

论文

有限域上自正交循环码的存在性

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摘要: 给出了非平凡自正交循环码和自对偶循环码存在的充要条件及其计数公式, 并由此得到几类非平凡自正交循环码存在性的一个简便易行的判别方法.

关键词: 循环码 自正交码 自对偶码 反向多项式

MSC2000 94B15

The Existence for Self-Orthogonal Cyclic Codes over Finite Fields

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Abstract: We obtain a necessary and sufficient condition for that there exists a nontrivial self-orthogonal or self-dual cyclic codes over finite fields and the explicit enumerating formula. As a corollary, a simple and easy criterion for several classes of non-trivial self-orthogonal cyclic codes is given.

Keywords: cyclic code self-orthogonal code self-dual code reciprocal polynomial

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