

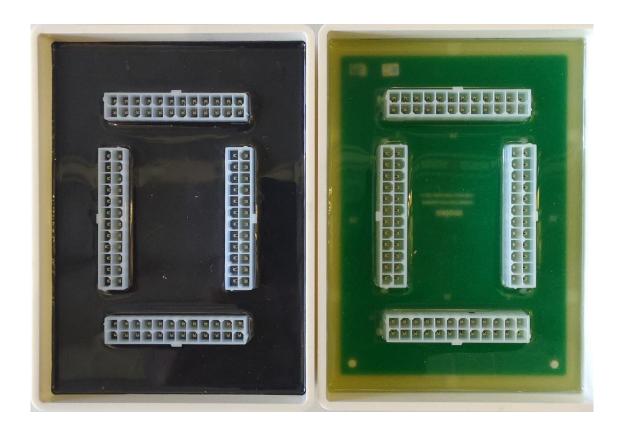
1.0

2.0

## **APPLICATION SPECIFICATION**

## **FIT FAMILY**

## **Potting Qualification for Vertical Headers**



### **TABLE OF CONTENTS**

Scope: ......

Product Family and Potting Height Recommendation ......

3.0 Resin U	.0 Resin Used for Potting Qualification4				
4.0 Consideration of Potting					
	g				
REVISION:	ECR/ECN INFORMATION:	TITLE:			SHEET No.
Α	EC No: <b>758626</b>		FIT FAMILY		4 (0
Α	DATE: 2023/07/08	Potting Qu	ualification for Vertical He	aders	<b>1</b> of <b>9</b>
DOCUMENT NUMBER:		CREATED / REVISED BY: CHECKED BY: APPRO		APPRO\	ED BY:
1722990000-AS		KARTHG3	MRAMAKRISHNA	MRAMAK	RISHNA



#### 1.0 <u>Scope:</u>

Potting Qualification for Fit Product family to define the Potting height and Potting material.

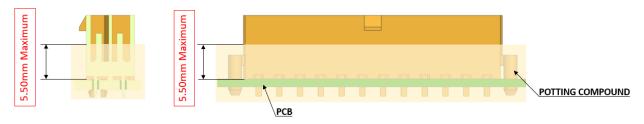
# 2.0 <u>Product Family and Potting Height Recommendation</u> (Height considered from the surface of the PCB)

SL.NO	Product Family	Series Number	Potting height in mm
Α	MINI-FIT, Vertical Header	5566*,172447	5.50
В	MINI-FIT MAX, Vertical Header	212520*	6.67
С	MICRO-FIT PLUS, Vertical Header	206832*	3.45
D	ULTRA-FIT, Vertical Header	172299* &172298	6.55
E	NANO-FIT, Vertical Header	105312*& 105310	4.00
F	MEGA-FIT, Vertical Header	76829* &172065	7.26
G	MICRO-FIT, Vertical Header	44432*	4.10

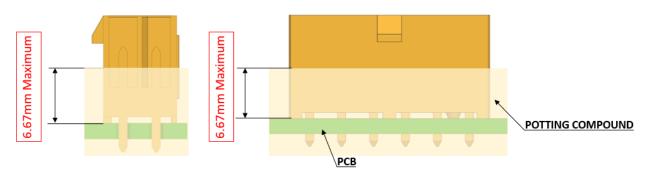
#### Note:

- > The series numbers containing a \* has been tested. The series numbers without star have been selected based on the housing core and terminal dimensions.
- Please refer to respective sales drawing for more detail dimension of this product.

