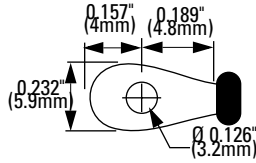
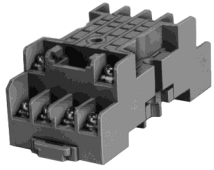
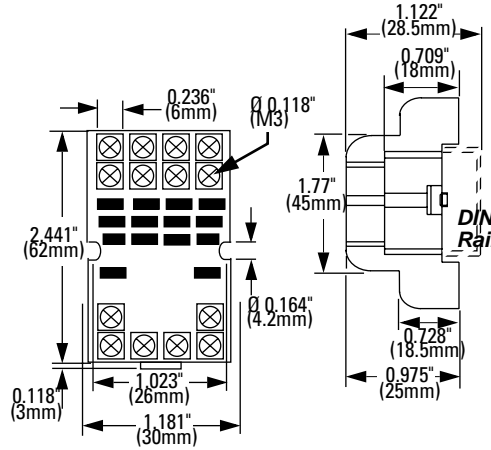


SY4S Sockets

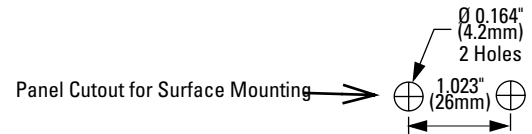
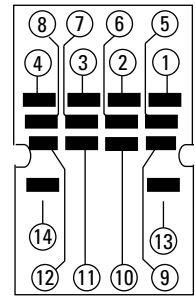


SY4S-05

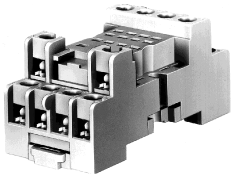
| | |
|--------------------------|---|
| Style | 14-blade, snap-mount/surface mount |
| Terminal | M3 screw with captive wire clamp |
| Wire Size | Maximum up to 2-#14AWG |
| Electrical Rating | 300V, 7A |
| Compatible Relay | RY4S, RY42S, RM2S, RY2KS, RY2LS |
| Compatible Timer | GT5Y |
| Hold-Down Spring | SY4S-51F1 for all relays; SY4S-51F3 for RY2KS only |
| Hold-Down Clip | SFA-101 (top notch), SFA-202 (side notch) for all relays and timers |



Terminal Arrangements (top view)

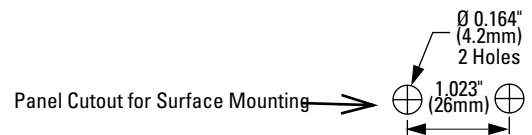
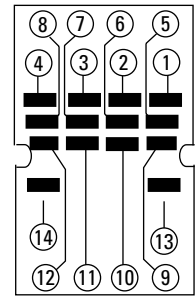
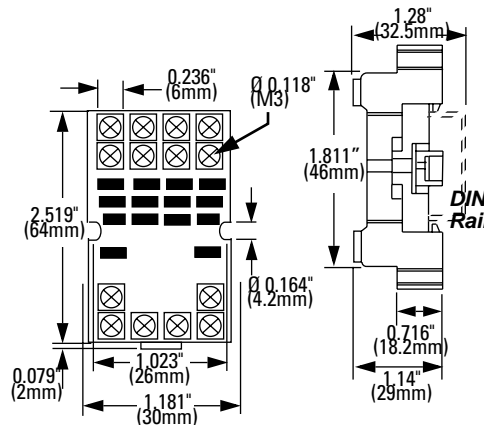


F



SY4S-05C Fingersafe

| | |
|--------------------------|---|
| Style | 14-blade, snap-mount/surface mount |
| Terminal | M3 screw with captive wire clamp, fingersafe |
| Wire Size | Maximum up to 2-#14AWG |
| Electrical Rating | 300V, 7A |
| Compatible Relay | RY4S, RY42S, RM2S, *RY2KS, *RY2LS |
| Compatible Timer | GT5Y |
| Hold-Down Spring | SY4S-51F1 for all relays; SY4S-51F3 for RY2KS only |
| Hold-Down Clip | SFA-101 (top notch), SFA-202 (side notch) for GT5Y timer and relays |



1. For socket mounting accessories, see page F-24.
2. For hold-down clip/spring selections, see page F-4.

| | | |
|-----------------------|---------------------------------|---|
| Specifications | Rated Insulation Voltage | 300V; except SH1B and SY4S-62: 250V |
| | Rated Current | SR/SH/SM: 10A, SY: 7A (SH1B coil terminal 7A) |
| | Insulation Resistance | 100MΩ minimum |
| | Dielectric Strength | 2,000V AC, 1 minute |
| | Material Grade | UL94V-0 |



UL Recognized
File No. E64245, E62437



CSA Certified
File No. LR35144



File No. BL950813332307 *



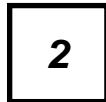
1. * Applicable to DIN rail sockets only.

Relay Socket Part Numbering Guide

Relay socket part numbers are composed of 5 part number codes. When ordering a relay socket, select one code from each category.
Example: SR2P-05C



① **Socket Series**

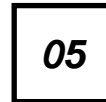


② **No. of Poles**



③ **Termination**

—



④ **Mounting Style**



⑤ **Fingersafe Option**

F

Part Numbers: Relay Sockets

| | Description | Part Number Code | Remarks |
|----------------------------|-------------------------------------|------------------|--|
| ① Socket Series | SR | SR | For use with RR series relays |
| | SH | SH | For use with RH series relays |
| | SY | SY | For use with RY series relays |
| | SM | SM | For use with RU2, RM2 series relays |
| ② No. of Poles | 1-pole | 1 | SH series |
| | 2-pole | 2 | SR, SH, SM, and SY series |
| | 3-pole | 3 | SR, and SH series |
| | 4-pole | 4 | SH series |
| ③ Termination | Tubular pin | P | SR series |
| | Blade | B | SH series |
| | Solder/blade | S | SY and SM series |
| ④ Mounting Styles | DIN rail snap-mount | 05 | To decide between configuration 05 and 06, see pictures and schematics beginning on page F-6 Model 05 is available as 05C with a fingersafe option; see ⑤ below |
| | | 06 | |
| | Panel mount | 51 | |
| | PC board mount | 61 | |
| | | 62 | |
| ⑤ Fingersafe Option | With finger-protection terminals | C | Available only on SR, SH, SM, and SY series snap-mount sockets |
| | Without finger-protection terminals | Leave blank | |



2. For hold-down springs and clips for DIN rail snap-mount, panel mount, and PC board mount, see page F-4.
3. For socket accessories, see page F-24.

