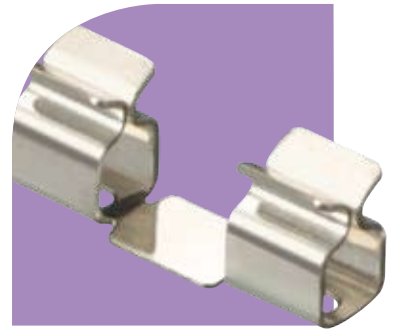


# RFI & PCB Hardware



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# RFI Shield Clips

## Shield Clips for EMI/RFI Shields

- ❖ SMT devices offering a fast solution for assembling RFI shields to PCBs.
- ❖ Eliminates the need for through holes and post reflow operations.
- ❖ Saves PCB real estate.
- ❖ Mini clip uses 40% less space than Midi.
- ❖ Substantial improvement in time and simplicity of assembly tuning and re-work.



### SPECIFICATION

#### ❖ Materials

Material: Beryllium Copper or Cupro-Nickel (Beryllium-free)  
Finish: Tin or Tin/Lead

#### ❖ Packaging

Packaging Format: Tape & Reel or Loose  
Reel Quantity: Midi: 1,900 on a Ø330mm reel  
Mini: 5,000 on a Ø330mm reel

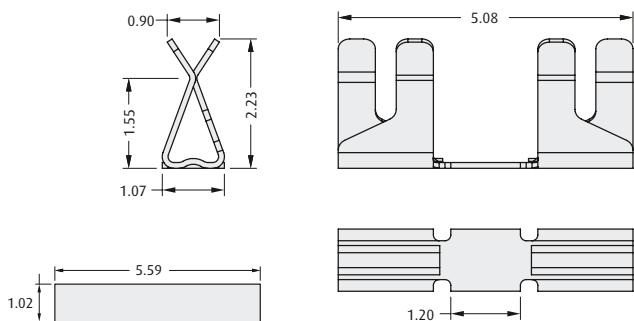
#### ❖ Electrical

Contact Resistance: Midi: 20 mΩ max.  
Mini: 40 mΩ max.

#### ❖ Mechanical

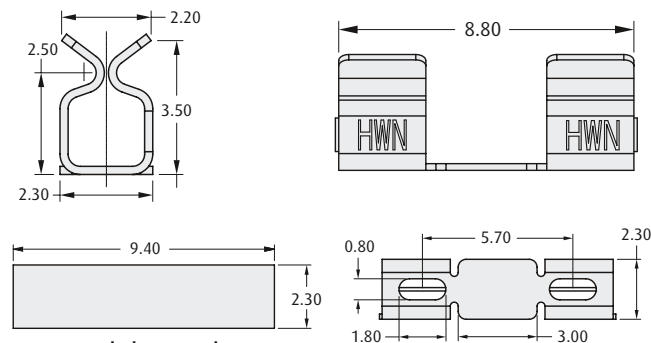
Shield Thickness: Midi: 0.30mm  
Mini: 0.13 – 0.23mm  
Insertion force (max.): Midi: 3.0N  
Mini: 5.0N (0.17mm shield)  
Withdrawal force (max.): Midi: 1.0N  
Mini: 0.35N

### MINI



Recommended PC Board Pattern

### MIDI



Recommended PC Board Pattern

### HOW TO ORDER

#### SERIES CODE

#### CONTACT HEIGHT

171	Midi clip in Beryllium Copper
172	Mini clip in Beryllium Copper
271	Midi clip in Cupro-Nickel

S XXX 1 - XX R

#### PACKAGING

R	Tape and Reeled
Blank	Loose

#### FINISH

06	Tin/Lead (Beryllium Copper only)	Pb
46	Tin	Pb

All dimensions in mm.

[www.harwin.com](http://www.harwin.com)

