

Package ‘colorfast’

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Type Package

Title Fast Conversion of R Colors to Color Component Values and Native Packed Integer Format

Version 1.0.0

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Description Color values in R are often represented as strings of hexadecimal colors or named colors. This package offers fast conversion of these color representations to either an array of red/green/blue/alpha values or to the packed integer format used in native raster objects. This fast conversion of colors is implemented using an order-preserving minimal perfect hash derived from Majewski et al (1996) 'A Family of Perfect Hashing Methods' <[doi:10.1093/comjnl/39.6.547](https://doi.org/10.1093/comjnl/39.6.547)>.

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Encoding UTF-8

RoxygenNote 7.3.2

Suggests testthat (>= 3.0.0)

Config/testthat/edition 3

NeedsCompilation yes

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Repository CRAN

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Contents

col_to_int	2
col_to_rgb	2

Index	4
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col_to_int	<i>Fast conversion of colors-as-strings to an integer vector of packed RGBA values.</i>
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Description

Packed RGBA values are used in R's native raster objects.

Usage

```
col_to_int(col)
```

Arguments

col	Character vector of color names. Supports all R color names (e.g. "red", "hot-pink") and hex colors of the form: "#RRGGBBAA", "#RRGGBB", "#RGBA" and "#RGB".
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Value

Integer vector where the 4 bytes making up each integer represent the RGBA values of the colour

Examples

```
col_to_int(c("hotpink", "#abc", "#abcd", "#aabb99", "#aabb9980"))
```

col_to_rgb	<i>Fast conversion of colors-as-strings to a matrix of RGBA integers</i>
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Description

This is a faster replacement for `grDevices::col2rgb()` which uses a hash lookup of R color names (rather than a linear search).

Usage

```
col_to_rgb(col)
```

Arguments

col	Character vector of color names. Supports all R color names (e.g. "red", "hot-pink") and hex colors of the form: "#RRGGBBAA", "#RRGGBB", "#RGBA" and "#RGB".
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Value

An integer matrix with four rows and number of columns the length of the input.

col_to_rgb

3

Examples

```
col_to_rgb(c("hotpink", "#abc", "#abcd", "#aabb99", "#aabb9980"))
```

Index

`col_to_int`, 2
`col_to_rgb`, 2