

Gleichstrom-Meßwerte, $t_{amb} = 25^{\circ}\text{C}$
1. Arbeitspunkt $-U_{CE} = 6\text{ V}, -I_C = 2\text{ mA}$

Basisspannung	$-U_{BE}$	150	120 ... 170	mV
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2. Arbeitspunkt¹⁾ $-U_{CE} = 1\text{ V}, -I_C = 40\text{ mA}$

Basisstrom	$-I_B$	1,2		mA
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Basisspannung	$-U_{BE}$	240		mV
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3. Arbeitspunkt¹⁾ $-U_{CE} = 1\text{ V}, -I_C = 400\text{ mA}$

Basisstrom	$-I_B$	12	9 ... 16	mA
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Basisspannung	$-U_{BE}$	480	330 ... 600	mV
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Restströme

Collectorreststrom, $-U_{CB} = 6\text{ V}$ Emitter offen	$-I_{cbo}$	8		μA
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Collectorreststrom, $-U_{CE} = 6\text{ V}$ Basis offen	$-I_{ceo}$	250	< 1300	μA
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Wärme-Innenwiderstand

$R_{i\text{therm}}$	\leq	75	$^{\circ}\text{C/W}$
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Bedingungen für paarweise Lieferung
Statische Werte

Arbeitspunkt: $-I_C = 400\text{ mA}, -U_{CE} = 1\text{ V}$

Unterschiede zwischen beiden Transistoren:

Spannung Basis-Emitter	ΔU_{BE}	\leq	+ 25	%
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Stromverstärkungsfaktor = $B = \frac{-I_C}{-I_B}$	ΔB	\leq	+ 20	%
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Arbeitspunkt: $-I_C = 3\text{ mA}, -U_{CE} = 6\text{ V}$

Unterschied zwischen beiden Transistoren:

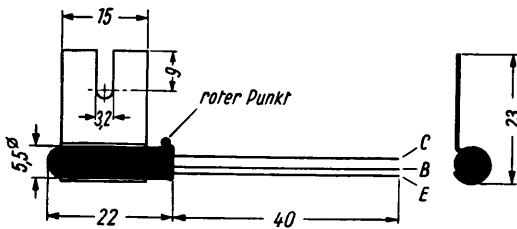
ΔU_{BE}	\leq	10	mV
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¹⁾ Nur mit Impulsen < 1 ms zu messen, wobei die integrierte Verlustleistung < 40 mW bleiben muß.

Grenzwerte, absolute Maxima

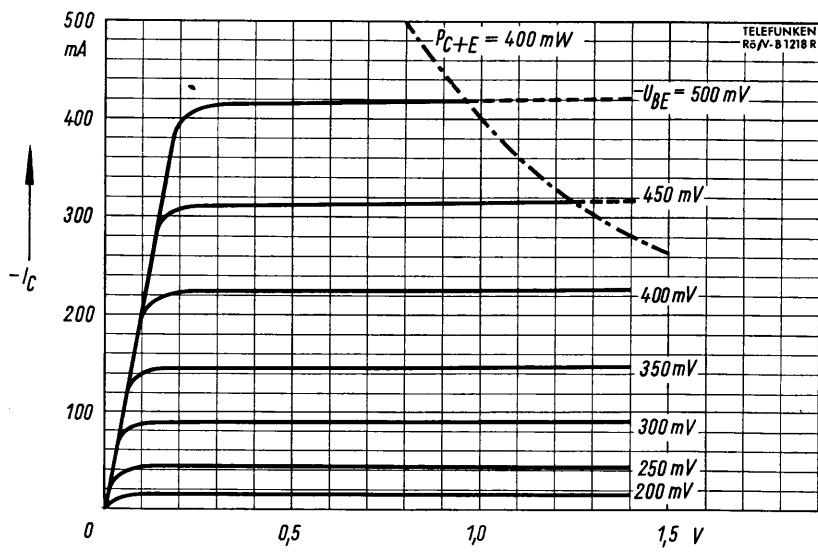
Spannung zwischen Collector und Emitter bei offener Basis	$-U_{CE0}$	18	V
Spannung zwischen Collector und Emitter bei kurzgeschlossener Basis-Emitter-Strecke	$-U_{Ck}$	40	V
Spannung zwischen Collector und Basis bei offenem Emitter	$-U_{CB0}$	40	V
Spannung zwischen Emitter und Basis bei offenem Collector	$-U_{EB0}$	10	V
Collectorspitzenstrom, Impulsbreite < 1 ms, Impulsfolge 16 Hz	$-I_C$	1	A
Collector- + Emitter-Verlustleistung, $t_{Kühlfahne} = 45^\circ\text{C}$	P_{C+E}	400	mW
Sperrschichttemperatur	t_j	75	$^\circ\text{C}$

