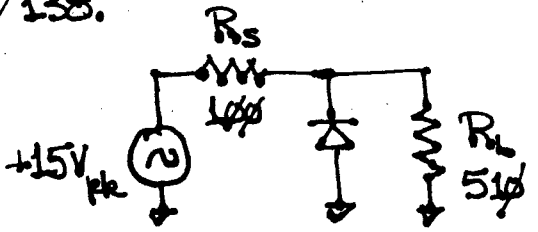
PP4.1/138.



$$V_L = \frac{R_L}{R_L + R_s} \cdot V_{in}$$

$$V_L = \frac{510}{100 + 510} \cdot 15V$$

$$V_L = \frac{510}{610} \cdot 15V$$

$$\boxed{V_L = 12.54\,V}$$

PP4.2/139.

$$V_{in} = -15V_{pk}$$

$$\boxed{V_{\gamma} = -0.7V}$$

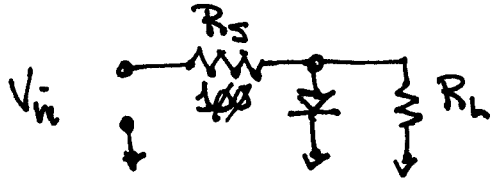
$$V_{RS} = V_{in} + 0.7V$$

$$V_{RS} = -15V + 0.7V$$

$$\boxed{V_{RS} = -14.3V}$$

PP 4.3/14Ø

positive shunt clipper



$R_S = 100\ \Omega$ & $R_L = 1.1K$ $\quad V_{in} = \pm 12V_{pk}$

$V_{in} = +12V$

$V_{in} = V_{RS} + V_{RL}$

$V_{RS} = V_{in} - V_{R_L}$

$V_{RS} = +12V - Ø.7V$

$\boxed{V_{RS} = 11.3V \text{ when } V_{in} = +12V}$

$\boxed{V_{R_L} = +Ø.7V}$

$V_{in} = -12V$

$V_{R_L} = \frac{R_L}{R_L + R_S} \cdot V_{in}$

$V_{R_L} = \frac{1.1K}{1.1K + 100} \cdot (-12V)$

$\boxed{V_{R_L} = -11.Ø V_{pk}}$

PP4.5/147.

Diketahui $R_{DL} = 8\,\Omega$ $C_1 = 4.7\,\mu F$ $R_L = 1.2K$

$$T_C = 5(R_{D1} C_1)$$

$$T_C = 5 \cdot 8\,\Omega \cdot 4.7 \times 10^{-6} F$$

$$\boxed{T_C = 188\,\mu s}$$

$$T_D = 5(R_L C_1)$$

$$T_D = 5 \cdot 1.2K \cdot 4.7 \times 10^{-6} F$$

$$T_D = 6 \times 10^{3} \cdot 4.7 \times 10^{-6} s$$

$$T_D = 28.2 \times 10^{-3} s$$

$$\boxed{T_D = 28.2\ ms}$$