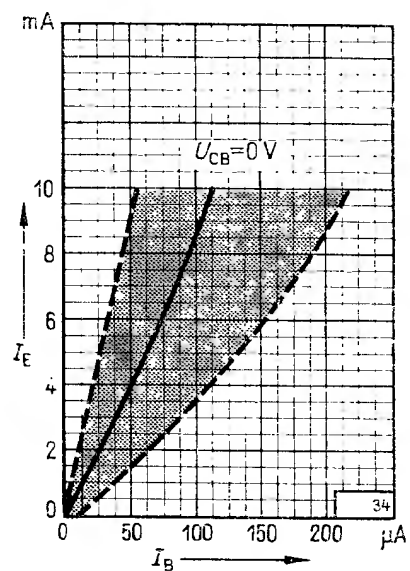
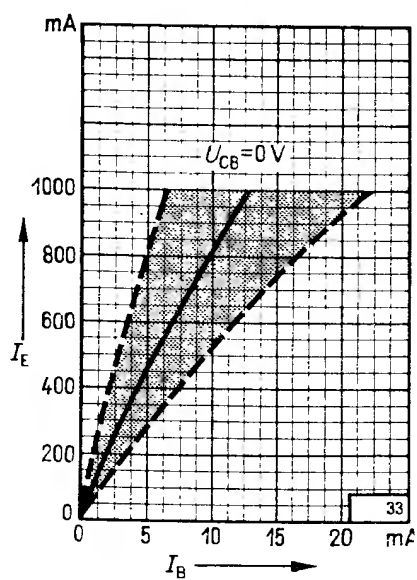


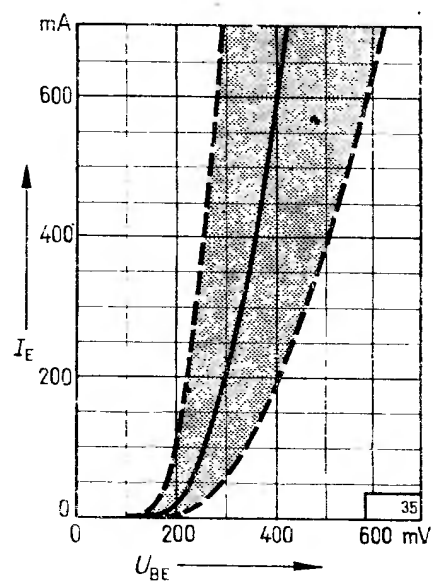
Általános jelleggörbék



$$I_E = f(I_B)$$

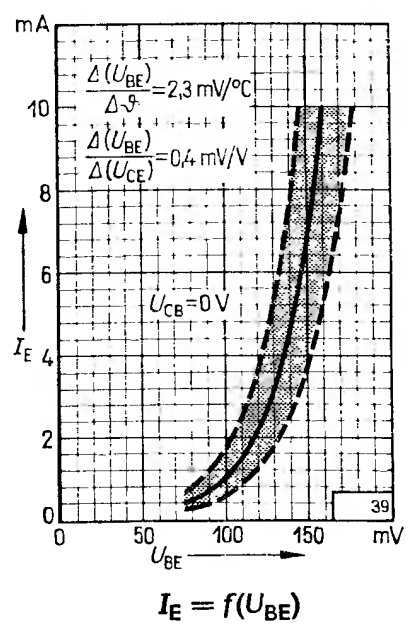
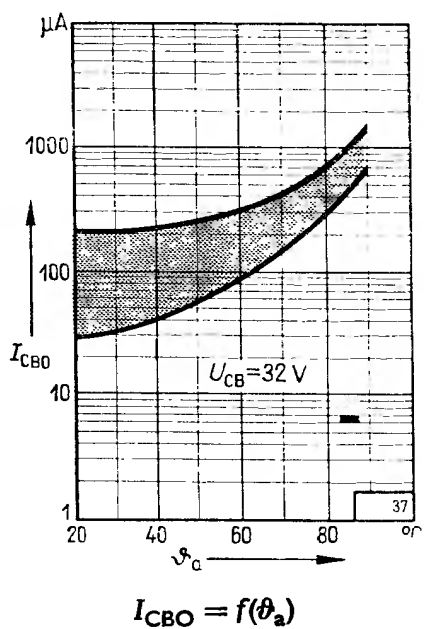
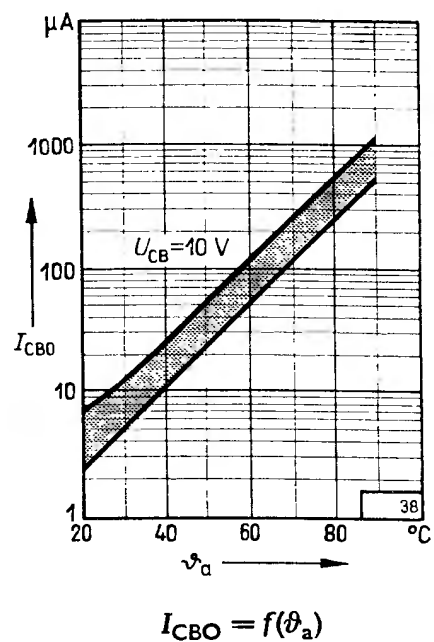
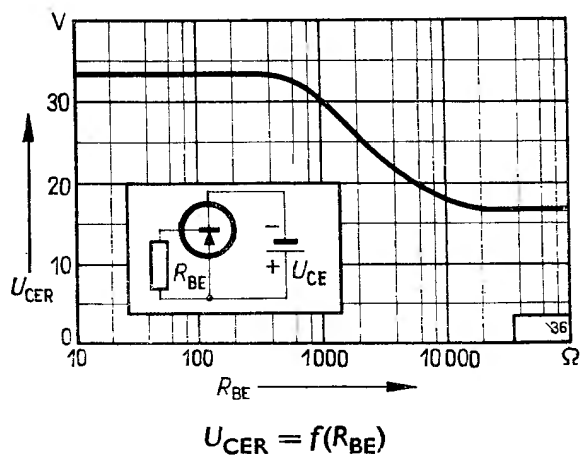


