



<b>ACCESSORIES</b>	<b>HC RELAYS</b> (Sockets and Terminal sockets)
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### FEATURES

#### 1. HC Relay Sockets

In the table below, the socket suitable for each type of HC relay is indicated by a black dot.

- 1) Plug-in type sockets, PC board type sockets, and wrapping type sockets are available for HC relays.
- 2) Certified by UL and CSA
- 3) A hold-down clip is included in the package.



The fixing method is the same as for HC sockets, ordinary HC terminal sockets and HL sockets.

HC/HL-LEAF-SPRING-MK

#### 2. HC Relay Terminal sockets

In the table below, the terminal socket suitable for each type of HC relay is indicated by a black dot.

- 1) Ordinary terminal sockets and terminal sockets for DIN rail assembly are available.
- 2) Certified by UL/C-UL
- 3) A hold-down clip is included in the package.



The fixing method is the same as for sockets.

Ordinary terminal socket  
HC/HL-LEAF-SPRING-MK



The fixing method is the same as for the HC DIN rail terminal sockets

DIN rail Terminal sockets  
HC-LEAF-SPRING-K

### SELECTOR CHART

#### 1. Sockets

Type	No. of pole	Product name	Part No.	Applicable HC relay (Plug-in type)									
				Standard type/With diode type (for DC)				Amber type					
				1 Form C	2 Form C	3 Form C	4 Form C	4 Form C (twin)	1 Form C	2 Form C	4 Form C	4 Form C (twin)	
Plug-in	1-pole	HC1-socket	HC1-SS-K	●						●			
	2-pole	HC2-socket	HC2-SS-K		●						●		
	3-pole	HC3-socket	HC3-SS-K		●	●					●		
	1/2/4-pole (common)	HC4-socket	HC4-SS-K	▲*1	▲*1		●	●	●	●	●	●	●
PC board	1-pole	HC1-socket for PC board	HC1-PS-K	●						●			
	2-pole	HC2-socket for PC board	HC2-PS-K		●						●		
	3-pole	HC3-socket for PC board	HC3-PS-K		●	●					●		
	1/2/4-pole (common)	HC4-socket for PC board	HC4-PS-K	▲*1	▲*1		●	●	●	●	●	●	●
Wrapping	1/2/4-pole (common)	HC4-wrapping socket	HC4-WS-K	▲*1	▲*1		●	●	●	●	●	●	●
		HC4-wrapping socket (spring)	HC4-WS	▲*1	▲*1		●	●	●	●	●	●	●

Standard packing: Carton: 20 pcs.; Case: 200 pcs.

Notes: 1. Use the hold-down clip that is shipped with the socket.

2. Certified by UL and CSA (except for wrapping socket).

(\*1) Please use with a max. carrying current no higher than 5 A.

#### 2. Terminal sockets (HC Terminal sockets)

Type	No. of pole	Item	Part No.	Standard packing		Applicable HC relay (Plug-in type)								
						Standard type/With diode type (for DC)				Amber type				
				Carton	Case	1 Form C	2 Form C	3 Form C	4 Form C	4 Form C (twin)	1 Form C	2 Form C	4 Form C	4 Form C (twin)
For DIN rail	2-pole	HC2-slim type DIN terminal socket	HC2-SFD-S	20 pcs.	100 pcs.		●						●	
	2/3-pole	HC3-DIN	HC3-SFD-K	5 pcs.	50 pcs.		●	●					●	
	1/2/4-pole (common)	HC vertical terminal socket	HC4-TSF-K	5 pcs.	50 pcs.	▲*2	●		●	●	●	●	●	●
For general	2-pole	HC2-terminal socket	HC2-SF-K	10 pcs.	100 pcs.		●						●	
	2/3-pole	HC3-high terminal socket	HC3-HSF-K	5 pcs.	50 pcs.		●	●					●	
	1/2/4-pole (common)	HC-high terminal socket	HC4-HSF-K	5 pcs.	50 pcs.	▲*2	●		●	●	●	●	●	●

Notes: 1. Use the hold-down clip that is shipped with the socket.

2. Certified by UL/C-UL (except for HC4-TSF-K).

3. In order to prevent breakage and disfiguring, the screw tightening torque for the terminal socket should be within the range of 0.49 to 0.69 N·m {5 to 7kgf·cm}.