max. Abmessungen

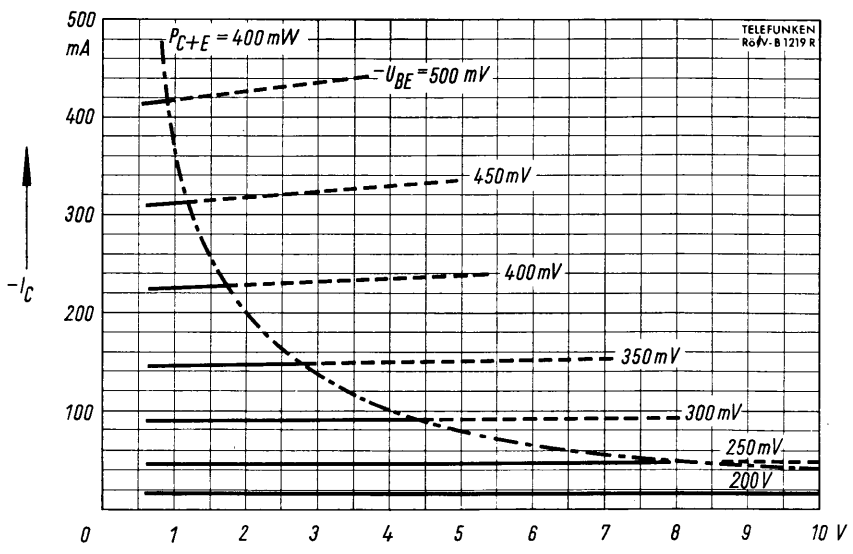


Gewicht: max. 2,5 g



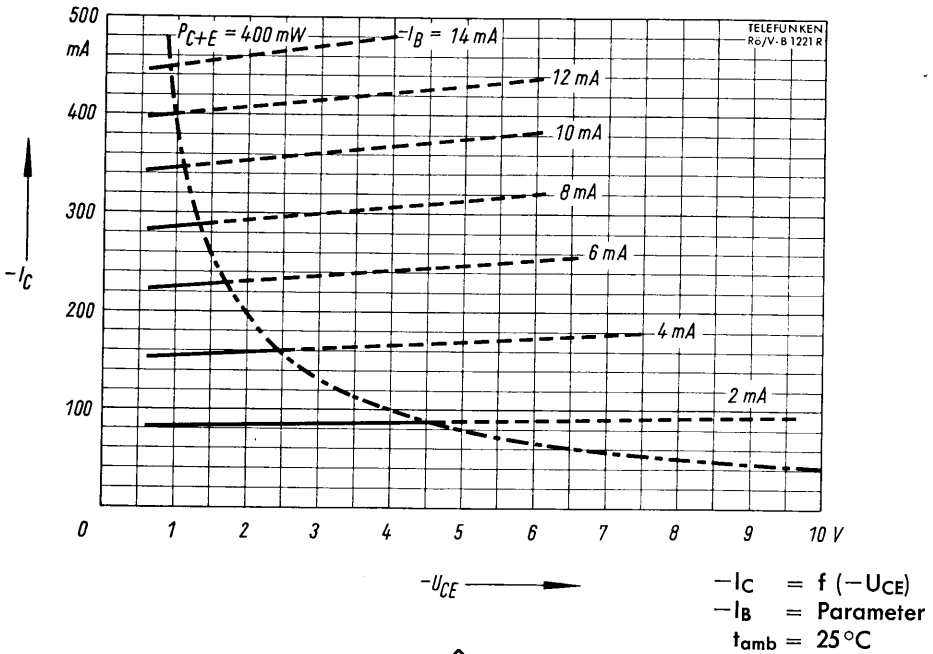
