

# Spring Contact Specifications

## Materials

### Base Metal

S1741, S7131 to S7191:  
S1941, S1951, S7061-46R:  
Others:

Phosphor Bronze  
Beryllium Copper  
Titanium Copper

### Finish:

See individual product

## Environmental

### Operating temperature

S1001: -40°C to +150°C  
S7131 to S7191: -20°C to +70°C  
S7221 to S7271: -40°C to +85°C  
Others: -55°C to +125°C

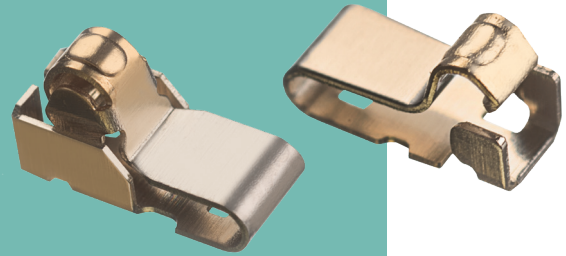
ORDER CODE	CURRENT (MAX)	DURABILITY (OPERATIONS)	WORKING HEIGHT	FORCE AT WORKING HEIGHT
S1741-46R	6A	5,000	1.75mm	1.50N
S1761-XXR	4A	1,500	2.50mm	1.50N
S1791-42R	3A	1,500	3.00mm	1.00N
S1941-XXR	9A	5,000	6.95mm	1.20N
S1951-46R	7A	5,000	6.75mm	1.20N
S7041-42R	5A	1,500	3.40mm	1.20N
S7051-42R	4A	2,500	4.50mm	1.20N
S7061-XXR	4A	2,500	4.60mm	1.20N
S7071-46R	5A	3,500	2.10mm	1.20N
S7081-42R	4A	1,000	2.10mm	1.20N
S7091-42R	6A	2,000	2.30mm	1.20N
S7101-42R	3A	2,500	3.00mm	1.20N
S7111-42R	6A	2,000	3.80mm	1.20N
S7121-42R	4A	3,000	1.50mm	1.20N
S7131-45R	1A	10,000	1.20mm	0.49N
S7141-45R	1A	10,000	1.65mm	0.49N
S7151-45R	1A	10,000	2.15mm	0.49N
S7161-45R	1A	10,000	2.65mm	0.49N
S7171-45R	1A	10,000	3.15mm	0.49N
S7181-45R	1A	10,000	3.65mm	0.49N
S7191-45R	1A	10,000	4.15mm	0.49N
S7221-45R	1A	10,000	0.90mm	0.39N
S7231-45R	1A	10,000	0.98mm	0.39N
S7241-45R	1A	10,000	1.00mm	0.39N
S7251-45R	1A	10,000	1.20mm	0.58N
S7261-45R	1A	10,000	1.20mm	0.78N
S7271-45R	1A	10,000	1.70mm	0.39N

All dimensions in mm.

# Spring Contacts

## Antenna Contacts with Positive Stop

- Extended beam miniature spring contacts, ultra-low profile.
- Ideal for antenna feed in mobile devices, LED lamp connections or RFID tags.
- Ultra-low connection system - free height from just 1.23mm to 2mm.
- Positive Stop to prevent over-compression and permanent set.
- Surface Mount with Pick and Place area for automated placement.



