

SOME RESULTS ON BLOCK KRONECKER AND BLOCK HADAMARD PRODUCT OF MATRICES

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Abstract. In this paper, we first construct a relationship between a block Kronecker product and a block Hadamard product of matrices. Then we give some power rules for the block Kronecker product of matrices under commutation assumptions. We extend some inequalities for powers of the block Hadamard product of a finite number of positive definite Hermitian matrices.

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