Tabla de Propiedades y algunas Transformadas de Fourier

	$f(t) = \frac{1}{2\pi}\int_{-\infty}^{+\infty} F(\omega) e^{j\omega t} d\omega$	$F(\omega) = \int_{-\infty}^{+\infty} f(t) e^{-j\omega t} dt$
1	$a_1 f_1(t) + a_2 f_2(t)$	$a_1 F_1(\omega) + a_2 F_2(\omega)$
2	$f(at),\ a \neq 0$	$\frac{1}{\lvert a \rvert} F\left(\frac{\omega}{a}\right)$
3	$f(t \mp t_0)$	$e^{\mp j\omega t_0} F(\omega)$
4	$e^{\pm j\omega_0 t} f(t)$	$F(\omega \mp \omega_0)$
5	$f(t) \cdot cos(\omega_0 t)$	$\frac{1}{2} F(\omega - \omega_0) + \frac{1}{2} F(\omega + \omega_0)$
6	$f(t) \cdot sen(\omega_0 t)$	$\frac{1}{2j} F(\omega - \omega_0) - \frac{1}{2j} F(\omega + \omega_0)$
7	$F(t)$	$2\pi f(-\omega)$
8	$\frac{d^n f(t)}{dt^n},\ n \in \aleph$	$(j\omega)^n F(\omega)$
9	$\int_{-\infty}^{t} f(t')dt'$	$\frac{1}{j\omega} F(\omega) + \pi F(0)\delta(\omega)$
10	$(-jt)^n f(t), n \in \aleph$	$\frac{d^n F(\omega)}{d\omega^n}$
11	$\frac{f(t)}{-jt}$	$\int_{-\infty}^{\omega} F(\omega')d\omega'$
12	$f_1(t) * f_2(t)$	$F_1(\omega) \cdot F_2(\omega)$
13	$f_1(t) \cdot f_2(t)$	$\frac{1}{2\pi} F_1(\omega) * F_2(\omega)$
14	$\int_{-\infty}^{\infty} f_1(t)\overline{f}_2(t)dt$	$\frac{1}{2\pi}\int_{-\infty}^{\infty} F_1(\omega) \cdot \overline{F}_2(\omega)d\omega$
15	$e^{-at}u(t)$	$\frac{1}{a + j\omega}$
16	$e^{-a\lvert t \rvert}$	$\frac{2a}{a^2 + \omega^2}$
17	$e^{-at^2},\ a \neq 0$	$\sqrt{\frac{\pi}{a}} e^{\frac{\omega^2}{4a}}$
18	$A \cdot p_{2T}(t)$	$2ATsinc(\omega T)$
19	$\Delta(t) = \begin{cases} A\left(1 - \frac{\lvert t \rvert}{T}\right), & \lvert t \rvert < T \\ 0, & \lvert t \rvert > T \end{cases}$	$ATsinc^2\left(\frac{\omega T}{2}\right)$
20	$\frac{t^{n-1}}{(n-1)!} e^{-at}u(t)$	$\frac{1}{(j\omega + a)^n}$
21	$e^{-at}\ sen\,\omega_0 t \cdot u(t)$	$\frac{\omega_0}{(a + j\omega)^2 + \omega_0^2}$
22	$e^{-at}\ cos\,\omega_0 t \cdot u(t)$	$\frac{a + j\omega}{(a + j\omega)^2 + \omega_0^2}$
23	$k\delta(t)$	k
24	k	$2\pi k\delta(\omega)$
25	$sgn(t)$	$\frac{2}{j\omega}$
26	$u(t)$	$\frac{1}{j\omega} + \pi\delta(\omega)$
27	$cos\,\omega_0 t$	$\pi[\delta(\omega - \omega_0) + \delta(\omega + \omega_0)]$
28	$sen\,\omega_0 t$	$j\pi[\delta(\omega + \omega_0) - \delta(\omega - \omega_0)]$
29	$e^{\pm j\omega_0 t}$	$2\pi\delta(\omega \mp \omega_0)$
30	$\sum_{n=-\infty}^{\infty} C_n e^{jn\omega_0 t},\ C_n = \frac{1}{T}\int_{-T/2}^{T/2} f(t) e^{-jn\omega_0 t} dt,\ \omega_0 = \frac{2\pi}{T}$	$2\pi\sum_{n=-\infty}^{\infty} C_n \delta(\omega - n\omega_0)$
31	$\sum_{n=-\infty}^{\infty} \delta(t - nT)$	$\omega_0 \sum_{n=-\infty}^{\infty} \delta(\omega - n\omega_0), \omega_0 = \frac{2\pi}{T}$
32	$t^n, n \in \aleph$	$2\pi j^n \frac{d^n \delta(\omega)}{d\omega^n}$

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