SPRING CONTACTS

<p><b>1.23mm HIGH</b></p> <p>Recommended PC Board Pattern</p> <table border="1"> <thead> <tr> <th>ORDER CODE</th> <th>FINISH</th> </tr> </thead> <tbody> <tr> <td>S7221-45R</td> <td>Gold</td> </tr> </tbody> </table>	ORDER CODE	FINISH	S7221-45R	Gold	<p><b>1.28mm HIGH</b></p> <p>Recommended PC Board Pattern</p> <table border="1"> <thead> <tr> <th>ORDER CODE</th> <th>FINISH</th> </tr> </thead> <tbody> <tr> <td>S7231-45R</td> <td>Gold</td> </tr> </tbody> </table>	ORDER CODE	FINISH	S7231-45R	Gold
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S7221-45R	Gold								
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<p><b>1.3mm HIGH</b></p> <p>Recommended PC Board Pattern</p> <table border="1"> <thead> <tr> <th>ORDER CODE</th> <th>FINISH</th> </tr> </thead> <tbody> <tr> <td>S7241-45R</td> <td>Gold</td> </tr> </tbody> </table>	ORDER CODE	FINISH	S7241-45R	Gold	<p><b>1.5mm HIGH, 1.5mm WIDE</b></p> <p>Recommended PC Board Pattern</p> <table border="1"> <thead> <tr> <th>ORDER CODE</th> <th>FINISH</th> </tr> </thead> <tbody> <tr> <td>S7251-45R</td> <td>Gold</td> </tr> </tbody> </table>	ORDER CODE	FINISH	S7251-45R	Gold
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S7271-45R	Gold								

All dimensions in mm.

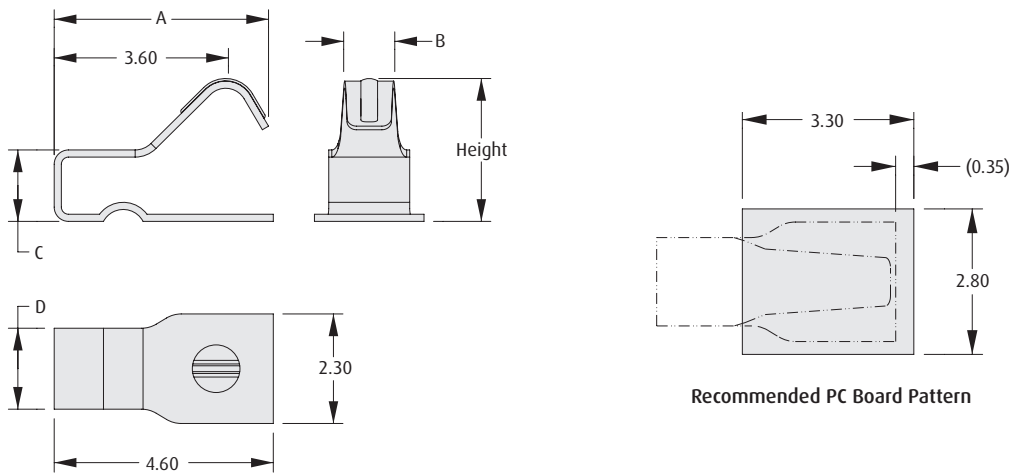
# Spring Contacts

## Extended Antenna Contacts

- Extended beam miniature spring contacts, ideal for antenna feed in mobile devices.
- Identical footprint contacts, with incremental step heights from 2mm to 5mm.
- Suitable for both wiping and sliding actions.
- Surface Mount with Pick and Place area for automated placement.
- Packaged in standard (EIA 481) Tape & Reel format.



### EXTENDED ANTENNA CONTACTS



### HOW TO ORDER

PART NO.	HEIGHT	DIM A	DIM B	DIM C	DIM D	FINISH
<b>S7131-45R</b>	2.00	4.30	0.80	1.00	1.55	Gold
<b>S7141-45R</b>	2.50	4.50	0.80	1.00	1.55	Gold
<b>S7151-45R</b>	3.00	4.50	0.90	1.50	1.70	Gold
<b>S7161-45R</b>	3.50	4.50	1.05	2.00	1.95	Gold
<b>S7171-45R</b>	4.00	4.50	1.36	2.50	2.30	Gold
<b>S7181-45R</b>	4.50	4.50	1.82	3.00	2.50	Gold
<b>S7191-45R</b>	5.00	4.50	2.08	3.50	3.00	Gold

All dimensions in mm.

