

## **Connectors Reliability**

Connector reliability is dependent on three factors: (1) it is properly defined, (2) it is well engineered, and (3) it is correctly used in its intended application. When this criteria is achieved, a connector should perform its intended function, without failure, for the duration of its specified period of operation.

Assessing the reliability of a specific connector product requires considerable cost, as a significant number of contacts need to be tested and measured over a number of conditions, to establish a known failure rate(s) under the intended application(s). Manufacturer data may be of value, but is not necessarily relevant to a specific application.

Quality assurance efforts can contribute to the best choice of product for field reliability, since the inspections and evaluations performed can provide insight as to the quality of the engineering. Design, fabrication, and the manufacturer's capability to maintain the attributes specified in their data sheet(s) and/or the customer's acquisition document(s).

Variations in reliability of a given connector product are not uncommon. Even for a good connector choice and proper application, the connector quality can be compromised during handling, installation, by extensive mating operations, and simply due to normal aging, particularly in severe environmental applications where the environmental harshness may be a variable (e.g. in mobile, naval, and aircraft applications).