Package ‘mkssd’

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Title Efficient multi-level k-circulant supersaturated designs

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Depends R(>= 2.13.0)

Description mkssd is a package that generates efficient balanced non-aliased multi-level k-circulant supersaturated designs by interchanging the elements of the generator vector. The package tries to generate a supersaturated design that has chisquare efficiency more than user specified efficiency level (mef). The package also displays the progress of generation of an efficient multi-level k-circulant design through a progress bar. The progress of 100% means that one full round of interchange is completed. More than one full round (typically 4-5 rounds) of interchange may be required for larger designs.

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R topics documented:

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Description

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Usage

mkssd(m, n, q, k, mef)

Arguments

m    number of factors
n    number of runs
q    number of levels
k    order of circulation
mef  minimum efficiency required, should be between 0 to 1

Value

A list containing following items

m    number of factors
n    number of runs
q    number of levels
k    order of circulation
generator.vector
    generator vector
design
    design
efficiency    chi-square efficiency
max.chisq    maximum chi-square
time.taken    time taken to generate the design
number.aliased.pairs
    number of aliased pairs

Author(s)

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References


Examples

mkssd(10,6,3,2,1)
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