Radiation Resistant Microsensors of Magnetic Field. I. BOLSHAKOVA, V. GRUSHETSKIY, A. MATKOVSKII, A. MOROZ, State University "Lviv Polytechnics", Lviv, Ukraine. Magnetic field microsensors, based on III-V semiconductor discrete microcrystals, are featured by the minimization of dimensions (10^{-5} mm^3), weight (10^{-6} g) and power consumption (10^{-3} W). The magnetic field sensitivity is in the range of 5∏100 mV/Tfor different types of microsensors. Several kinds of probes with microsensors are developed which allow one to make measurements in thin gaps (transverse probes with the width of less than 0.1 mm) and small holes (axial probes with the diameter of less than 1 mm). Multisensors with 6-8 pairs of Hall sensitive elements allocated along one crystal with 0.6 mm one from another, which are intended for the high gradient magnetic field measurements, are developed as well. The radiation hardness is achieved by means of the complex doping of microcrystals during growth. The microsensor sensitivity change after the irradiation by fast neutrons with fluence 10^{14} n◊cm^{-2} is in the range of 0.1∏0.5% in dependence on the doping level of microcrystals. The microsensors may be customized.