Relay and Timer Socket Selection Guide

Relay and Timer Sockets

| Mounting | Series | Page | Part No. | No. of Poles | Receptacle | Terminal | Compatible IDEC Relay and Timer | |
|---------------------------------|--------------------|-------|--------------------------------|--------------|------------|---------------------------------------|---|--|
| <p>DIN Rail Snap-Mount</p> | SR | F-6 | SR2P-05 SR2P-05C SR2P-06 | 2 | 8-Pin | M3.5 Screw | RR2P, GT5P, RTE-P1, GT3 (8-pin) | |
| | | | SR3P-05 SR3P-05C SR3P-06 | 3 | 11-Pin | | RR3PA, RR2KP, RTE-P2 GT3 (11-pin) | |
| | | | SR3B-05 | 3 | 11-Blade | | RR1BA, RR2BA, RR3B, RTE-B | |
| | SH | F-9 | SH1B-05 SH1B-05C | 1 | 5-Blade | M3.5 Screw Coil Terminal: M3 | RH1B | |
| | | | SH2B-05 SH2B-05C | 2 | 8-Blade | M3.5 Screw | RH2B | |
| | | | SH3B-05 SH3B-05C | 3 | 11-Blade | | RH3B, RH2LB | |
| | | | SH4B-05 SH4B-05C | 4 | 14-Blade | | RH4B | |
| | SY | F-13 | SY2S-05 SY2S-05C | 2 | 8-Blade | M3 Screw | RY2S, RY22S | |
| | | | SY4S-05 SY4S-05C | 4 | 14-Blade | | RU4S, RY4S, RY42S, RY2KS, RY2LS, RM2S, GT5Y | |
| | SM | F-15 | SM2S-05 SM2S-05C | | | | RU2S | |
| | <p>Panel Mount</p> | SR | F-16 | SR2P-51 | 2 | 8-Pin | Solder | RR2P, RAPP, RBPP, GT5P, RTE-P1, GT3 (8-pin) |
| | | | | SR3P-51 | 3 | 11-Pin | | RR3PA, RR2KP, RTE-P2, GT3 (11-pin) |
| SR3B-51 | | | | 3 | 11-Blade | RR1BA, RR2BA, RR3B | | |
| SH | | F-17 | SH1B-51 | 1 | 5-Blade | RH1B, RAHB, RBHB | | |
| | | | SH2B-51 | 2 | 8-Blade | RH2B, RAMB, RBMB | | |
| | | | SH3B-51 | 3 | 11-Blade | RH3B, RH2LB | | |
| | | | SH4B-51 | 4 | 14-Blade | RH4B | | |
| SY | | F-19 | SY2S-51 | 2 | 8-Blade | RY2S, RY22S | | |
| | | | SY4S-51 | 4 | 14-Blade | RY4S, RY42S, RY2KS, RY2LS, RM2S, GT5Y | | |
| <p>PCB Mount</p> | SH | F3-20 | SH1B-62 | 1 | 5-Blade | PC Board | RH1B, RAHB, RBHB | |
| | | | SH2B-62 | 2 | 8-Blade | | RH2B, RAMB, RBMB | |
| | | | SH3B-62 | 3 | 11-Blade | | RH3B, RH2LB | |
| | | | SH4B-62 | 4 | 14-Blade | | RH4B | |
| | SY | F3-21 | SY2S-61 | 2 | 8-Blade | | RY2S, RY22S | |
| | | | SY4S-61 | 4 | 14-Blade | | RY4S, RY42S, RY2KS, RY2LS, RM2S, GT5Y | |
| | | | SY4S-62 | 4 | 14-Blade | | RY4S, RY42S, RY2KS, RY2LS, RM2S, GT5Y | |
| <p>Surface Mount</p> | SH | F-23 | SH2B-02 | 2 | 8-Blade | M3.5 Screw | RH2B, RAMB, RBMB | |
| For Panel Mounted Timers | | | | | | | | |
| | SR | F-23 | SR6P-M08G | 2 | 8-pin | M3.5 Screw | GE1A; RTE-P1; GT3A-1,-2,-3; GT3D-1,-2,-3; GT3W (8-pin); GT3S; GT3F | |
| | | | SR6P-M11G | | 11-pin | | RTE-P2; GT3A-4,-5,-6; GT3D-4,-8; GT3W (11-pin) | |

For relay mounting accessories, see page F-24.