(\*2) Please use with a max. carrying current no higher than 7 A.

# HC RELAY ACCESSORIES

## 3. Terminal sockets (HJ Terminal sockets)

Type	No. of pole	Item	Part No.	Standard packing		Applicable HC relay (Plug-in type)					
						Standard type/With diode type (for DC)			Amber type		
				Carton	Case	2 Form C	4 Form C	4 Form C (twin)	2 Form C	4 Form C	4 Form C (twin)
For DIN rail	2-pole	HJ2-terminal socket	HJ2-SFD	10 pcs.	100 pcs.	●			●		
		HJ2-terminal socket (Finger protect type)	HJ2-SFD-S			●			●		
	1/2/4-pole (common)	HJ4-terminal socket	HJ4-SFD			▲*3	●	●	●	●	●
		HJ4-terminal socket (Finger protect type)	HJ4-SFD-S			▲*3	●	●	●	●	●

Note: When using HJ4-SFD/HJ4-SFD-S with HC relay 1 Form C/2 Form C as a set, please keep the terminal socket max. continuous current no higher than 5 A.  
 (\*3) Please use with a max. carrying current no higher than 5 A.

## RATING

### Specifications (Sockets)

Item		Performance							
Type		HC1 Plug in terminal socket	HC1 PC board socket	HC2 Plug in terminal socket	HC2 PC board socket	HC3 Plug in terminal socket	HC3 PC board socket	HC4 Plug in terminal socket	HC4 PC board socket
Contact arrangement		1 Form C (1-pole)		2 Form C (2-pole)		3 Form C (2/3-pole common)		4 Form C (1/2/4-pole common)	
Max. continuous current (Ambient temperature: -50 to +70°C -58 to +158°F)		10A	10A	7A	7A	7A	7A	5A	5A
Breakdown voltage (Initial)	Between open contacts	2, 000 Vrms for 1 min. (Detection current: 10mA)							
	Between contact sets								
	Between contact and coil								
Initial insulation resistance		100 MΩ between each terminal (500V DC)							

Note: When using 1/2 pole HC relay (10A, 7A rating) on a 4 Form C socket that is 1/2/4-pole common, please use within a range that does not exceed the max. continuous current (5A).

### Specifications (Terminal sockets)

Item		Performance							
Type		HC2-slim For DIN rail terminal sockets	HC2 For DIN rail terminal sockets	HC2 For general terminal sockets	HC3 For DIN rail terminal sockets	HC3-high For general terminal sockets	HC4-high For DIN rail terminal sockets	HC4-high vertical type terminal sockets	HC4 For general terminal sockets
Contact arrangement		2 Form C (2-pole)			3 Form C (2/3-pole common)		4 Form C (1/2/4-pole common)		
Max. continuous current (Ambient temperature: -50 to +70°C -58 to +158°F)		7A	7A	7A	7A	7A	7A	7A	7A
Breakdown voltage (Initial)	Between open contacts	2, 000 Vrms for 1 min. (Detection current: 10mA)							
	Between contact sets								
	Between contact and coil								
Initial insulation resistance		100 MΩ between each terminal (500V DC)							

Note: When using a 1-pole HC relay (10A) on 4 Form C terminal socket that is 1/2/4-pole common, please use within a range that does not exceed the max. continuous current (7A).

## DIMENSIONS (mm inch)

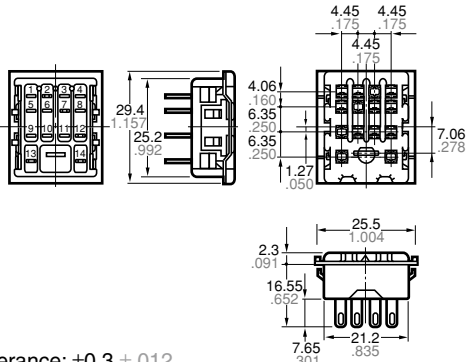
The CAD data of the products with a **CAD Data** mark can be downloaded from: <http://industrial.panasonic.com/ac/e/>

