



1 SUMMARY

This subroutine evaluates an approximation to

$$\text{ERFC}(X) = \frac{2}{\sqrt{\pi}} \int_x^{\infty} e^{-t^2} dt$$

ATTRIBUTES — **Version:** 1.0.0. **Types:** FC07B; FC07BD. **Original date:** June 1979. **Origin:** S.Marlow.

2 HOW TO USE THE PACKAGE

2.1 The Argument List

The single precision version

```
CALL FC07B(X,ERFC)
```

The double precision version

```
CALL FC07BD(X,ERFC)
```

X is a REAL (DOUBLE PRECISION in the D version) variable which must be set by the user to the value of the argument x. It is not altered by the subroutine. Restrictions: $0 \leq X < \infty$.

ERFC is a REAL (DOUBLE PRECISION in the D version) variable which is set by the subroutine to the computed value of $\text{erfc}(x)$.

3 GENERAL INFORMATION

Use of common: none.

Workspace: none.

Other routines called directly: none.

Input/output: none.

Accuracy: 12 figures.

4 METHOD

The approximation to the function is given in National Physical Laboratory Mathematical Tables, volume 5, Chebyshev series for mathematical functions (HMSO 1962) by C.W.Clenshaw.