

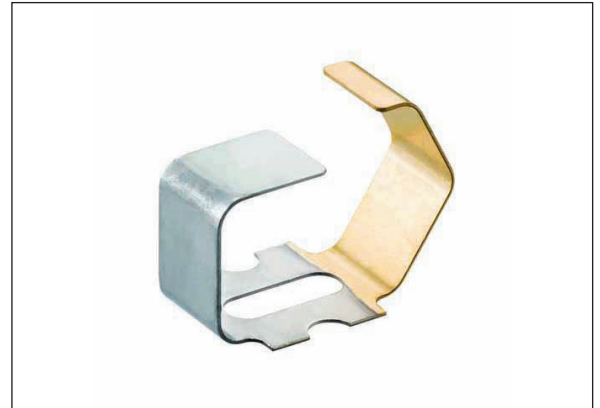
# Spring Contacts

Surface Mount flexible connection options

Make a simple connection or get your PCB grounded with a Harwin Spring Contact – a single-piece metal connection point with inherent spring properties.

Spring contacts are also known by other names such as Shield Fingers, Antenna Contacts or Grounding Contacts, depending on the end application. Take advantage of the small sizes for antenna feeds in mobile devices, LED lamp connections, grounding metal elements or single signal connections.

Purchase these contacts from stock throughout the Harwin distributor network. Place them on your PCB with automated SMT machinery, straight from the tape & reel packaging; simple assembly and low production costs.



Multi-directional Spring contact with gold plated contact area



Antenna Contact – down to 1.23mm free height



Basic C-style spring contact

Features and Benefits	
Free heights from 1.23mm to 7.25mm	Flexibility to suit different design requirements and space constraints
Positive Stop on smallest antenna contacts	Prevent over-stressing and permanent set of the component
Multi-directional contacts available	Use in either vertical or horizontal contact positions
Box style design on selected range	Prevents twist and snagging of free end, anti-hook
Gold and tin finish options	Plating finish can be matched to the mating surface to help prevent corrosion issues
Spring Contact Development Kit with 16 different contacts	A wide range of sizes and styles to assist with design, development and prototyping
Extended Beam design	Suitable for both wiping and sliding actions
C shape design	Simple and effective contact with metal shield or frames

Key Applications	
Communications	Antenna connection, Mobile and handheld devices, Internal PCB grounding
Consumer	Home entertainment, Wireless devices, IOT
Instrumentation	Panels, Controls, Enclosure grounding
Industrial	Motion control units, Environmental monitoring, Process control equipment
Retail	POS tracking devices, Display units, RFID systems

## Product Features

Multi-directional, works in either vertical or horizontal compression

Gold or tin finish options

Extended beam for lower spring forces

Positive stop to prevent over stressing

Wide range of working heights

Range of spring forces

Box design to prevent snagging

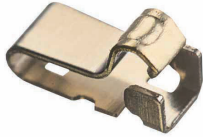
Antenna contacts in very small sizes

## Specifications

Electrical		Mechanical		Physical	
Current Rating	Up to 14A (dependent on contact)	Number of Mating Cycles	Up to 10,000 (dependent on contact)	Packaging	Tape & Reel
Contact Resistance	50mΩ max	Free Height (Uncompressed)	1.23mm to 7.25mm	Material	Copper alloy
		Working Height	0.90mm to 6.95mm	Plating	Gold, tin or selective, over nickel

## How to Order

### Antenna Contact with Positive Stop



Part No.	Free Height
S7221-45R	1.23mm
S7231-45R	1.28mm
S7241-45R	1.30mm
S7251-45R	1.50mm
S7261-45R	1.50mm
S7271-45R	2.00mm

### Extended Antenna Contacts



Part No.	Free Height
S7131-45R	2.00mm
S7141-45R	2.50mm
S7151-45R	3.00mm
S7161-45R	3.50mm
S7171-45R	4.00mm
S7181-45R	4.50mm
S7191-45R	5.00mm

### C-Style



Part No.	Free Height
S7121-45R	1.70mm
S1741-46R	2.50mm
S7091-46R	2.70mm
S7081-42R	2.75mm
S1761-42R, S1761-46R	3.50mm
S1791-42R	4.00mm
S7061-42R, S7061-46R	5.60mm

### Box Contacts



Part No.	Free Height
S7071-46R	2.50mm
S7101-42R	3.50mm
S7041-42R	4.00mm
S7111-42R	4.50mm
S7051-42R	6.00mm

### Multi-directional Contacts



Part No.	Free Height
S1961-46R	3.55mm
S1971-46R	4.55mm
S1941-42R, S1941-46R	7.25mm
S1951-46R	7.25mm

### Development Kit



16 contacts in a handy carry case, free refills (on registration).

Part No.
DEV-001



**Harwin Europe (Global Headquarters)**

Portsmouth, Hampshire, UK

E: [mis@harwin.co.uk](mailto:mis@harwin.co.uk)

T: +44 (0)23 9231 4545

**Harwin Inc (Americas)**

New Albany, Indiana, USA

E: [mis@harwin.com](mailto:mis@harwin.com)

T: +1 603 893 5376

**Harwin Asia Pte Ltd (Asia, Australasia)**

Singapore

E: [mis@harwinasia.com](mailto:mis@harwinasia.com)

T: +65 6 779 4909