### 1. Plug-in type sockets

**CAD Data**



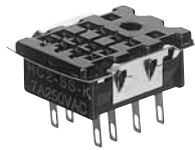
External dimensions



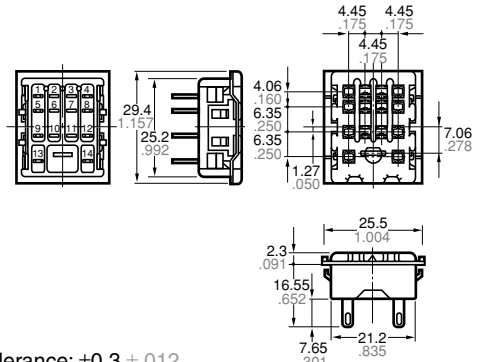
General tolerance:  $\pm 0.3 \pm 0.012$

### HC2-Socket (HC2-SS-K)

**CAD Data**



External dimensions



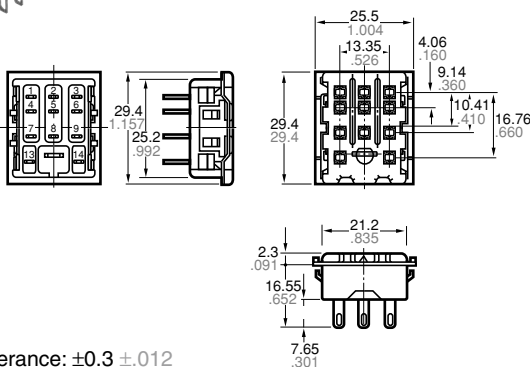
General tolerance:  $\pm 0.3 \pm 0.012$

### HC3-Socket (HC3-SS-K)

**CAD Data**



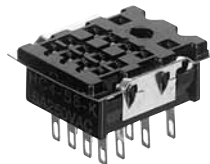
External dimensions



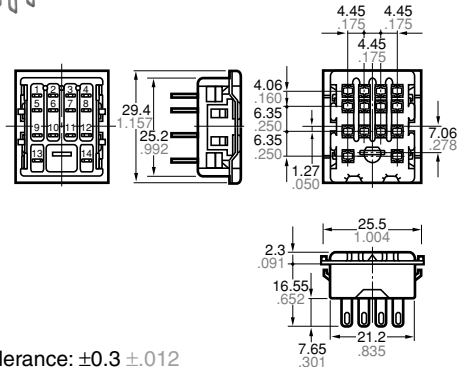
General tolerance:  $\pm 0.3 \pm 0.012$

### HC4-Socket (HC4-SS-K)

**CAD Data**

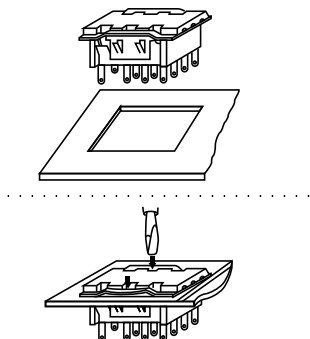


External dimensions

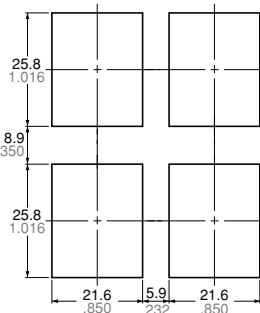


General tolerance:  $\pm 0.3 \pm 0.012$

### Mounting hole diagram



### Side-by-side installation



General tolerance:  $\pm 0.2 \pm 0.008$

Notes: 1. Applicable chassis board thickness is 1.0 to 2.0 mm.

2. Installation is easy by inserting the socket from the top into the holes and by depressing the two down arrows on the retention fitting from the front.

### With a relay mounted (HC2-SS-K)



Hold-down clip is packaged with the socket.

# HC RELAY ACCESSORIES

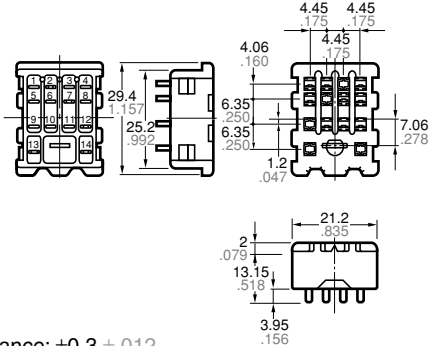
## 2. PC board type sockets

HC1- PC board type socket (HC1-PS-K)