$$I_E = f(I_B)$$

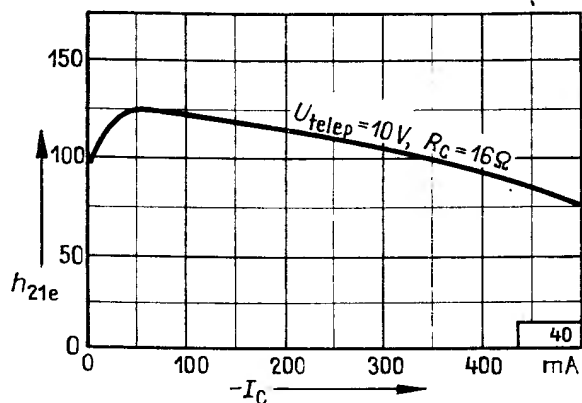


$$I_E = f(U_{BE})$$

AC 128



AC 128



$$h_{21e} = f(I_C)$$

AC 128 K

Határértékek:

$$\left[\begin{array}{l} P_{\text{tot}} = 670 \text{ mW} \\ (\theta_c = 60^\circ\text{C}) \end{array} \right]$$

$$U_{\text{EBO}} = 10 \text{ V}$$

$$I_{\text{C(AV)}} = 2 \text{ A}$$

$$\left[\begin{array}{l} P_{\text{tot}} = 1 \text{ W} \\ (\theta_j = 90^\circ\text{C}) \end{array} \right]$$

$$\left[\begin{array}{l} I_{\text{C(M)}} = 40 \text{ mA} \\ \theta_j = 90^\circ\text{C} \end{array} \right]$$

$$U_{\text{CBO}} = 32 \text{ V}$$

$$R_{\text{thjc}} = 0,045^\circ\text{C/mW}$$

$$U_{\text{CER}} = 32 \text{ V}$$

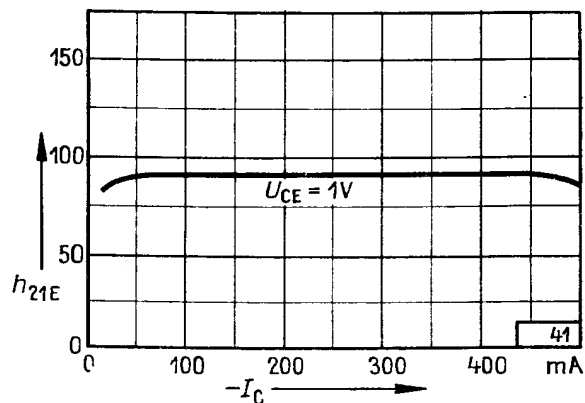
Jellemző adatok: $\theta_a = 25^\circ\text{C}$

