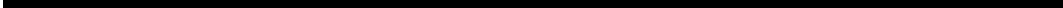


Table of Fourier integral

海大河海系

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(file:tabfor.te)



常見函數之 Fourier 轉換

$f(x)$	$F(\omega)$
$\frac{1}{2}$ for $ x < a$; 0 for $ x > a$	$\frac{\sin a\omega}{\omega}$
$\frac{1}{\sqrt{2\pi x }}$	$\frac{1}{\sqrt{ \omega }}$
$\frac{2a-x}{4}$ for $ x < 2a$; 0 for $ x > 2a$	$\frac{\sin^2 a\omega}{\omega^2}$
$\frac{a}{\pi(x^2+a^2)}$	$e^{-a \omega }$
$\frac{e^{-x^2/4a}}{e^{-a x }}$	$e^{-a\omega^2}$
$\frac{2\sqrt{\pi a}}{K_0(a x)}$	$\frac{1}{\omega^2+a^2}$
$\frac{2a}{K_0(a x)}$	$\frac{1}{\sqrt{\omega^2+a^2}}$
$\frac{\pi}{ie^{iax}}$ for $x > 0$; 0 for $x < 0$	$\frac{1}{\omega-a}$ (for $\mathscr{I} a > 0$)
$f^{(n)}(x)$	$(i\omega)^n F(\omega)$