**CAD Data**



External dimensions



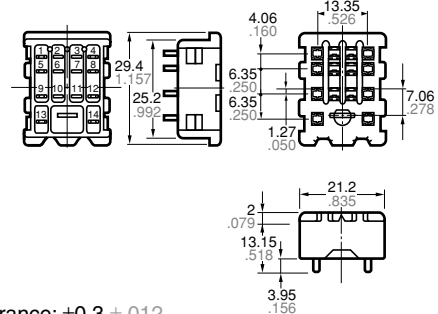
General tolerance:  $\pm 0.3 \pm 0.12$

HC2- PC board type socket (HC2-PS-K)

**CAD Data**



External dimensions



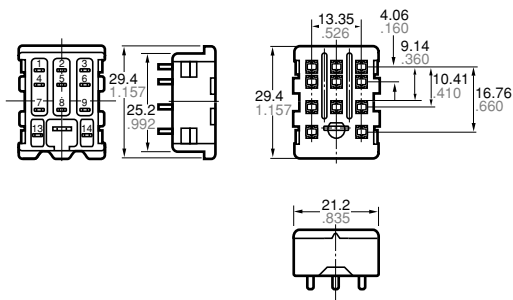
General tolerance:  $\pm 0.3 \pm 0.12$

HC3- PC board type socket (HC3-PS-K)

**CAD Data**



External dimensions



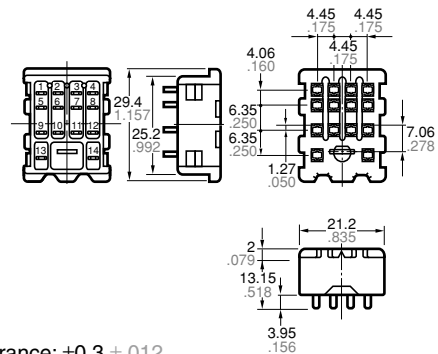
General tolerance:  $\pm 0.3 \pm 0.12$

HC4- PC board type socket (HC4-PS-K)

**CAD Data**

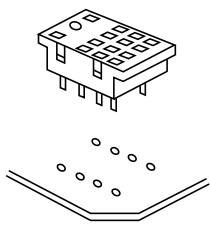


External dimensions



General tolerance:  $\pm 0.3 \pm 0.12$

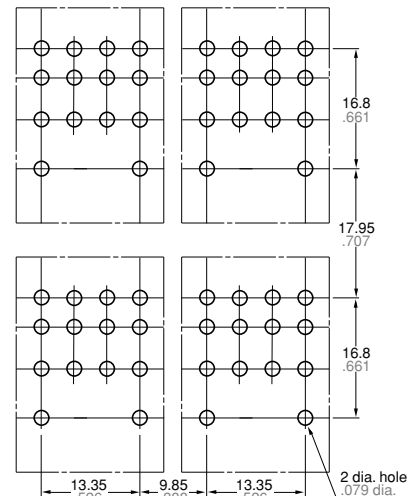
PC board pattern (Bottom view)



With a relay mounted

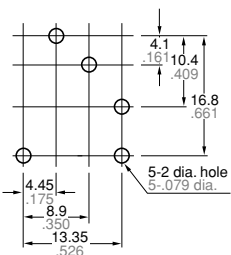


Side-by-side installation

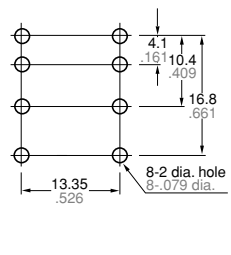


Hold-down clip is packaged with the socket.