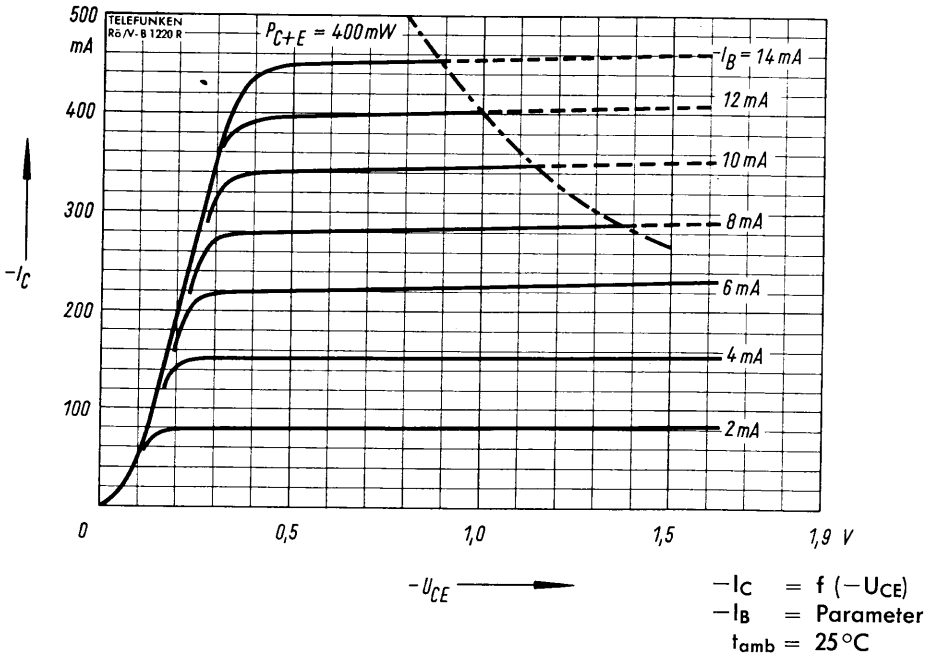


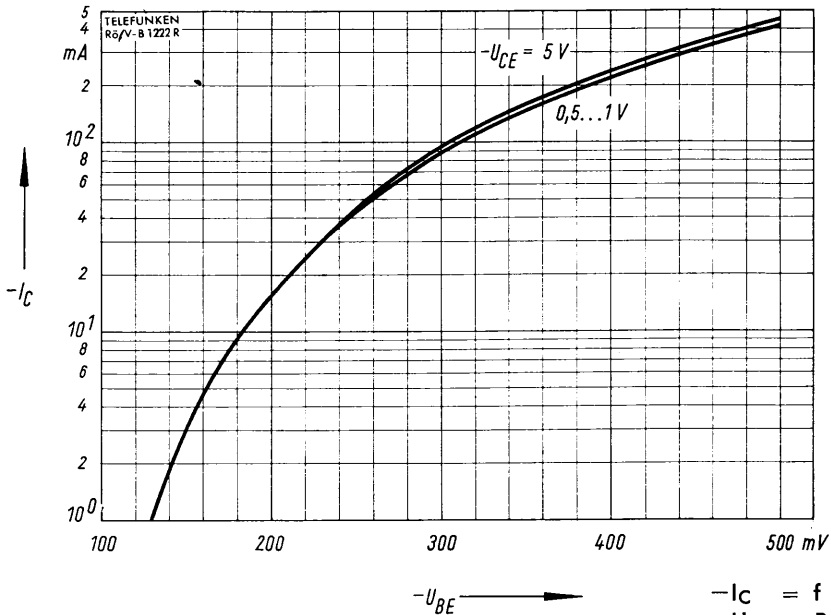
$-I_C = f(-U_{CE})$
 $-U_{BE} = \text{Parameter}$
 $t_{amb} = 25^\circ\text{C}$



