RFI Shield Clips & Cans
All electronic equipment must now comply with international legislation regarding RFI (Radio Frequency Interference) and EMI (Electro-Magnetic Interference) protection – the design and construction must be such that:

- It does not emit unacceptable levels of EMI or RFI,
- Functionality is not compromised by external EMI and RFI sources.
RFI Shield Clips & Cans

The Traditional Solution

RFI/EMI Shield cans are the most popular way of providing protection against the effects of RFI and EMI. They create a Faraday cage around the sensitive or emitting circuits, preventing interference disrupting the device.

- Fixed into place, using expensive hand-soldering;
- Cannot be easily or safely removed for maintenance or repair – risk of PCB damage;
- Two-piece cans (for later access) are expensive products.
Harwin’s SMT Clip and Can system works by soldering the Clips to the PCB during the SMT phase. The Cans are then pushed into the clips in a very quick secondary operation.

- Fast secondary operation for Can assembly with no soldering;
- Allows easy removal/replacement of the Can without de-soldering – avoiding PCB damage;
- Simple 5 side can construction gives for additional cost savings.
By removing the need to solder cans directly to the PCB, multiple savings can be made:

- Eliminate expensive manual soldering operations – PCB assembly costs are dramatically reduced.
- Eliminate hot and cold spots on the PCB, reducing potential long term failure caused by thermal damage.
- Eliminate expensive rework for maintenance and circuit adjustment, by easy access under the can.
- Reduce the cost of the Can itself by using a simple 5-sided construction.
RFI Shield Clips

Maximum flexibility and choice

- 13 different products, for shield can thicknesses 0.13mm to 1.00mm.
- 90 Degree clip options for addressing localized eddy interference at corners.
- Low Profile clips, so cans as low as 1.1mm can use this method.
- High retention clip for additional retention force for the can.

The complete range can be found through the website [Product Selection](#); samples can be requested from any product page.

![RFI Shield Clips](image-url)
RFI Shield Clips

Tape and Reel packaging

All Shield Can Clips are supplied on Tape and Reel packaging, and have a flat pick-and-place area built-in, making them ideal for automatic assembly to the PCB.
The clips are Surface Mount designs, and can therefore be soldered with the rest of the SMT components. No expensive hand soldering required.
Manufactured from Nickel Silver, ideal for high frequency shielding, these Shield Cans are available in a number of standard sizes.

- **0.3mm Thick cans** – use S1711-46R, S2711-46R, S0971-46R or S0921-46R clips.
- **0.15mm Thick cans** – use S0911-46R, S0941-46R, S0961-46R, S1001-46R or S1721-46R.

The complete range can be found [on the website](#), and samples can also be requested from each Product page.
Almost all markets have a requirement for RFI and EMI protection, often using shield cans. The small size of these RFI Shield Clips and Cans makes them ideal for use in all sizes of product, including smaller portable devices.

- Wi-Fi Modules
- Smart Fridges
- Bluetooth devices
- Smartphones
- Telecoms hubs
RFI Shield Can Development Kit

Solving your Prototype needs

Winner of Tools, Kits and Reference Designs

When you are not entirely sure about the size of can you require, Harwin’s Shield Can Kit S01-806005KIT can assist with your prototyping requirements. These kits are designed to provide good screening capabilities in high frequency applications. Just cut to size, fold the sides, assemble the clips to the PCB and add the can. Further information can be found on the website. The Shield Can Kit won the ECN Impact Award in the Tools, Kits & Reference Designs category in 2015.
The Shield Can Kit eliminates costs and lead-times associated in sourcing custom prototypes, allowing faster product development.

The kit includes:

- 2 pre-scored sheets of 0.3mm thick Nickel Silver - your Shield Can blanks;
- 24 x S1711-46R Midi Clips - to securely attach the cans to the PCB;
- Detailed usage instructions – the instruction sheet is also available on the website.
Easy to use – **No Special Tools**

The Size **You** Want, When You Want

The Shield Can Kit [S01-806005KIT](#) allows you to make prototypes and limited quantities of cans, quickly and easily. The blanks are simple to cut and easy to form, requiring no special tooling. Pre-scored on a 5mm grid, cans of 5mm, 10mm or higher are possible. Maximum can size per sheet is 70mm x 50mm, 5mm high.
If you like this product, try...

Spring Contacts
- 30 different styles, all Surface Mount
- Heights from 1.23mm to 7.25mm
- Suitable for signal, grounding, antenna contacts.
- Right-angle option available

Test Points
- 3 different heights for flexibility
- Surface Mount fixed testing locations
- Suitable for hook probes, standard and miniature
- Reduced footprint versions

SMT PCB Sockets
- Surface Mount Throughboard connections
- Accepts pins Ø0.8 to 1.8mm
- Supplied on tape and reel
- Ultra-low profile
Our experts are specialists in their field with many years of experience in their respective roles and industries.

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