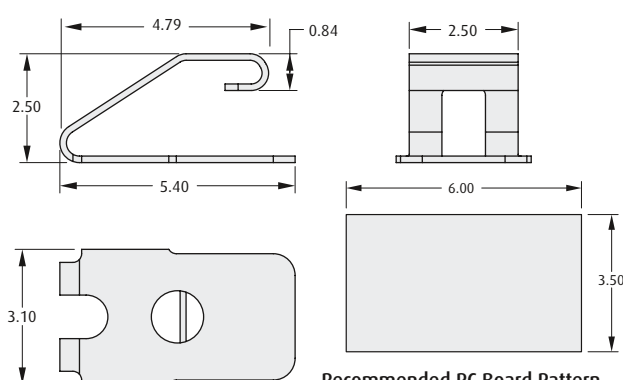
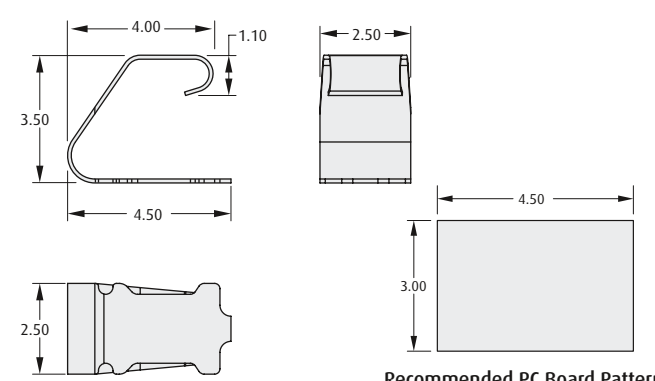
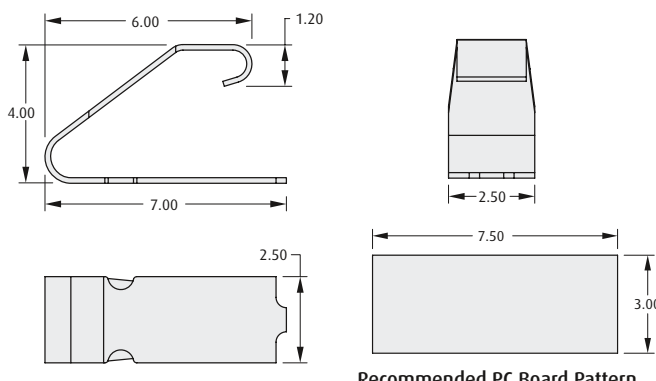




# RFI Shield Fingers

## Grounding Spring Contacts

- ❖ SMT devices for use in shielding and grounding applications.
- ❖ For use on surface mount PCBs, in contact with metal shields or frames.
- ❖ Suitable for both wiping and sliding actions.
- ❖ Ideal for automated requirements, using standard placement equipment.

SPECIFICATION		2.5mm HIGH	
<div>❖ Materials</div> <div>Material: Copper Alloy</div> <div>Finish: See order code</div>		<div></div> <div>Recommended PC Board Pattern</div>	
<div>❖ Packaging</div> <div>Packaging format: Tape &amp; Reel or Loose</div> <div>Reel quantity: S1761, S1791: 2,000 S1741: 2,500</div>			
3.5mm HIGH		4.0mm HIGH	
<div></div> <div>Recommended PC Board Pattern</div>		<div></div> <div>Recommended PC Board Pattern</div>	
HOW TO ORDER			
<div>S17 X 1 - XX R</div>			
<div>SERIES CODE</div>		<div>PACKAGING</div>	
<div>CONTACT HEIGHT</div>		<div>R Tape and Reeled</div>	
<div>Blank Loose</div>		<div>FINISH</div>	
<div>4 2.5mm High</div>		<div>42 Gold + Tin (S1761, S1791) PG</div>	
<div>6 3.5mm High</div>		<div>46 Tin (S1741) PG</div>	
<div>9 4.0mm High</div>			

www.harwin.com

All dimensions in mm.



# HARWIN

# SMT Jumper Link

- Designed to link PCB tracks where through hole links are not possible.
- Typical applications include use on aluminium backplanes in power applications.
- High current.
- Small footprint.



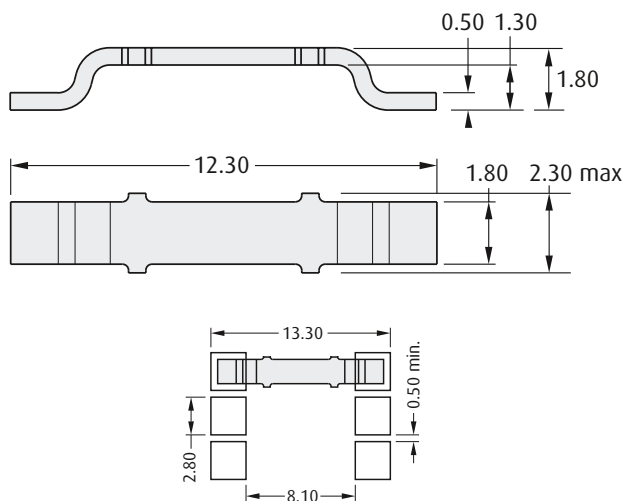
## 12.3mm LONG

### Materials

Material: Copper Alloy  
Finish: See Order Code

### Packaging

Format: Tape and Reel or Loose  
Reel quantity: 5,000 on a Ø330mm reel



Recommended PC Board Pattern

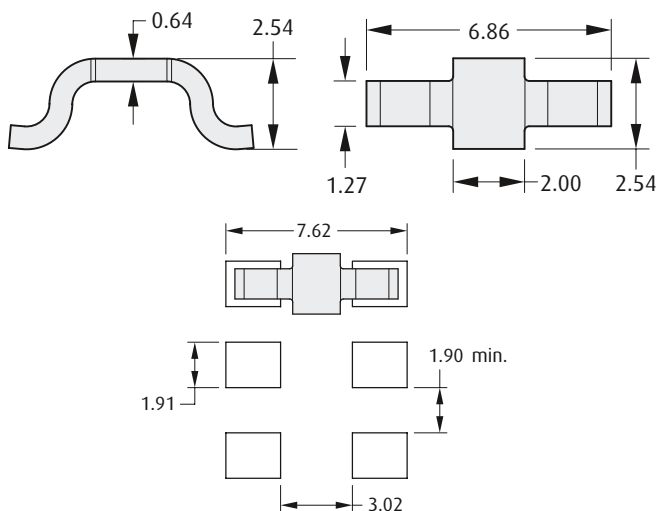
## 6.86mm LONG

### Materials

Material: Copper  
Finish: See Order Code

### Packaging

Format: Tape and Reel or Loose  
Reel quantity: 2,500 on a Ø330mm reel



Recommended PC Board Pattern

## HOW TO ORDER

**S1 XX 1 - XX R**

### SERIES CODE

### TYPE

62	12.3mm long
73	6.86mm long

### PACKAGING

R	Tape & Reeled
Blank	Loose

### FINISH

06	Tin/Lead	Pb
46	Tin	Pb

All dimensions in mm.

[www.harwin.com](http://www.harwin.com)





## SMT Test Point

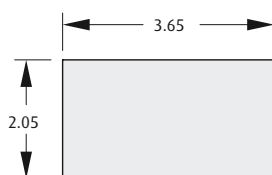
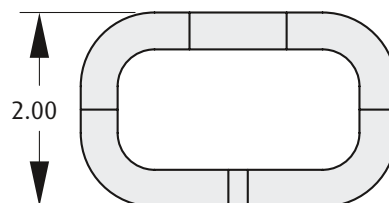
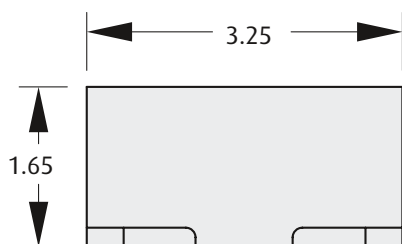
- ❖ Ideal for use with standard probes, clips and hooks.
- ❖ Can be placed using industry standard equipment.
- ❖ Suitable for automatic or manual test.
- ❖ High speed placement.
- ❖ Industry standard Tape and Reel packaging.
- ❖ Strong and durable.

### Materials

Material: Copper Alloy  
Finish: See Order Code

### Packaging

Format: Tape and Reel or Loose  
Reel quantity: 2,500 on a Ø330mm reel



Recommended PC Board Pattern

### HOW TO ORDER

**S1751 - XX R**

SERIES CODE

FINISH	
06	Tin/Lead
46	Tin

PACKAGING

R	Tape & Reeled
Blank	Loose

[www.harwin.com](http://www.harwin.com)

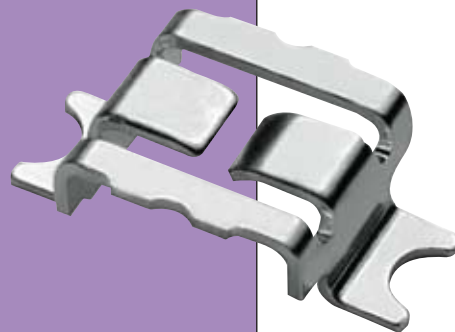
All dimensions in mm.



**HARWIN**

# SMT Fuse Clip for Mini Blade Fuses

- ❖ Suitable for mating with a 2.8 x 0.8mm terminal.
- ❖ Designed to accept blade fuses typically found in automotive and related applications if placed in a pair.
- ❖ Uses minimal PCB real estate with a low profile connection.
- ❖ Resists shock and vibration.
- ❖ Reduced assembly times.
- ❖ 15 Amp current rating.