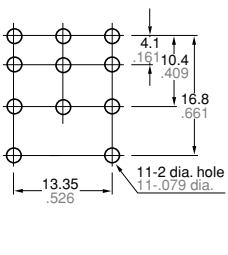
1 Form C



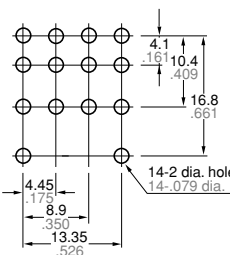
2 Form C



3 Form C



4 Form C

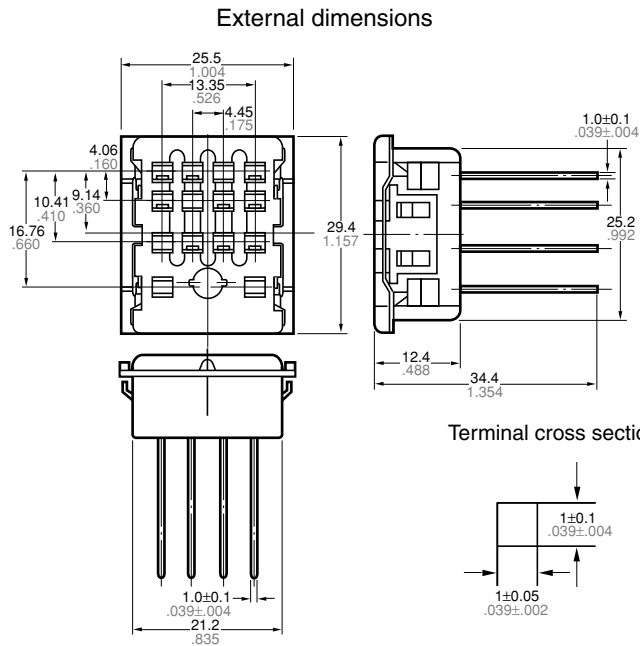
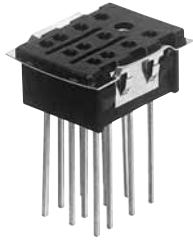


General tolerance:  $\pm 0.1 \pm 0.04$

## 3. Wrapping type sockets

Standard wrapping type sockets  
(HC4-WS-K)

**CAD Data**



Hold-down clip  
(Hold-down clip is packaged with the socket)

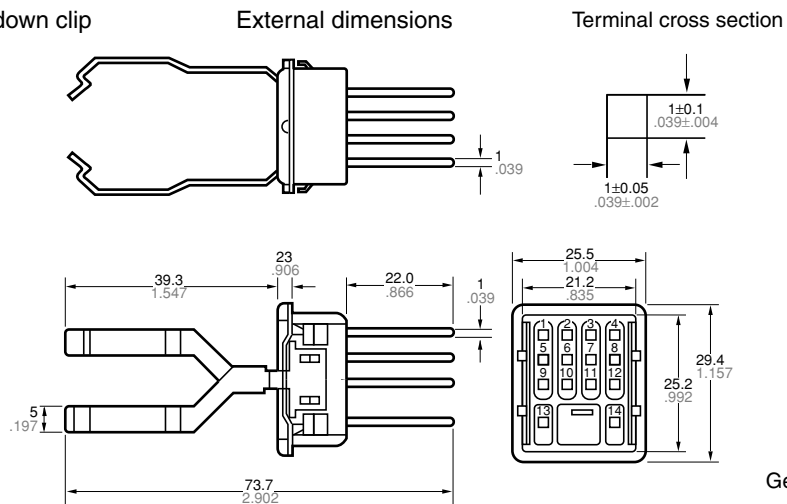
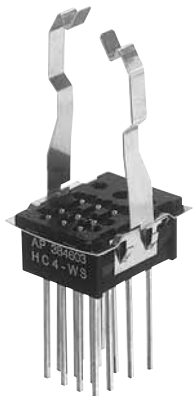


General tolerance:  $\pm 0.3 \pm .012$

Note: The external and mounting dimensions are the same for 1-pole (HC1-WS-K), 2-pole (HC2-WS-K), and 3-pole (HC3-WS-K) types.  
Only the number of terminals varies.

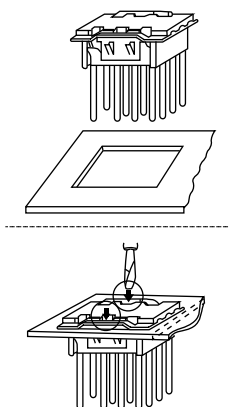
Wrapping type sockets with hold-down clip  
(HC4-WS)

**CAD Data**

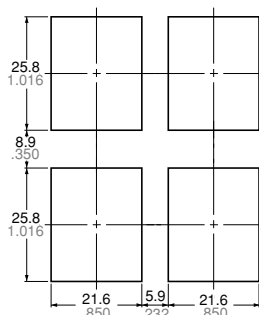


General tolerance:  $\pm 0.7 \pm .028$

Mounting hole diagram



Side-by-side installation



General tolerance:  $\pm 0.2 \pm .008$

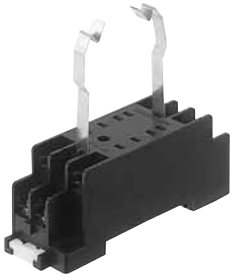
- Notes: 1. Applicable chassis board thickness is 1.0 to 2.0 mm.  
2. Installation is easy by inserting the socket from the top into the holes and by depressing the two down arrows on the retention fitting from the front.