## A. Mini-fit, Vertical Header: Potting Height Recommendation



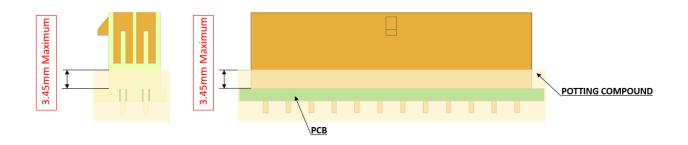
## B. Mini-Fit Max Vertical header: Potting Height Recommendation



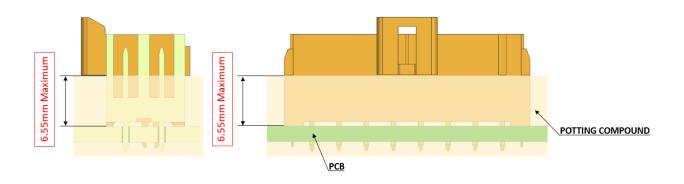
REVISION:	ECR/ECN INFORMATION:	TITLE:			SHEET No.
Α	EC No: <b>758626</b>		FIT FAMILY Potting Qualification for Vertical Headers		
A	DATE: 2023/07/08	Potting Q	<b>2</b> of <b>9</b>		
DOCUMENT NUMBER:		CREATED / REVISED BY:	CHECKED BY:	APPRO\	/ED BY:
1722990000-AS		KARTHG3	MRAMAKRISHNA	MRAMAK	KRISHNA



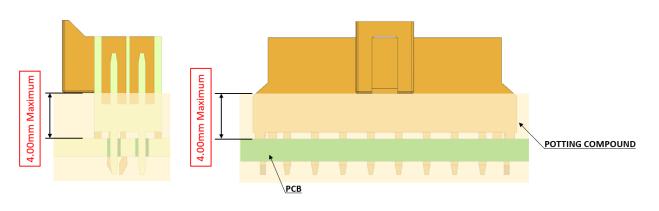
## C. Micro Fit Plus Vertical header: Potting Height Recommendation



## D. <u>Ultra-Fit Max, Vertical Header: Potting Height Recommendation</u>



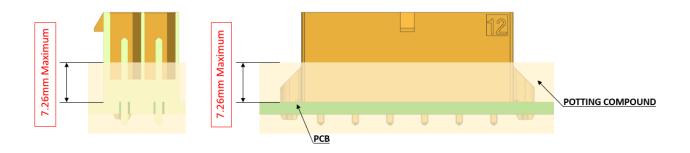
## E. Nano-fit Max, Vertical Header: Potting Height Recommendation



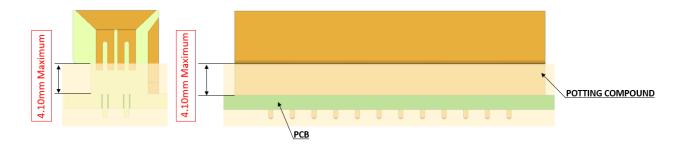
REVISION:	ECR/ECN INFORMATION:	TITLE:			SHEET No.
Λ.	EC No: <b>758626</b>	FIT FAMILY Potting Qualification for Vertical Headers			<b>3</b> of <b>9</b>
A	DATE: 2023/07/08	Potting Q			
DOCUMENT NUMBER:		CREATED / REVISED BY:	CHECKED BY:	APPRO\	/ED BY:
1722990000-AS		KARTHG3	MRAMAKRISHNA	MRAMAK	RISHNA



### F. Mega-fit Max, Vertical Header: Potting Height Recommendation



## G. MICRO-FIT, Vertical Header: Potting Height Recommendation



#### 3.0 Resin Used for Potting Qualification.

1. UF-820A / UF-820B

UF-820 https://www.sanyu-rec.jp/en/product/electronic/entry/187.html

2. UF-705A / UF-705 1B

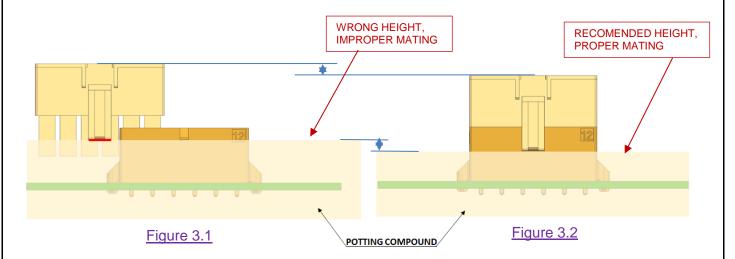
UF-705 <a href="https://www.sanyu-rec.jp/en/product/electronic/entry/188.html">https://www.sanyu-rec.jp/en/product/electronic/entry/188.html</a>

