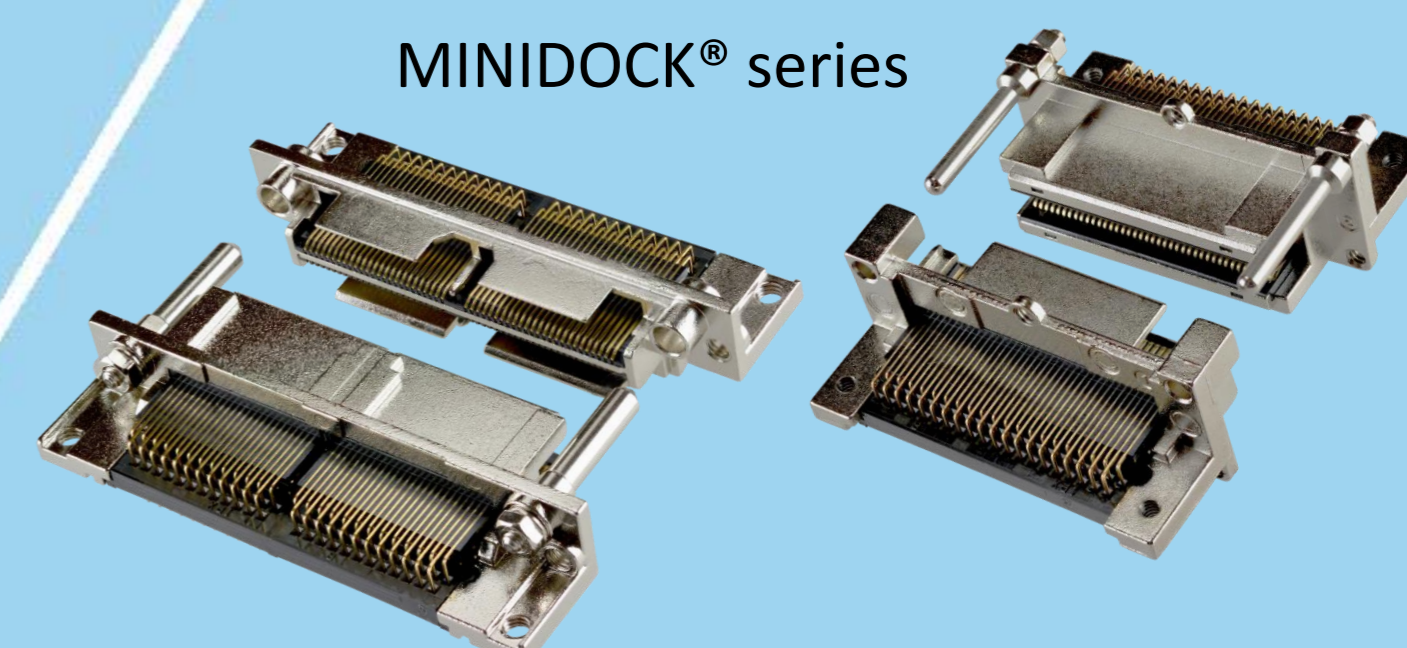
## FPC FFC Connector



Inquiry



MINIDOCK® series



## I/O Connector

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