## **Crydom International Ltd.**

## **OBSERVED MTBF (MEAN TIME BETWEEN FAILURES)**

Crydom does not calculate MTBF data as it can be very misleading. What we do is to calculate observed MTBF. This is done by estimating the number of device hours which have been accumulated within a given time and comparing this number with the number of returned relays we have received over the same period (we only consider relays which were not damaged by electrical, thermal or mechanical overstress for the calculations).

Based on the number of relays shipped over the last 2 years, assuming that it is 3 months after shipment before the relays are in service and that they are used for 8 hours a day, 5 days a week we calculate the number of device hours. As mentioned above, we only consider the relays returned which cannot be identified as having failed because of customer mis-application. The observed MTBF is calculated by dividing the total device hours in service by the number of unexplained relay failures. These calculations result in observed MTBF values which range between 20,000,000 and 400,000,000 hours, depending on the device type.

These MTBF levels are extremely high, but even if we assume that only 10% of field failures are returned to us this still gives MTBF values from 2,000,000 to 40,000,000 hours.

Other analyses we have done on our final test results and customer feedback indicate that our outgoing quality level is in the range of 10 PPM.