$$h_{21E} = 90 \quad (U_{\text{CB}} = 0 \text{ V}, I_E = 300 \text{ mA})$$

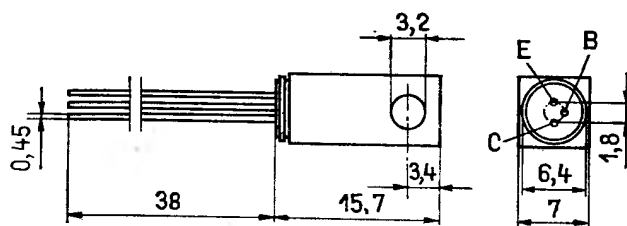
$$h_{21E} = 80 \quad (U_{\text{CB}} = 0 \text{ V}, I_E = 1 \text{ A})$$

$$f_T = 1,5 \text{ MHz} \quad (U_{\text{CB}} = 2 \text{ V}, I_E = 10 \text{ mA})$$

(További adatok és jelleggörbék az AC 128-nál)



$$h_{21E} = f(I_C)$$



AC 128 (z)

Határértékek:

$$\left[\begin{array}{l} P_{CE} = 170 \text{ mW} \\ (\vartheta_a = 25^\circ\text{C}) \end{array} \right]$$

$$\begin{array}{l} I_C = 1 \text{ A} \\ I_B = 40 \text{ mA} \end{array}$$

$$\left[\begin{array}{l} P_{CE} = 550 \text{ mW} \\ (\vartheta_a = 25^\circ\text{C}) \\ (12 \text{ cm}^2\text{-es hűtéssel}) \end{array} \right]$$

$$\begin{array}{l} \vartheta_j = 75^\circ\text{C} \\ R_{thja} = 0,3^\circ\text{C/mW} \end{array}$$

$$U_{CBO} = 32 \text{ V}$$

$$\left[\begin{array}{l} R_{th} = 0,09^\circ\text{C/mW} \\ (12,5 \text{ cm}^2\text{-es hűtéssel}) \end{array} \right]$$

$$\left[\begin{array}{l} U_{CER} = 32 \text{ V} \\ (R_{BE} = 500 \Omega) \end{array} \right]$$

$$\left[\begin{array}{l} R_{thjc} = 0,05^\circ\text{C/mW} \\ (\text{nagy alvázon}) \end{array} \right]$$

$$U_{EBO} = 10 \text{ V}$$

$$\vartheta_{stg} = -55 \dots +75^\circ\text{C}$$

Jellemző adatok: $\vartheta_a = 25^\circ\text{C}$

Báziskapcsolásban

$$I_{CBO} = 6 < 20 \mu\text{A} \quad (U_{CB} = 10 \text{ V};)$$

$$I_{CBO} = 20 < 50 \mu\text{A} \quad (U_{CB} = 32 \text{ V})$$

$$I_{EBO} = 20 < 50 \mu\text{A} \quad (U_{EB} = 10 \text{ V})$$

$$I_{EBO} = < 500 \mu\text{A} \quad (U_{EB} = 5 \text{ V}, \vartheta_j = 75^\circ\text{C})$$

$$U_{(BR)CB} = \max 55 \text{ V}; \quad U_{pt} = \min 50 \text{ V}.$$

$$r_{bb'} = 25 \Omega \quad (U_{CB} = 5 \text{ V}, I_E = 1 \text{ mA})$$

$$\begin{array}{l} C_{b'c} = 100 \text{ pF} \quad (U_{CB} = 5 \text{ V}, I_E = 0 \text{ mA}, \\ f = 450 \text{ kHz}) \end{array}$$

Emitterkapcsolásban

$$h_{21E} = 90 \quad (50 \dots 250) \quad (U_{CB} = 0 \text{ V}, I_E = 50 \text{ mA}, U_{BE} = 300 \text{ mV})$$

$$h_{21E} = 90 \quad (U_{CB} = 0 \text{ V}, I_E = 300 \text{ mA}, U_{BE} = 450 \text{ mV})$$

$$h_{21E} = 45 \dots 230 \quad (U_{CB} = 0 \text{ V}, I_E = 1 \text{ A})$$

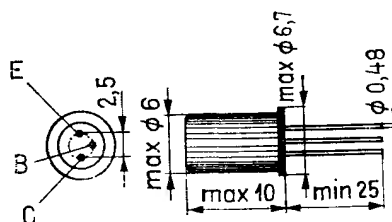
$$f_\beta = 15 > 10 \text{ kHz} \quad (U_{CB} = 2 \text{ V}, I_E = 10 \text{ mA})$$

