

NAME

cabs, cabsf, cabsl – absolute value of a complex number

LIBRARY

Math library (*libm*, *-lm*)

SYNOPSIS

```
#include <complex.h>
```

```
double cabs(double complex z);
```

```
float cabsf(float complex z);
```

```
long double cabsl(long double complex z);
```

DESCRIPTION

These functions return the absolute value of the complex number *z*. The result is a real number.

ATTRIBUTES

For an explanation of the terms used in this section, see **attributes(7)**.

Interface	Attribute	Value
cabs(), cabsf(), cabsl()	Thread safety	MT-Safe

STANDARDS

C11, POSIX.1-2008.

HISTORY

glibc 2.1. C99, POSIX.1-2001.

NOTES

The function is actually an alias for *hypot(a, b)* (or, equivalently, *sqrt(a*a + b*b)*).

SEE ALSO

abs(3), **cimag(3)**, **hypot(3)**, **complex(7)**