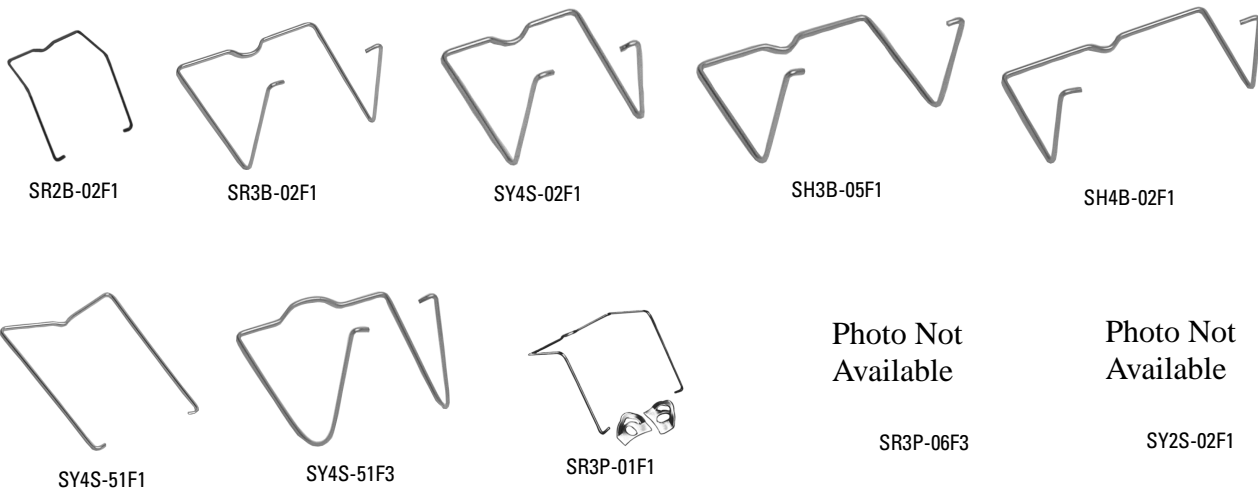
Hold-Down Springs and Clips Selection Guide

DIN Rail Snap-Mount Sockets

| Socket Part No. | Applicable Relays, Timer | Hold-Down Pullover Spring | Hold-Down Clip (side notch) | Hold-Down Clip (top notch) |
|---------------------|-----------------------------|---------------------------|-----------------------------|----------------------------|
| SR2P-05 SR2P-05C | RR2P | SR2B-02F1 | SFA-203 | — |
| | RTE-P1, GT3, GT5P | — | SFA-203 | — |
| SR2P-06 | RR2P | SR2B-02F1 | SFA-202 | — |
| | GT3 (8-pin), RTE-P1, GT5P | — | SFA-202 | — |
| SR3P-05 SR3P-05C | RR3PA | SR3B-02F1 | SFA-203 | — |
| | RR2KP | SR3P-06F3 | SFA-203 | — |
| | RTE-P2, GT3 (11-pin) | — | SFA-203 | — |
| SR3P-06 | RR3PA | SR3B-02F1 | SFA-202 | — |
| | RR2KP | SR3P-06F3 | SFA-202 | — |
| | RTE-P2, GT3 (11-pin) | — | SFA-202 | — |
| SR3B-05 | RR1BA, RR2BA, RR3B, RTE-B | SR3B-02F1 | SFA-202 | — |
| SH1B-05 SH1B-05C | RH1B | SY2S-02F1 | — | SFA-101 SFA-202 |
| SH2B-05 SH2B-05C | RH2B | SY4S-02F1 | — | SFA-101 SFA-202 |
| SH3B-05 SH3B-05C | RH3B, RH2LB | SH3B-05F1 | — | SFA-101 SFA-202 |
| SH4B-05 SH4B-05C | RH4B | SH4B-02F1 | — | SFA-101 SFA-202 |
| SY2S-05 SY2S-05C | RY2S, RY22S | SY2S-02F1 | — | SFA-101 SFA-202 |
| SY4S-05 SY4S-05C | RY4S, RY42S, RY2LS, RM2S | SY4S-51F1 | — | SFA-101 SFA-202 |
| | RY2KS, GT5Y | (SY4S-51F3) | — | SFA-202 |

F

1. Hold-down springs work in conjunction with hold-down spring anchors included with DIN rail sockets.
2. When mounting relays with a check button onto panel mount or PC board mount sockets, use the hold-down spring shown in parenthesis. Hold-down springs for relays with check buttons are not available for SR2P-51.
3. For close mounting of panel mount or PC mount sockets, use hold-down clips rather than hold-down springs.
4. SFA-101, SFA-202 and SFA-302 come in pairs.