REVISION:	ECR/ECN INFORMATION:	TITLE:			SHEET No.
Α	EC No: <b>758626</b>	FIT FAMILY Potting Qualification for Vertical Headers		<b>4</b> of <b>9</b>	
<b>A</b>	DATE: 2023/07/08	Potting Q			
DOCUMENT NUMBER:		CREATED / REVISED BY:	CHECKED BY:	APPRO\	/ED BY:
1722990000-AS		KARTHG3	MRAMAKRISHNA	MRAMAK	KRISHNA



#### 4.0 Consideration of Potting

- Headers containing Drain hole feature in the housing are not recommended for potting.
- Always Follow the potting height recommended.



When the potting compound is poured above the recommended height, the receptacle does not mate properly due to obstruction/blockage created by potting compound. (Refer Figure 3.1)

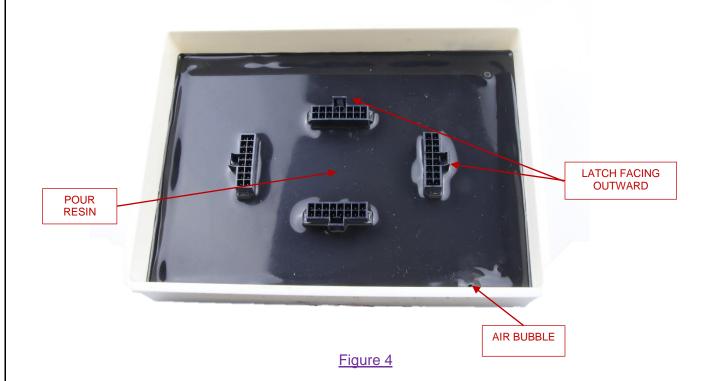
When the potting compound is poured up to the recommended height, the receptacle mates properly since there is no obstruction/blockage due to potting compound. (Refer Figure 3.2)

### Select the header on the following criteria.

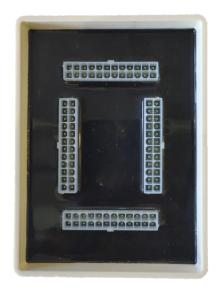
- > APPLICATION Wire-to-board
- ➤ ORIENTATION Vertical
- SAP Sales status Active
- Without Drain hole
- Select a receptacle which mates with the header.
- When designing the PCB for header make sure the latch of the header is facing in the outward direction. (Refer the figure 4)
- Always pour the resin from the center of the PCB to avoid the bubble formation on the surface of the resin after potting. (Refer the figure 4)
- Check with 5 samples in the first batch. if there is no seepage into the voids, start mass production.

REVISION:	ECR/ECN INFORMATION:	TITLE:			SHEET No.	
A   =====		FIT FAMILY		<b>5</b> of <b>9</b>		
	DATE: 2023/07/08	Potting Q	Potting Qualification for Vertical Headers			
DOCUMENT NUMBER:		CREATED / REVISED BY:	CHECKED BY:	APPRO\	/ED BY:	
1722990000-AS		KARTHG3	MRAMAKRISHNA	MRAMAK	RISHNA	
TEMPLATE ELLENAME: ADDITIONAL SPECISIZE AND AD						





