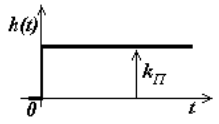
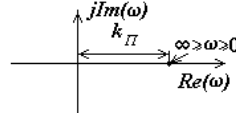
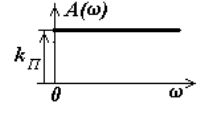
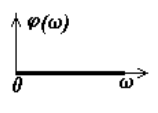
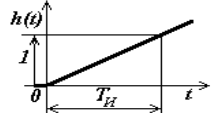
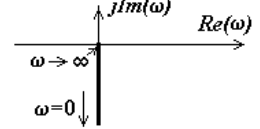
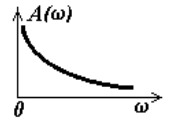
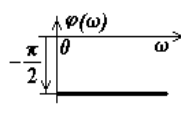
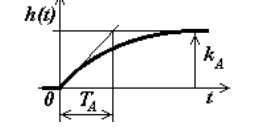
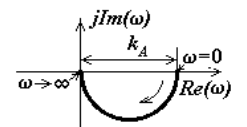
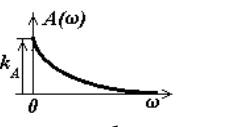
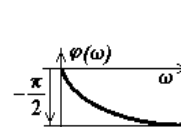
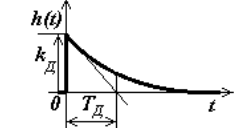
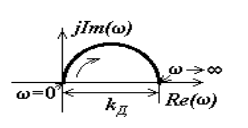
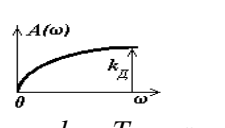
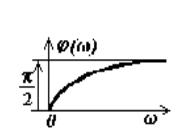
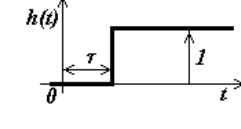
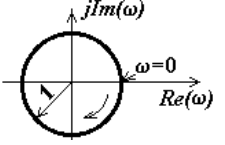
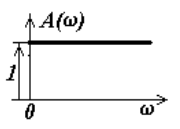
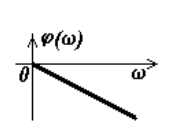


Динамические характеристики элементарных звеньев

Тип и дифференциальное уравнение звена	Переходная характеристика	Передающая функция	Комплексная частотная характеристика	Амплитудная частотная характеристика	Фазовая частотная характеристика
П-звено $y(t) = k_{\text{П}} \cdot x(t)$	 $h(t) = k_{\text{П}}$	$W(s) = k_{\text{П}}$	 $W(j\omega) = k_{\text{П}}$	 $A(\omega) = k_{\text{П}}$	 $\phi(\omega) = 0$
И-звено $T_{\text{И}} \frac{dy(t)}{dt} = x(t)$	 $h(t) = \frac{1}{T_{\text{И}}} \cdot t$	$W(s) = \frac{1}{T_{\text{И}} \cdot s}$	 $W(j\omega) = \frac{1}{T_{\text{И}} \cdot j \cdot \omega}$	 $A(\omega) = \frac{1}{T_{\text{И}} \cdot \omega}$	 $\phi(\omega) = -\frac{\pi}{2}$
А-звено $T_{\text{А}} \frac{dy(t)}{dt} + y(t) = k_{\text{А}} \cdot x(t)$	 $h(t) = k_{\text{А}} \cdot (1 - e^{-\frac{t}{T_{\text{А}}}})$	$W(s) = \frac{k_{\text{А}}}{T_{\text{А}} \cdot s + 1}$	 $W(j\omega) = \frac{k_{\text{А}}}{T_{\text{А}} \cdot j \cdot \omega + 1}$	 $A(\omega) = \frac{k_{\text{А}}}{\sqrt{(T_{\text{А}} \cdot \omega)^2 + 1}}$	 $\phi(\omega) = -\arctg(\omega \cdot T_{\text{А}})$
РД-звено $T_{\text{Д}} \frac{dy(t)}{dt} + y(t) = k_{\text{Д}} \times T_{\text{Д}} \times \frac{dx(t)}{dt}$	 $h(t) = k_{\text{Д}} e^{-\frac{t}{T_{\text{Д}}}}$	$W(s) = \frac{k_{\text{Д}} \cdot T_{\text{Д}} \cdot s}{T_{\text{Д}} \cdot s + 1}$	 $W(j\omega) = \frac{k_{\text{Д}} \cdot T_{\text{Д}} \cdot j \cdot \omega}{T_{\text{Д}} \cdot j \cdot \omega + 1}$	 $A(\omega) = \frac{k_{\text{Д}} \cdot T_{\text{Д}} \cdot \omega}{\sqrt{(T_{\text{Д}} \cdot \omega)^2 + 1}}$	 $\phi(\omega) = \arctg(\frac{1}{\omega \cdot T_{\text{Д}}})$
З-звено $y(t) = x(t - \tau)$	 $h(t) = l(t - \tau)$	$W(s) = e^{-\tau \cdot s}$	 $W(j\omega) = e^{-j \cdot \omega \cdot \tau}$	 $A(\omega) = 1$	 $\phi(\omega) = -\tau \cdot \omega$