Panel and PC Board Mount Sockets

| Socket Part No. | Applicable Relays, Timer | Hold-Down Pullover Spring | Hold-Down Clip (side notch) | Hold-Down Clip (top notch) |
|--------------------|---------------------------|---------------------------|-----------------------------|----------------------------|
| SR2P-51 | RR2P | SR3P-01F1 | — | — |
| | GT3 (8-pin), RTE-P1 | — | SFA-402 | — |
| SR3P-51 | RR3PA | SR3P-01F1 | — | — |
| | RR2KP | SR3P-51F3 | — | — |
| | GT3 (11-pin), RTE-P2 | — | SFA-402 | — |
| SR3B-51 | RR1BA, RR2BA, RR3B, RTE-B | SR3B-02F1 | — | — |
| SH1B-51 SH1B-62 | RH1B | SY4S-51F1 | — | SFA-301 SFA-302 |
| SH2B-51 | RH2B | SY4S-51F1 (SY4S-02F1) | — | SFA-301 SFA-302 |
| SH2B-62 | RH2B | SY4S-51F1 (SY4S-02F1) | — | — |
| SH3B-51 SH3B-62 | RH3B, RH2LB | SY4S-51F1 (SY4S-02F1) | — | SFA-301 SFA-302 |
| SH4B-51 SH4B-62 | RH4B | SY4S-51F1 (SH4B-02F1) | — | SFA-301 SFA-302 |
| SY2S-51 SY2S-61 | RY2S, RY22S | SY4S-51F1 | — | SFA-301 SFA-302 |
| SY4S-51 SY4S-61 | RY4S, RY42S, RY2LS | SY4S-51F1 (SY4S-02F1) | — | SFA-301 SFA-302 |
| | RY2KS | SY4S-51F1 (SY4S-02F3) | SFA-302 | — |
| | GT5Y | — | SFA-302 | — |
| SY4S-62 * | RY4S, RY42S, RY2LS, RM2S | SY4S-51F1 (SY4S-02F1) | — | — |
| | RY2KS | SY4S-51F1 (SY4S-02F3) | — | — |

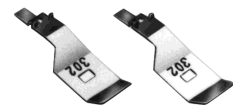
* Does not accept hold down clips



SFA-101



SFA-202



SFA-302

Photo Not Available

SFA-301



SFA-203



SFA-402

F

Accessories

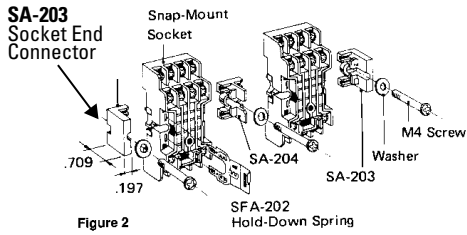


Figure 2

| Description | Appearance | Use with | Part No. | Remarks |
|--|------------|--|----------|---|
| Aluminum DIN Rail (1 meter length) | | All DIN rail sockets | BNDN1000 | 'DEC offers a low-profile DIN rail (BNDN-1000). The BNDN-1000 is designed to accommodate snap-mount sockets and surface mount sockets. Made of durable extruded aluminum, the BNDN-1000 measures 0.413" in height and 1.37" (35mm) in width (DIN standard). Standard length is 39" (1,000mm). |
| DIN Rail End Stop | | BNDN1000 DIN rail | BNL5 | 9.1 mm wide. |
| Surface Mount End Connector | | SY2S, SY4S, SR3B, SH1B, SH2B, SH3B, SH4B | SA-203 | For use on ends of socket groupings when surface mounting. |
| | | | SA-204 | For use between adjoining sockets when surface mounting. |
| Surface Mount Connector | | SY2S, SY4S, SR3B, SH1B, SH2B, SH3B, SH4B | SA-405 | For use between adjoining sockets when surface mounting. |
| DIN Rail Spacer | | All DIN rail sockets | SA-406 | |
| Steel Mounting Plates (for panel mount sockets) | | SY4S-51, SH2B-51 | SA-402 | 11.42" length with 10 holes. |
| | | SY4S-51, SH2B-51 | SA-403 | 23.33" length with 21 holes. |
| Relay Holders | | RH2B, RM2S, RY4S, RY42S, RY2LS, RAMB, RBMB | RH-01 | For diagram, see next page. |
| | | RY2S, RAHB, RBHB, RH1B | RH-03 | |
| Replacement Hold-Down Spring Anchor (horseshoe clip) | | All DIN rail sockets | Y778-011 | For use with hold-down springs (bale wire types) or DIN rail mount sockets. 2 pieces included with each socket. |

