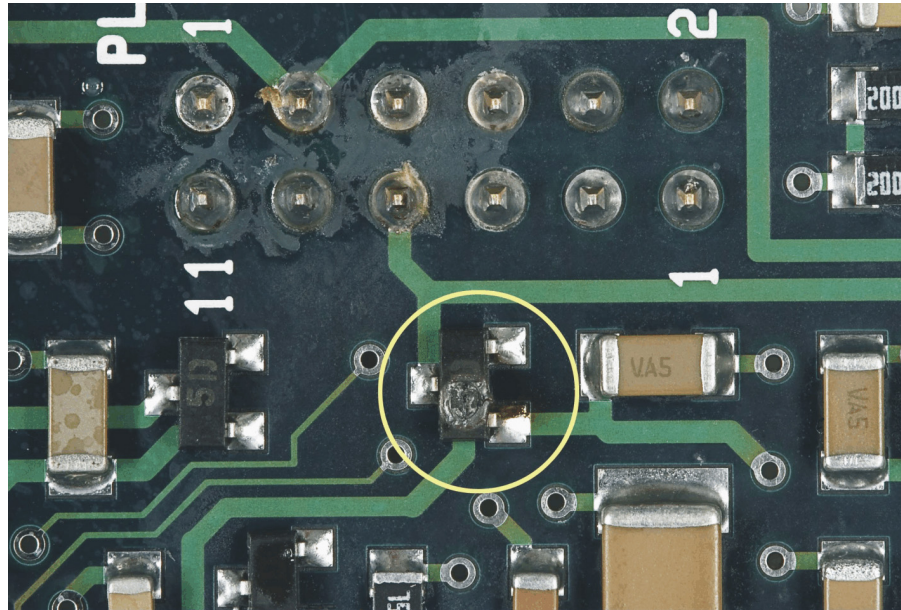


Introduction

Damage was first identified in a couple of surface mounted diodes, see Figure 2.10-2 below, which are near the switch mode power supply connector.



Miti(08)_F2.10-2

Figure 2.10-2 – Picture of damaged diode

Circuits, schematics and printed circuit board (PCB) layouts were obtained for this part of the system. This information, in combination with installation documentation, enabled a scenario for damage to be determined. It also identified components likely to be damaged. These components were:

- a thyristor protection circuit, which is a switching type protector and the first component on the printed circuit board where the line terminates;
- a diode which clamps the incoming line to the -70 V supply rail (line);
- a diode which clamps the incoming line to the -35 V rail (line);
- two diodes which connect from the -35 V and -70 V supply lines to the SLIC circuit. One of these diodes is shown damaged in Figure 2.10-2 above;
- the SLIC circuit.