



## Radiation Test on MDI Model 7107-T15F

A Cobalt 60 Total dose (gamma) test was performed on two samples of MDI Model 7107-T15F triple output DC/DC Converters. These parts incorporate the new MDI patent pending radiation hardening technology. No internal or external radiation shielding was used.

The test was performed at the Brookhaven National Laboratories Gamma Radiation Facility, Building 356 in Upton, NY.

The parts were exposed to a Cobalt 60 source at a dose rate of approximately 38 kRads per hour, measured at 20K rad intervals, until a total ionizing dose of 200 kRads was achieved. Although the parts were still operating satisfactorily at this point, the test was stopped for time constraints.

Operating conditions were full rated load on the +5 VDC output and minimum load on the +/- 15 VDC outputs. Input current on the converters was also monitored during the test. The efficiency of the two test samples actually increased slightly over the deposited radiation.

The +/- 15 VDC outputs increased approximately 3.5% over 200 Krads, in a mostly linear manner.

The representative test results for the main output of both test samples is shown:

