

SOLDER CONNECTION

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Technical Bulletin

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BP Bonding Plugs

DESCRIPTION

Earth Bonding Point (EBP) plugs area simple method of grounding. They are designed to provide a common ground point for grounding using protective earth in an ESD protected area (EPA).

The plug fits into the UK mains supply socket, making a connection with the earth conductor only. In place of the live and neutral pins are moulded insulating plastic pins to allow positive location in the socket. Connectors on the front of the plug are available for connection via ground cords to the various elements of the EPA. Each element is held at a common potential. A resistance of sufficient resistance to limit current to less than 0.0005 amperes (0.5 milliamps), at the highest voltage that may be encountered, should be incorporated.

Nominally, 800 kilo ohms are sufficient for voltages of up to 240 volts alternating current (AC). The value of one mega ohm is specified because it is a standard value discrete resistor. Follow appropriate regulatory or company safe grounding instructions. If over-stressed, the resistor will open the circuit. It is virtually impossible to misuse the plug, which is permanently sealed. The resistance between the terminations and the pin of each plug is tested after manufacture.

TYPES



COMBINATIONS

Earth bonding points and plugs can be manufactured using any combination of the following:

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- 1) M5 post.
- 5) Hole blank.
- 2) 4mm stud.
- Safety banana socket.
- 3) 10mm stud.
- Black banana socket.
- 4) 7mm stud.
- Reverse banana socket.

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