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CORRECT INSTALLATION OF RFI FILTERS	SECTION	ISSUE 1	DATE 16.11.90	AUTHERITY

#### INSTALLATION INTO A CHASSIS

# a) Threaded-Case Devices (FLT, DLT Ranges and Derivatives)

During installation these devices should be tightened using the correctly sized full hexagon socket and using the recommended mounting torque. Where a nut and washer has been specified, the washer should be correctly located between the chassis and the nut. The rotational force should be applied to the nut whilst the body is held stationary, with an appropriate full hexagon socket or box spanner. The terminations should not be bent within 2mm of the coloured potting material and care should be taken during installation not to bend the terminations unnecessarily.

## b) Solder in Devices (D. dBZ, SLT Ranges and Derivatives)

The mounting holes should be burr-free of the correct size and untarnished. This will help to ensure a good soldered joint. Where 60/40 Sn/Pb solder is to be used, a controllable iron set to give an operating bit temperature of 240°C to 260°C and a maximum dwell of 5 seconds is recommended. Vapour phase installation ensures that the device cannot be overheated during the soldering operations.

## SOLDERING OF TERMINATIONS (ALL FILTERS WITH SOLDERABLE TERMINATIONS)

It is recommended that the terminations should not be soldered or bent within 2mm of the filter case. A maximum operating iron bit temperature of 240° to 260°C with a dwell of 5 seconds should be used with 60/40 Sn/Pb solder. Where possible, a heat-shunt should be used to prevent over heating of the device taking place.

## FURTHER NOTES ON INSTALLATION

It is recommended that the terminations are not used to support PCB's within a unit. Also, bolt-in filter elements should not be utilised to hold separate pieces of equipment together. Strain relief of cable looms should be provided to remove strain from the filtered elements. Where hand soldering is to be used, an externally controlled and settable soldering iron should be utilised, preferably with the bit temperature checked prior to use.

#### **FURTHER REFERENCES**

MIL-STD-750C, Method 2026.5, Solderability

MIL-STD-750C, Method 2031.1, Soldering Heat

IEC 68-2-20, Test T, Solderability

BS 2011 2.1, Test T, Solderability