

Edge metallization profile on optically transparent windows formed by RF magnetron deposition

A. V. Trukhachev, K. O. Boltar, N. G. Mansvetov, M. V. Sednev, N. S. Trukhacheva,
E. N. Zubkova and N. V. Prakhov

Orion R&P Association, JSC
9 Kosinskaya st., Moscow, 111538, Russia
E-mail: orionmoscow@mail.ru

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The paper examines the process of formation of edge metallization on input windows (germanium, silicon and other disks) used to input the received light flux by a photodetector located in a protective sealed housing. The article presents the results of an experimental study of the dependence of the edge metallization profile of Ge disks formed by magnetron sputtering on the design parameters of the loading device. Design options for loading devices are presented. The influence of thickness on the profiles of edge metallization of structural elements of the loading device, masking the disks during deposition, has been experimentally shown.

Keywords: Ge disks (entrance windows) – optically transparent element, photodetector design, magnetron sputtering, Au, Ni, Mo, device for forming edge metallization.

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