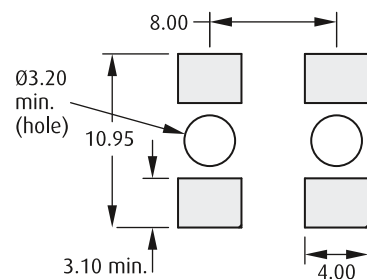
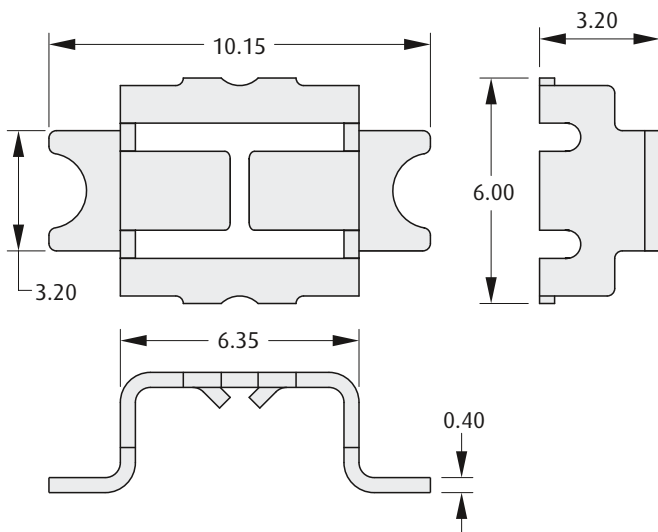


## Materials

Material: Copper Alloy  
Finish: See Order Code

## Packaging

Format: Tape and Reel or Loose  
Reel quantity: 1,500 on a Ø330mm reel



Recommended PC Board Pattern

## HOW TO ORDER

**S1901 - XX R**

SERIES CODE

### FINISH

06	Tin/Lead	Pb
46	Tin	Pb

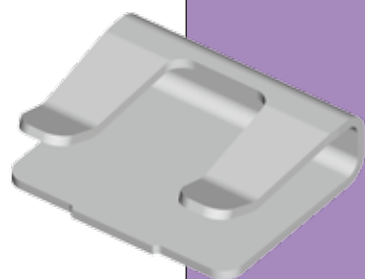
### PACKAGING

R	Tape & Reeled
Blank	Loose

All dimensions in mm.

[www.harwin.com](http://www.harwin.com)





# SMT Cable Clip

for Ø1.00mm cable

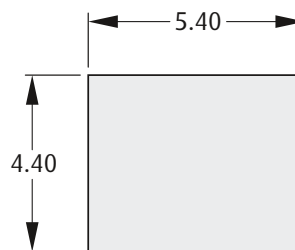
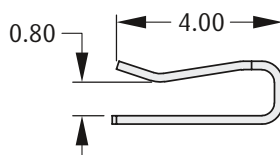
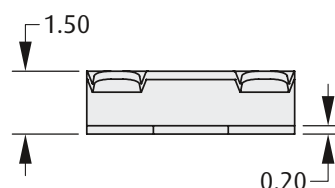
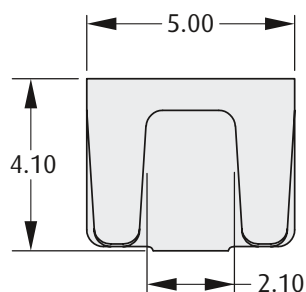
- ❖ Suitable for use with cable with outer diameter Ø1.00mm.
- ❖ Cable clip can be soldered at same time as rest of board, reducing additional operation time required for adhesive cable clips.
- ❖ Other size designs available, contact [technical@harwin.com](mailto:technical@harwin.com).

## Materials

Material: Copper Alloy  
Finish: See Order Code

## Packaging

Format: Tape and Reel or Loose  
Reel quantity: 3,000 on a Ø330mm reel



Recommended PC Board Pattern

## HOW TO ORDER

**S8101 - 46 R**

SERIES CODE

FINISH

46

Tin



PACKAGING

R

Tape & Reeled

Blank

Loose

[www.harwin.com](http://www.harwin.com)

All dimensions in mm.



**HARWIN**



Image used with kind permission of Lockheed Martin.



Robonaut used with kind permission of NASA.



# HARWIN

INTERCONNECT DESIGN & MANUFACTURE

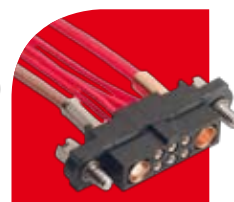
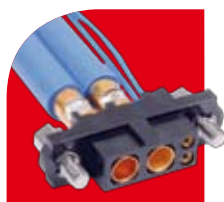
## Performance without compromise

### Datamate **Mix-Tek**

Datamate Mix-Tek connectors from Harwin offer a wide range of signal, power and coaxial contact combinations within one compact connector housing. The Manufacturing technology employed to produce this series is a flexible process that allows both small and large quantities to be made to order.

#### Key performance benefits:

- 2mm Pitch
- 3A signal contacts
- 20A max current rating for power contacts
- 6GHz for coax contacts
- Complete design flexibility
- COTS system



Visit [www.harwin.com/mix-tek](http://www.harwin.com/mix-tek)  
to order samples

# HARWIN

For more information  
see **page 44**