## MINI- FIT



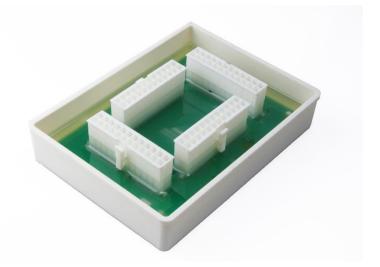


Figure 5.1

Figure 5.2

REVISION:	ECR/ECN INFORMATION:	TITLE:			SHEET No.
Α	EC No: <b>758626</b>	FIT FAMILY Potting Qualification for Vertical Headers		<b>6</b> of <b>9</b>	
_ ^	DATE: 2023/07/08	Potting Qi			
DOCUMENT NUMBER:		CREATED / REVISED BY:	CHECKED BY:	APPRO\	/ED BY:
1722990000-AS		KARTHG3	KARTHG3 MRAMAKRISHNA MRAMAKRISHNA		CRISHNA
TEMPLATE FILENAME: APPLICATION_SPEC[SIZE_A](V.1).DOC					



### **MINI- FIT MAX**



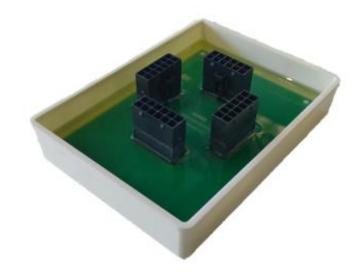


Figure 6.1 Figure 6.2

### **MICRO-FIT PLUS**



1722990000-AS



**KARTHG3** 

TEMPLATE FILENAME: APPLICATION\_SPEC[SIZE\_A](V.1).DOC

**MRAMAKRISHNA** 

**MRAMAKRISHNA** 



### **ULTRA-FIT**



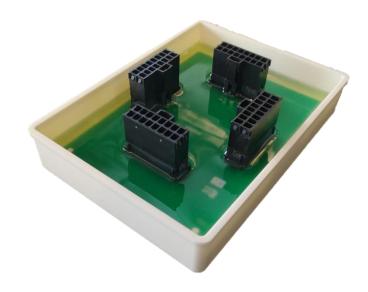


Figure 8.1

Figure 8.2

## NANO-FIT



Figure 9.1

1722990000-AS



Figure 9.2

**MRAMAKRISHNA** 

**MRAMAKRISHNA** 

REVISION:	ECR/ECN INFORMATION:	TITLE:			SHEET No.
Α	EC No: <b>758626</b> DATE: <b>2023/07/08</b>	Potting Q	FIT FAMILY Potting Qualification for Vertical Headers		<b>8</b> of <b>9</b>
DOCUMENT NUMBER:		CREATED / REVISED BY:	CHECKED BY:	APPRO\	/ED BY:

**KARTHG3** 



### **MEGA-FIT**





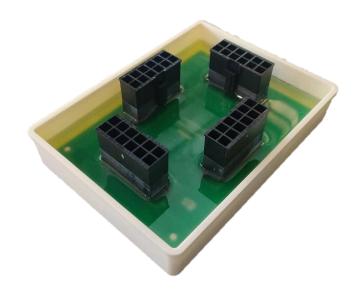


Figure 10.2

#### **MICRO-FIT**

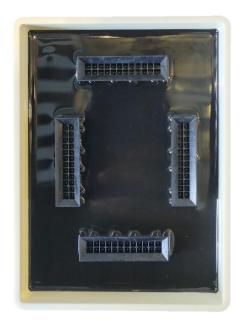


Figure 11.1

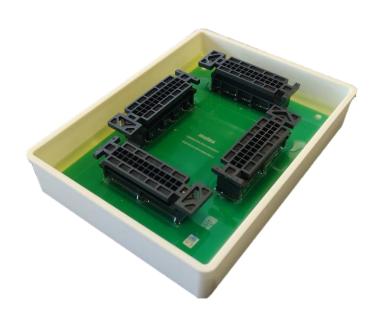


Figure 11.2

REVISION: ECR/ECN INFORMATION: TITLE:

SHEET No.

Potting Qualification for Vertical Headers

SHEET No.

9 of 9

DOCUMENT NUMBER:

1722990000-AS

CREATED / REVISED BY:
KARTHG3

CHECKED BY:
MRAMAKRISHNA

APPROVED BY: MRAMAKRISHNA