# Spring Contacts

## Grounding/RFI 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.



SPRING CONTACTS

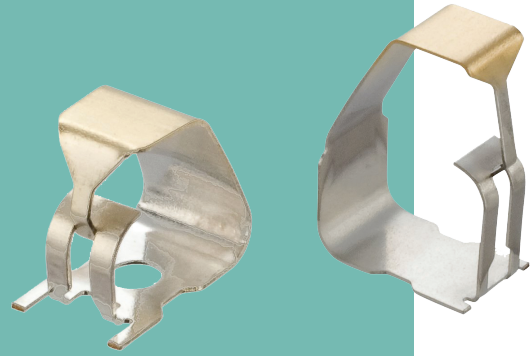
1.7mm HIGH	2.5mm HIGH										
<p style="text-align: center;">Recommended PC Board Pattern</p> <table border="1"> <thead> <tr> <th>ORDER CODE</th> <th>FINISH</th> </tr> </thead> <tbody> <tr> <td>S7121-42R</td> <td>Gold</td> </tr> </tbody> </table>	ORDER CODE	FINISH	S7121-42R	Gold	<p style="text-align: center;">Recommended PC Board Pattern</p> <table border="1"> <thead> <tr> <th>ORDER CODE</th> <th>FINISH</th> </tr> </thead> <tbody> <tr> <td>S1741-46R</td> <td>Tin</td> </tr> </tbody> </table>	ORDER CODE	FINISH	S1741-46R	Tin		
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S7121-42R	Gold										
ORDER CODE	FINISH										
S1741-46R	Tin										
2.7mm HIGH	3.5mm HIGH										
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S1761-46R	Tin										
4.0mm HIGH	5.6mm HIGH										
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S1791-42R	Gold										
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S7061-42R	Gold + Tin										
S7061-46R	Tin										

All dimensions in mm.

# Spring Contacts

## Grounding/RFI Contacts

- ❖ Prevents EMC noise and static.
- ❖ Simple and effective method for connecting multiple PCBs.
- ❖ No special tooling required, uses standard Pick and Place equipment.
- ❖ Protected tips prevent product from hooking.



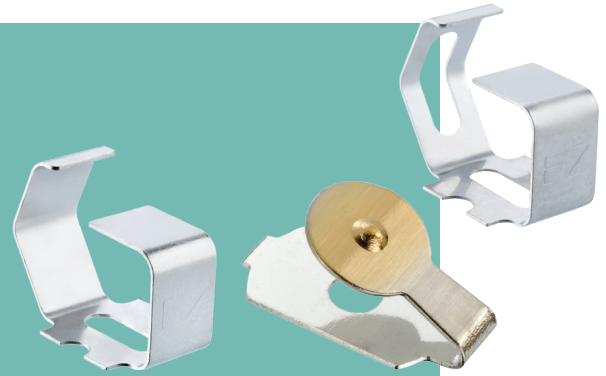
3.5mm HIGH	4.0mm HIGH								
<p style="text-align: center;">Recommended PC Board Pattern</p> <table border="1"> <thead> <tr> <th>ORDER CODE</th> <th>FINISH</th> </tr> </thead> <tbody> <tr> <td>S7101-42R</td> <td>Gold + Tin</td> </tr> </tbody> </table>	ORDER CODE	FINISH	S7101-42R	Gold + Tin	<p style="text-align: center;">Recommended PC Board Pattern</p> <table border="1"> <thead> <tr> <th>ORDER CODE</th> <th>FINISH</th> </tr> </thead> <tbody> <tr> <td>S7041-42R</td> <td>Gold + Tin</td> </tr> </tbody> </table>	ORDER CODE	FINISH	S7041-42R	Gold + Tin
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S7111-42R	Gold + Tin								
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All dimensions in mm.