# HC RELAY ACCESSORIES

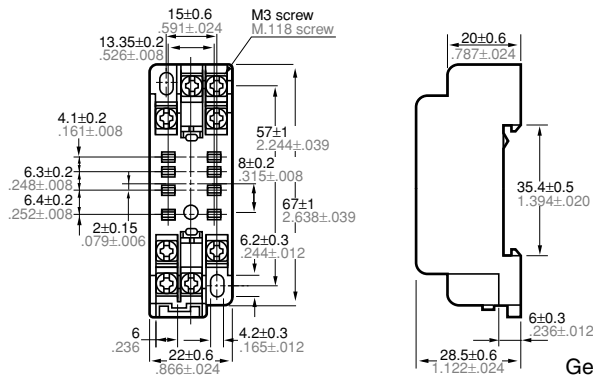
## 4. DIN rail Terminal sockets

HC2-Slim type DIN rail terminal sockets (HC2-SFD-S)

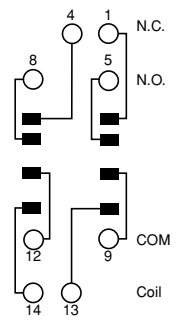
### CAD Data



### External dimensions



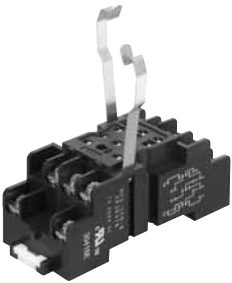
### Schematic



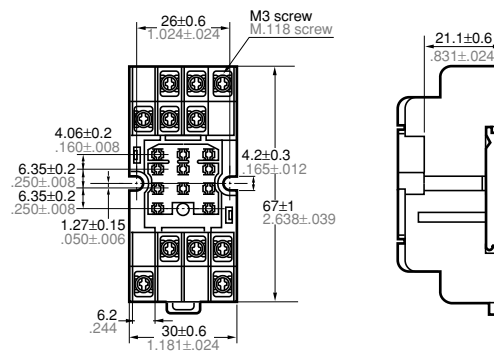
General tolerance:  $\pm 0.5 \pm .020$

HC3-high DIN rail terminal socket (HC3-SFD-K)

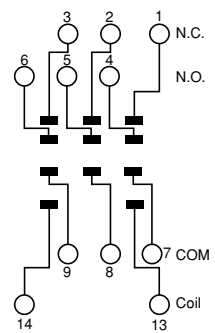
### CAD Data



### External dimensions



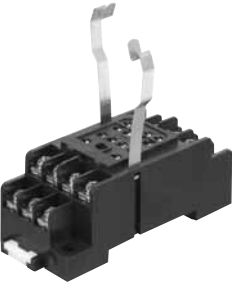
### Schematic



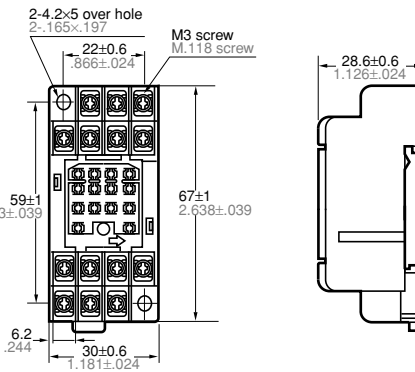
General tolerance:  $\pm 0.5 \pm .020$

HC vertical type terminal socket (HC4-TSF-K)

