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.

VERSIONS

These functions were added in glibc 2.1.

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

C99, POSIX.1-2001, POSIX.1-2008.

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)