F

Instructions

Mounting Snap-Mount Sockets

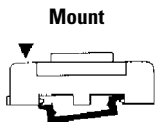


Figure 1

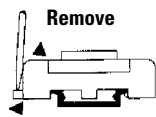


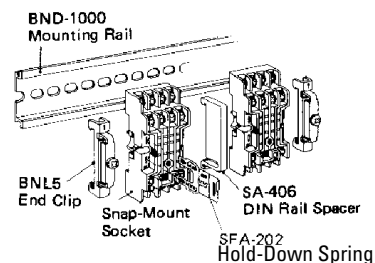
Figure 2

Snap-mount sockets are designed to mount on the BNDN-1000 mounting rail. The built-in mounting clip eliminates mounting hardware and reduces mounting time by 80%.

To mount see Figure 1. Place the end of the socket (end opposite of mounting clip against the outer edge of the rail). Press the socket down firmly until the clip snaps onto the mounting rail. To remove see Figure 2. Pull out the mounting clip with a screwdriver, and lift the socket.

For spacing between adjoining sockets, use the SA-406 DIN rail spacer. Spacers are 0.195" wide. Spacing can be adjusted according to the number of spacers added. Spacers snap on and off easily like snap-mount sockets.

To prevent side-to-side movement, use a BNL-5 end clip at **each** end of every socket row.



Mounting Relay Holders

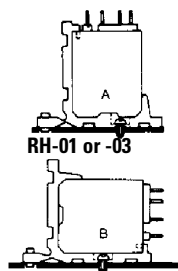


Figure 1

Mount directly onto panel boards in two alternate positions: A and B (see Figure 1).

To mount the relay into the holder, hook the bottom edge of the relay case (coil terminal side) onto the relay holder (see Figure 2).

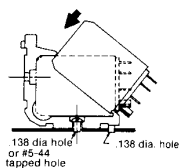


Figure 2

Push down until the relay snaps into place.

Mounting Hold-Down Springs

Take the two anchor clips (horseshoe / U-shaped piece) that come with the socket and insert into the slits on both sides of the socket. Make sure the raised notches on the anchor clip face into the socket.

Plug relay into socket

Insert the open ends of the hold-down spring into either the first or second hole of the anchor clip. The relay-spring combination will determine which hole should be used.

Slide spring over relay.

F

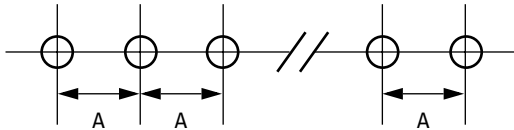
Dimensions

Surface Mount Sockets (SH2B-02)

IDEC surface mount sockets (SH2B-02) are also designed to mount individually or collectively on a flat surface without the use of a DIN rail. Use the mounting screw between adjoining sockets and at the outer ends of the row of sockets.

Dimension Table

| Socket Part No. | Dimension A |
|-----------------|-------------|
| SH2B-02 | 1.14" |



1. Drawing is not to scale.

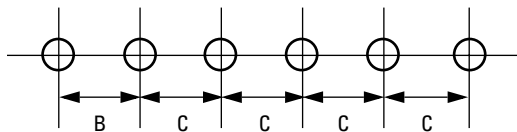
Snap-Mount Sockets

F Snap-mount sockets are designed to mount individually or collectively without using a rail. Use a SA-405 connector or SA-204 connector between adjoining sockets (see Figures 1 and 2). Use the SA-203 end connector at the outer ends of each socket row when using the SA-204 connector (see Figure 2).

