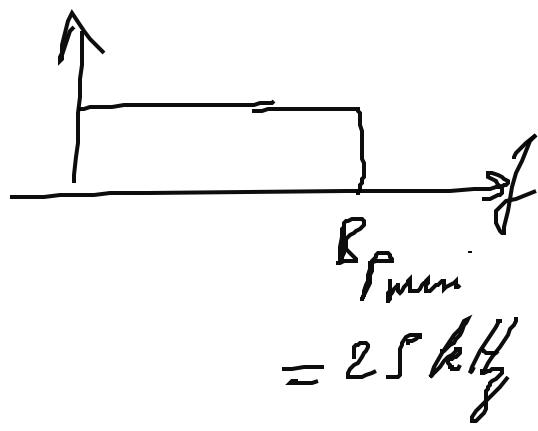


$$n = \log_2 M = 2 \text{ bits}$$
$$M = 2^2 = 4$$



$$\eta = \frac{28000}{25000} = 1.12 \text{ bits/s/Hz}$$

$$D_c = \frac{D_s}{\log_2 M} = \frac{28000 \text{ bits/s}}{2 \text{ bits/symb}}$$
$$= 14000 \text{ bands.}$$