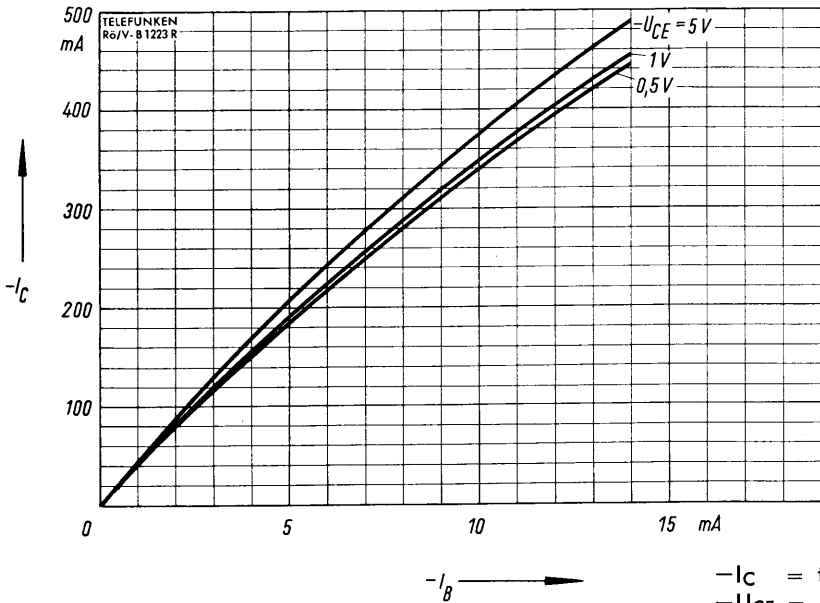
$-I_C = f(-U_{CE})$
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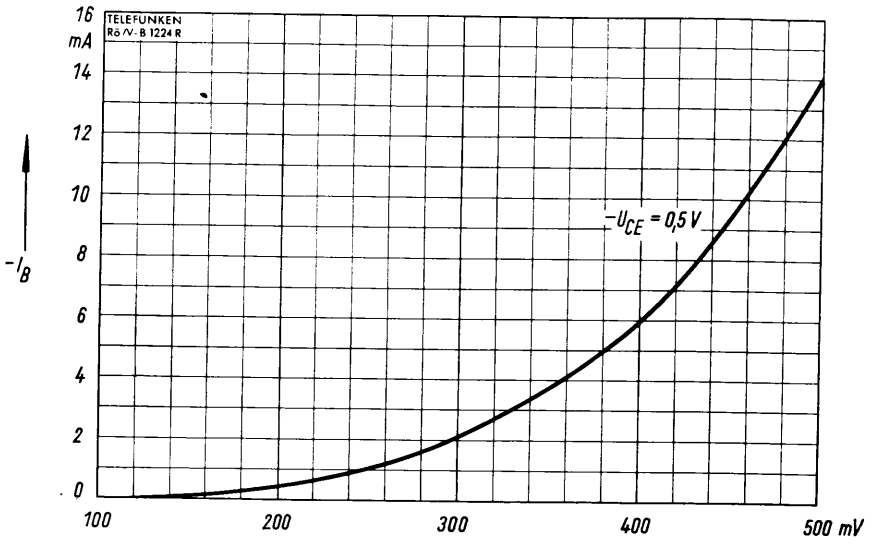


