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Simulation of heat load during characterisation control of micro cryogenic cooling systems of photodetectors

E. D. Korotaev[1], *M. V. Bannikov*[1], *K. O. Boltar*[1,2], *I. V. Efimov*[1] *and A. A. Sharov*[1,3]

[1] Orion R&P Association, JSC
9 Kosinskaya st., Moscow, 111538, Russia
E-mail: orion@orion-ir.ru

[2] Moscow Institute of Physics and Technology
9 Institutskii per., Dolgoprudny, Moscow Region, 141701, Russia

[3] Moscow State University of Geodesy and Cartography
4 Gorohovskii per., Moscow Region, 105064, Russia

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The features of the device and manufacturing technology of thermal load simulators designed to control the parameters of miniature cryocoolers of photo-detectors are considered. The main parameters of the manufactured samples of simulators are given in comparison with foreign analogues. Thermal load simulators for monitoring miniature cryocoolers with a cooling capacity of 0.5–0.75 W have been created at Orion R&P Association.

Keywords: miniature cryocoolers, thermal load simulator, heat gain, cold finger, photo-detector.

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