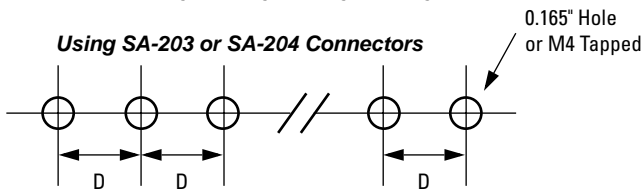
Dimension Table

| Socket Part No. | Dim. B | Dim. C | Dim. D |
|-------------------|--------|--------|--------|
| SY2S-05, SY2S-05C | 0.669" | 0.826" | 0.866" |
| SY4S-05, SY4S-05C | 1.024" | 1.181" | 1.220" |
| SR3B-05 | 1.496" | 1.693" | 1.732" |
| SH1B-05, SH1B-05C | 0.630" | 0.787" | 0.827" |
| SH2B-05, SH2B-05C | 1.024" | 1.181" | 1.220" |
| SH3B-05, SH3B-05C | 1.417" | 1.575" | 1.614" |
| SH4B-05, SH4B-05C | 1.811" | 1.969" | 2.008" |

Using an SA-406 Connector



Using SA-203 or SA-204 Connectors



2. Drawings are not to scale.

Dimensions, continued

Collective Panel Mounting

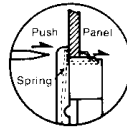
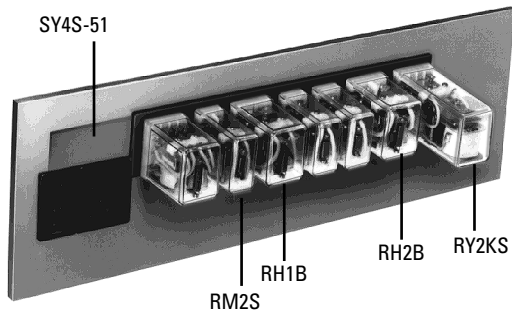


Figure 1

SH and SY series panel mount sockets are designed to mount collectively in panel cut-outs. Insert socket with mounting springs facing the top and bottom edge of the panel cut-out. Push the socket until the mounting spring clips onto the panel. (See Figure 1.)

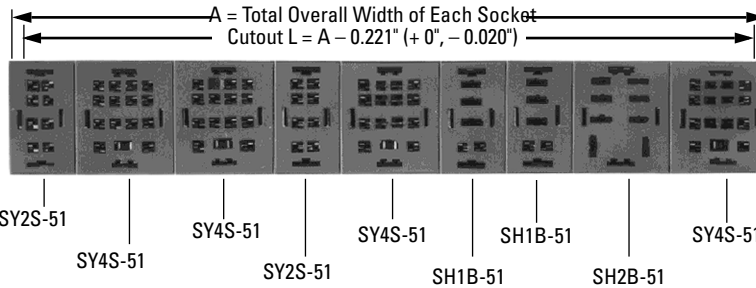
Dimension Table

| Part No. | Width | Relay |
|----------|--------|--------------------------------|
| SY4S-51 | 1.063" | RY4S, RY42, RY2KS, RY2LS, RM2S |
| SH4B-51 | 1.772" | RH4B |
| SH3B-51 | 1.418" | RH3B, RH2LB |
| SH2B-51 | 1.063" | RH2B, RAMB, RBMB |
| SH1B-51 | 0.709" | RH1B, RAHB, RBHB |
| SY2S-51 | 0.709" | RY2S, RY22S |

How to Calculate Cutout Length (L)

$$\text{Cutout } L = A \text{ (Total Overall Width of Each Socket)} - 0.221" \text{ (+ 0", - 0.020")}$$

Example:



$$L = [0.709" + 1.063" + 1.063" + 0.709" + 1.063" + 0.709" + 1.063" + 1.063"] - 0.221" = 7.93"$$

$$L = 7.93" \text{ (+ 0", - 0.020")}$$

Mounting Plate

