Wp=0.27, Ws=0.5元, Ts=10Us, Zp=3dB, Zs=70dB. /中股的在不变法. hw9.1

$$\lambda_p = 1$$
, $\lambda_s = \frac{s_{ls}}{s_{lp}} = 2.5$

$$a = \sqrt{\frac{10^{0.10} - 1}{10^{0.10} - 1}} = 31.68$$

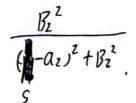
$$n = \frac{lg\alpha}{lg\lambda s} = 3.77$$
; NRY.

$$I = \exp(j \frac{zk+N-1}{zN} \pi) = \exp(j \frac{zk+3}{8}), k=1,...N$$

$$G(p) = \frac{1}{\sqrt{11}(p-p_k)} = \frac{1}{(p^2+0.7654p+1)(p^2+1.8478p+1)}$$

$$G(s) = G(P = \frac{s}{n_P}) = \frac{n_P^2}{\left[(s + 0.3827.n_P)^2 + 0.8535.n_P^2\right] \cdot \left[(s + 0.9239.n_P)^2 + 0.1464n_P^2\right]}$$

$$= A \frac{\beta_1^2}{(1-a_1)^2 + \beta_1^2} \cdot \frac{\beta_2^2}{(1-a_2)^2 + \beta_2^2}$$







$$A = \frac{1}{(1-(0)^2 \frac{1}{8}\pi)(1-(0)^2 \frac{1}{8}\pi)}, \quad \alpha_1 = \Omega_p \cdot (0) \frac{1}{8}\pi, \quad \alpha_2 = \Omega_p \cdot (0) \frac{1}{8}\pi,$$

$$B_1 = \Omega_p \cdot \sqrt{1-(0)^2 \frac{1}{8}\pi}, \quad B_2 = \Omega_p \cdot \sqrt{1-(0)^2 \frac{1}{8}\pi}.$$

同知8.2程识以 日(天) = 用
$$\frac{\Omega p^2}{\sin \frac{\pi}{8} \pi \cdot \sin \frac{\pi}{8} \pi}$$
. $\frac{Ze^{\alpha_1 T_3} \cdot \sin(B_1 T_3)}{Z^2 - Z[2e^{\alpha_1 T_3} \cdot \cos(B_1 T_3)] + e^{z\alpha_1 T_3}}$. $\frac{Ze^{\alpha_2 T_3} \cdot \sin(B_1 T_3)}{Z^2 - Z[2e^{\alpha_2 T_3} \cdot \cos(B_1 T_3)] + e^{z\alpha_1 T_3}}$.

Wp = 0.271, Ws = 0.571, 2p = 3d13, 2s = 30d13.

双键变换法

$$a = \sqrt{\frac{|0^{3}-1|}{|0^{q_{3}}-1|}} = 31.68$$
, $n = \frac{|9a|}{|9\lambda_{s}|} = 3.07$, NAVY.

$$P_{k} : exp(j\frac{z_{k}+N-1}{z_{N}}\pi), k=l,z,\cdots N$$

$$G(p) = \frac{1}{\prod_{k=1}^{N} (p-p_{k})} = \frac{1}{(p^{2}+0.76r^{4}p+1)(p^{2}+1.8478p+1)}$$

$$G(5) = G(p)|_{p=\frac{S}{\pi p}} = --$$

$$|A(Z) = G(S)|_{S=\frac{Z-1}{Z+1}} = --$$