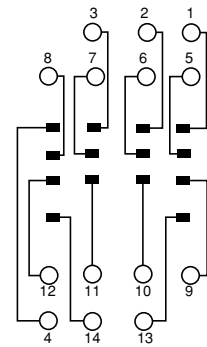
### CAD Data



### External dimensions

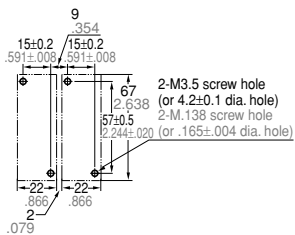


### Schematic

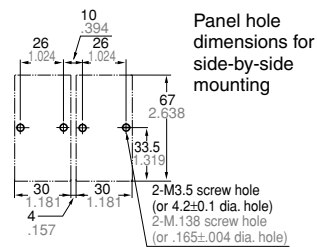


General tolerance:  $\pm 0.5 \pm .020$

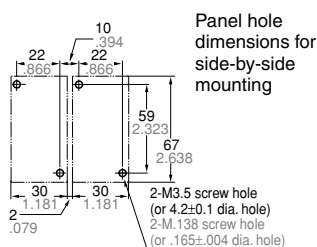
### Mounting hole diagram HC2-Slim type



### HC2, HC3 and HC4



### HC vertical type



General tolerance:  $\pm 0.1 \pm .004$

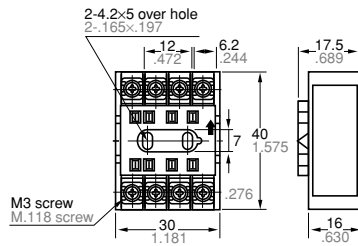
## 5. Ordinary terminal sockets

HC2-terminal socket (HC2-SF-K for HC2)

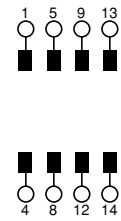
### CAD Data



### External dimensions



### Schematic



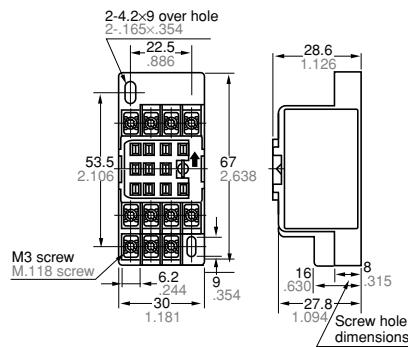
General tolerance:  $\pm 0.5 \pm .020$

HC3-high terminal socket (HC3-HSF-K) suitable for both HC2 and HC3

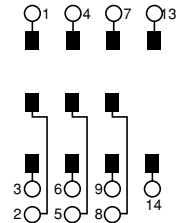
### CAD Data



### External dimensions



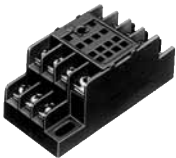
### Schematic



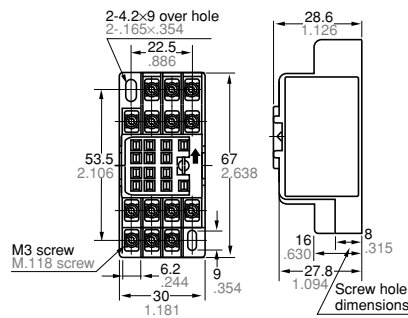
General tolerance:  $\pm 0.5 \pm .020$

HC4-high terminal socket (HC4-HSF-K) suitable for HC 1, 2 and 4

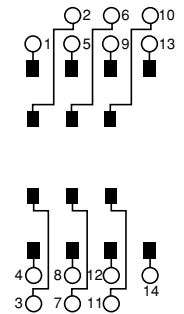
### CAD Data



### External dimensions

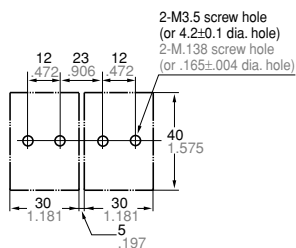


### Schematic



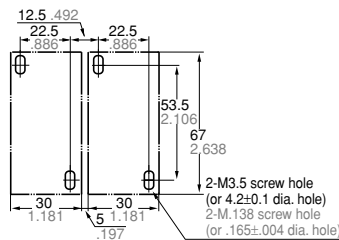
General tolerance:  $\pm 0.5 \pm .020$

### Mounting hole diagram HC2-SF-K



Panel hole dimensions for side-by-side mounting

### HC3-HSF-K and HC4-HSF-K



Panel hole dimensions for side-by-side mounting

General tolerance:  $\pm 0.1 \pm .004$

### With a relay mounted (HC2-SF-K)



Hold-down clip is packaged with the terminal socket.