# Spring Contacts

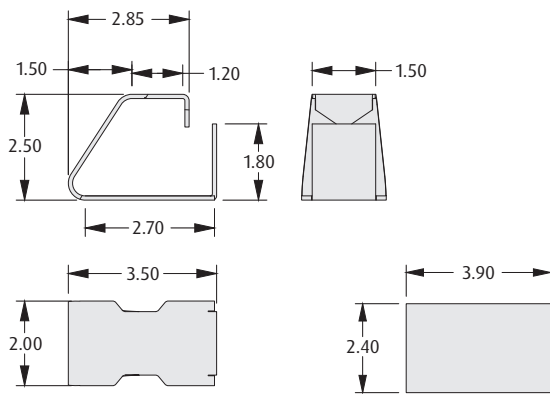
## Grounding/RFI Contacts

- Packaged in standard (EIA 481) Tape & Reel format.
- Spring contacts maintain a positive force and stable electrical contact.
- Small PCB footprint.
- Multi-Directional contacts can be used in either vertical or horizontal orientations.



SPRING CONTACTS

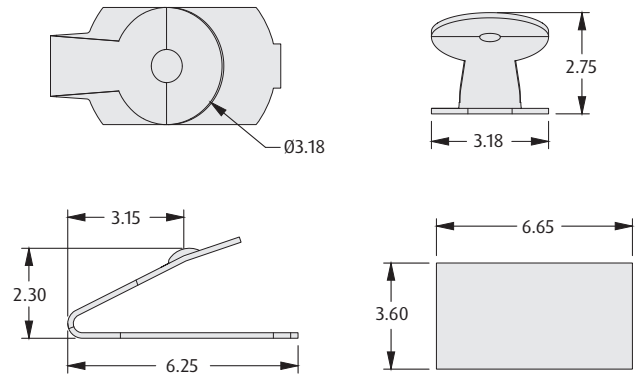
### 2.5mm HIGH



Recommended  
PC Board Pattern

ORDER CODE	FINISH
S7071-46R	Tin

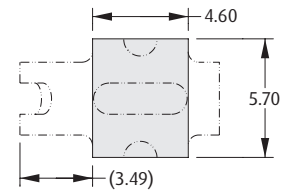
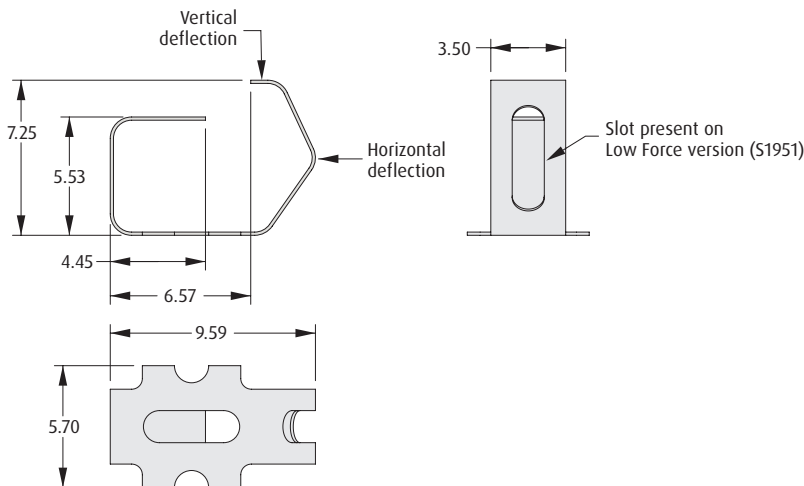
### 2.75mm HIGH



Recommended  
PC Board Pattern

ORDER CODE	FINISH
S7081-42R	Gold + Tin

### MULTI-DIRECTION



Recommended PC Board Pattern

ORDER CODE	TYPE	FINISH
S1941-42R	Normal Force	Gold + Tin
S1941-46R	Normal Force	Tin
S1951-46R	Low Force	Tin

All dimensions in mm.