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ON THE MINIMUM DISTANCE OF CIRCULANT RT DISTANCE CODES

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In this paper we study the minimum distance properties of circulant codes equipped with the Rosenbloom-Tsfasman metric. The existence of circulant RT distance codes is established. We also describe some interesting properties of the RT weight of circulant matrices. This paper has four sections.

Section one is introductory in nature, introduces RT metric and circulant codes. Section two recalls the definition of RT metric array codes. RT weight of a circulant matrix is given in section three. The final section defines circulant RT distance codes and proves some interesting properties associated with it.

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