$$f_T = 1,5 > 1 \text{ MHz} \quad (U_{CB} = 2 \text{ V}, I_E = 10 \text{ mA})$$

Áramerősítés (h_{21E}) szerinti csoportosítás

$$U_{CB} = 0 \text{ V}, I_E = 50 \text{ mA-nál}$$

Római szám	V	VI	VII
h_{21E}	50...100	75...150	125...250



AC 176

Az AC 153 n-típusú komplementerje

Határértékek:

$$\begin{aligned} P_{\text{tot}} &= 800 \text{ mW} & I_B &= 100 \text{ mA} \\ U_{\text{CEO}} &= 18 \text{ V} & \vartheta_j &= 90^\circ \text{C} \\ U_{\text{CBO}} &= 32 \text{ V} & R_{\text{thja}} &= 300^\circ \text{C/W} \\ U_{\text{EBO}} &= 10 \text{ V} & R_{\text{thjc}} &= 40^\circ \text{C/W} \end{aligned}$$

$$U_{(\text{BR})\text{CEO}} > 18 \text{ V} \quad (I_{\text{CEO}} = 300 \text{ mA})$$

$$U_{(\text{BR})\text{CBO}} > 32 \text{ V} \quad (I_{\text{CBO}} = 500 \mu\text{A})$$

$$U_{(\text{BR})\text{EBO}} > 10 \text{ V} \quad (I_{\text{EBO}} = 200 \mu\text{A})$$

$$f_T = 1 < 3 \text{ MHz} \quad (I_C = 10 \text{ mA}, U_{\text{CE}} = 2 \text{ V})$$

$$C_{\text{CBO}} = 100 \text{ pF} \quad (U_{\text{CBO}} = 5 \text{ V}, f = 450 \text{ kHz})$$

Jellemző adatok: $\vartheta_a = 25^\circ \text{C}$

$$I_{\text{CEV}} = 1 < 3 \text{ mA} \quad (U_{\text{CEV}} = 32 \text{ V}, U_{\text{BE}} = 0,6 \text{ V}, \vartheta_a = 90^\circ \text{C})$$

$$I_{\text{CBO}} = 7 < 35 \mu\text{A} \quad (U_{\text{CBO}} = 10 \text{ V}, \vartheta_a = 25^\circ \text{C})$$

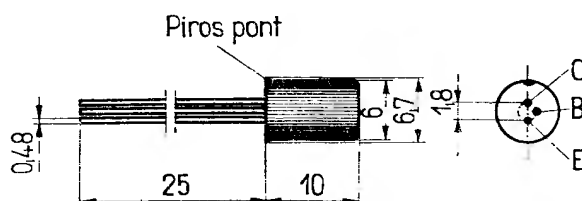
$$I_{\text{CBO}} = 1 < 3 \text{ mA} \quad (U_{\text{CBO}} = 32 \text{ V}, \vartheta_a = 90^\circ \text{C})$$

$$I_{\text{CBO}} = 25 < 500 \mu\text{A} \quad (U_{\text{CBO}} = 32 \text{ V}, \vartheta_a = 25^\circ \text{C})$$

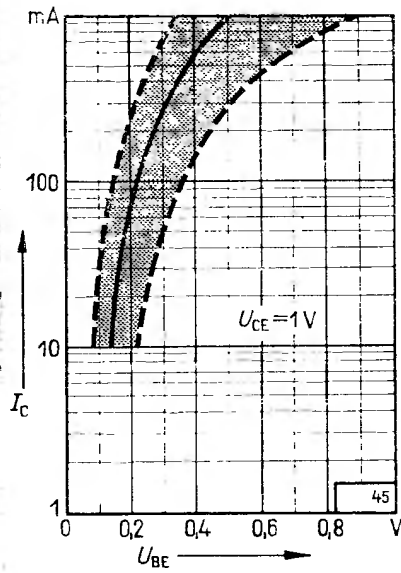
$$I_{\text{EBO}} = 20 < 200 \mu\text{A} \quad (U_{\text{EBO}} = 10 \text{ V}, \vartheta_a = 25^\circ \text{C})$$

Munkapontok:

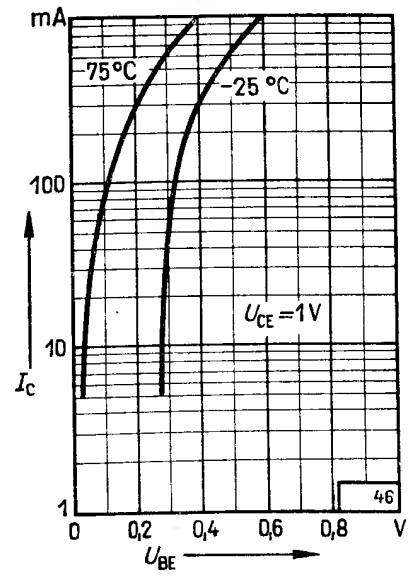
U_{CB}	I_C	I_B	$h_{21\text{E}}$	U_{BE}
0	50	1,4	35	0,3
0	300	1,2...6	50...250	0,65
0	1000	33,3	30	1
V	mA	mA	I_C/I_B	V



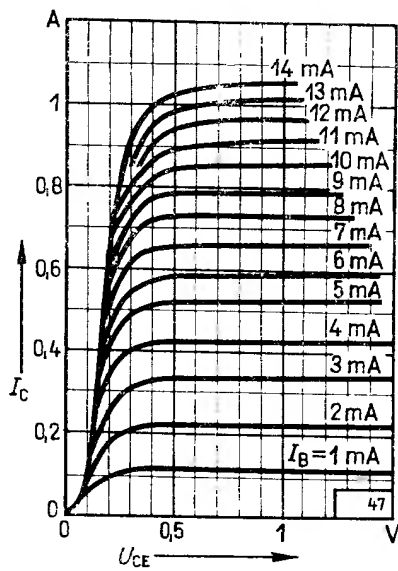
AC 176



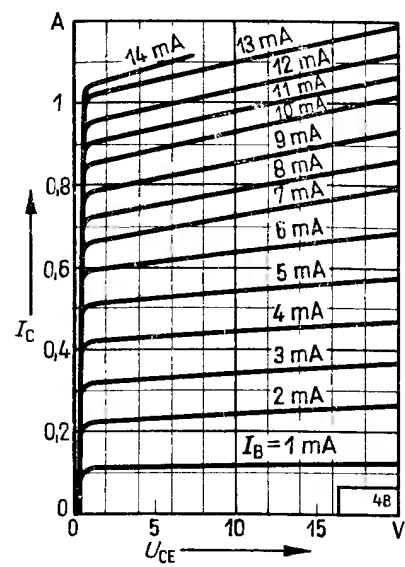
$$I_C = f(U_{BE})$$



$$I_C = f(U_{BE})$$

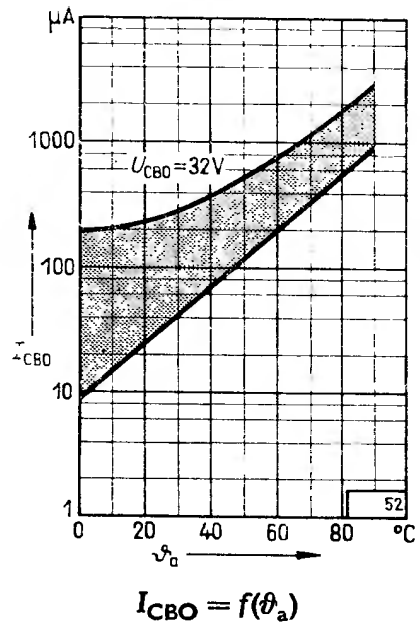
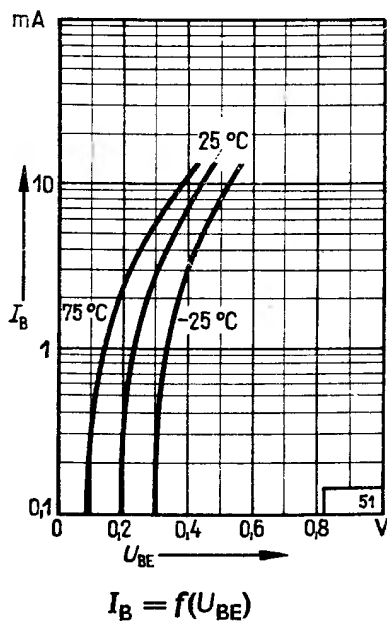
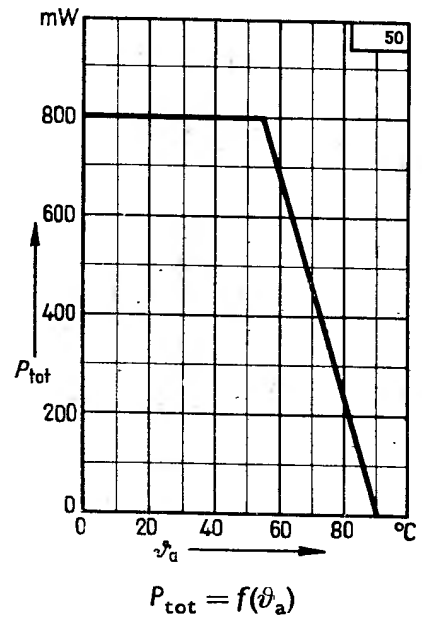
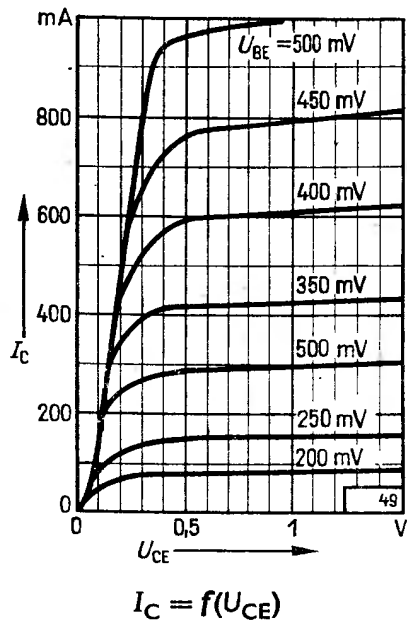