$-I_c = f(-U_{BE})$
 $-U_{CE} = \text{Parameter}$
 $t_{amb} = 25^\circ C$

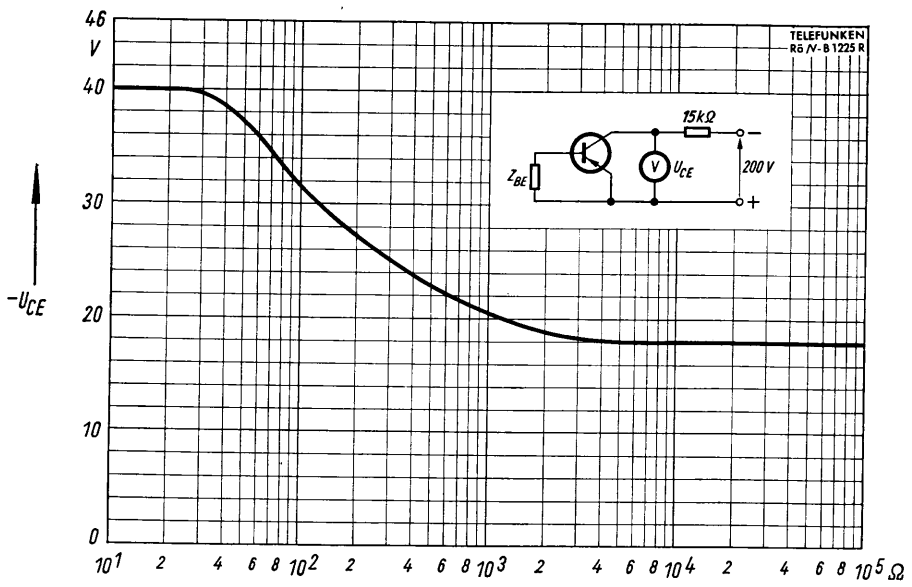


$-I_c = f(-I_B)$
 $-U_{CE} = \text{Parameter}$
 $t_{amb} = 25^\circ C$



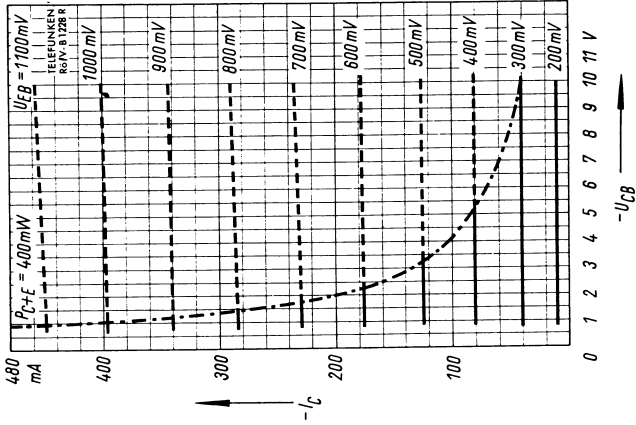


$-I_B = f(-U_{BE})$
 $-U_{CE} = \text{Parameter}$
 $t_{amb} = 25^\circ C$

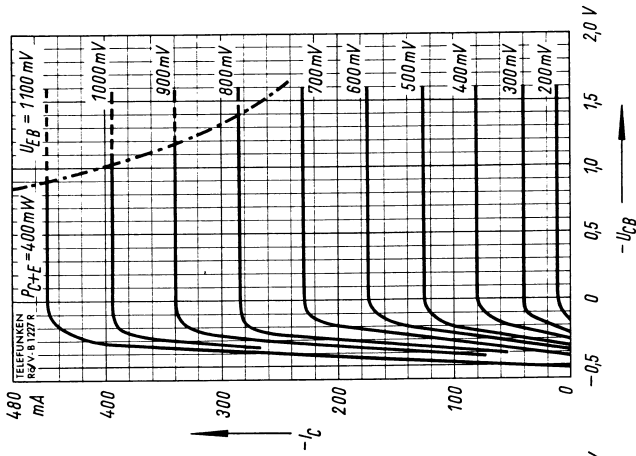


$-U_{CE} = f(Z_{BE})$
 $t_{amb} = 25^\circ C$

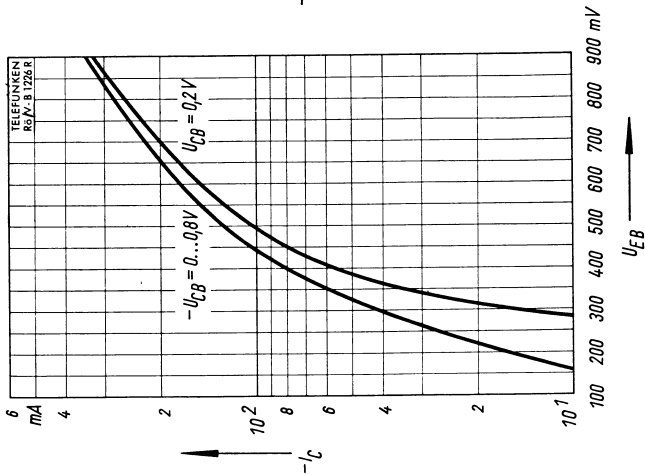




$-I_c = f(-U_{CE})$
 $U_{EB} = \text{Parameter}$
 $t_{amb} = 25^\circ\text{C}$



$-I_c = f(-U_{CB})$
 $U_{EB} = \text{Parameter}$
 $t_{amb} = 25^\circ\text{C}$



$-I_c = f(U_{EB})$
 $-U_{CB} = \text{Parameter}$
 $t_{amb} = 25^\circ\text{C}$



Gleichstrom-Meßwerte, $t_{amb} = 25^\circ\text{C}$

1. Arbeitspunkt $-U_{CE} = 6\text{ V}, -I_C = 3\text{ mA}$,

Basisspannung $-U_{BE}$ 140 120...170 mV

2. Arbeitspunkt¹⁾ $-U_{CE} = 1\text{ V}, -I_C = 40\text{ mA}$

Basisstrom $-I_B$ 0,8 mA

Basisspannung $-U_{BE}$ 240 mV