$$I_C = f(U_{CE})$$

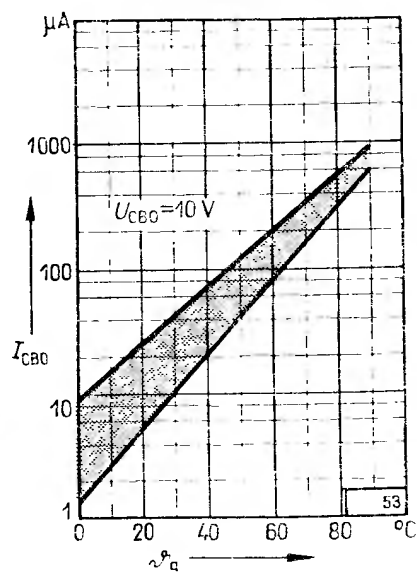


$$I_C = f(U_{CE})$$

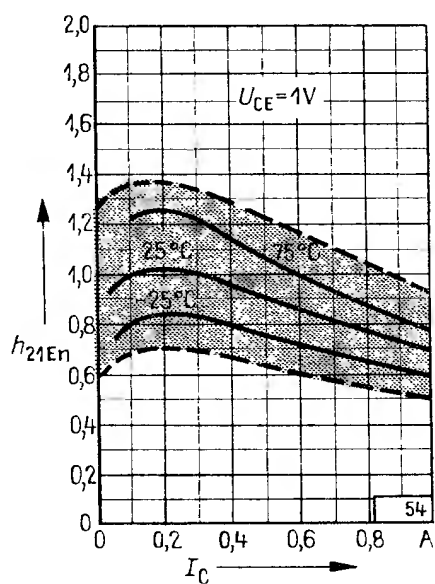
AC 176



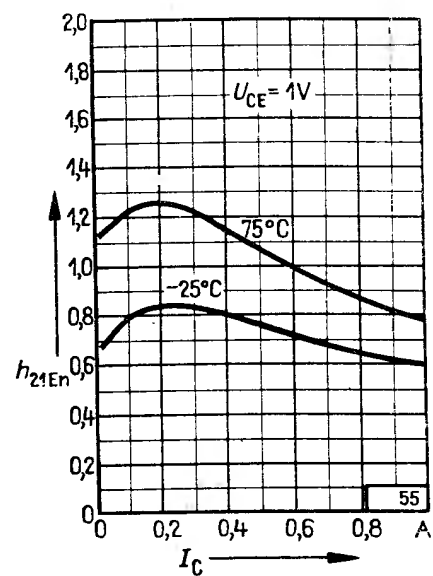
AC 176



$$I_{CBO} = f(\theta_a)$$



$$h_{21En} = f(I_C)$$



$$h_{21En} = f(I_C)$$