3. Arbeitspunkt¹⁾ $-U_{CE} = 1\text{ V}, -I_C = 400\text{ mA}$

Basisstrom $-I_B$ 7 2,7...10 mA

Basisspannung $-U_{BE}$ 480 330...600 mV

Restströme

Collectorreststrom, $-U_{CB} = 6\text{ V}$ $-I_{cbo}$ 8 μA
Emitter offen

Collectorreststrom, $-U_{CE} = 6\text{ V}$ $-I_{ceo}$ 250 < 1300 μA
Basis offen

Wärme-Innenwiderstand

$R_{i\text{ therm}}$ \leq 75 $^\circ\text{C/W}$

Bedingungen für paarweise Lieferung

Statische Werte

Arbeitspunkt: $-I_C = 400\text{ mA}, -U_{CE} = 1\text{ V}$

Unterschiede zwischen beiden Transistoren:

Spannung Basis-Emitter $\Delta U_{BE} \leq + 25\%$

Stromverstärkungsfaktor = $B = \frac{-I_C}{-I_B}$ $\Delta B \leq + 20\%$

Arbeitspunkt: $-I_C = 3\text{ mA}, -U_{CE} = 6\text{ V}$

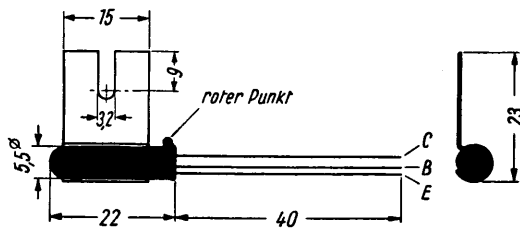
Unterschied zwischen beiden Transistoren: $\Delta U_{BE} \leq 10\text{ mV}$

¹⁾ Nur mit Impulsen < 1 ms zu messen, wobei die integrierte Verlustleistung < 40 mW bleiben muß.

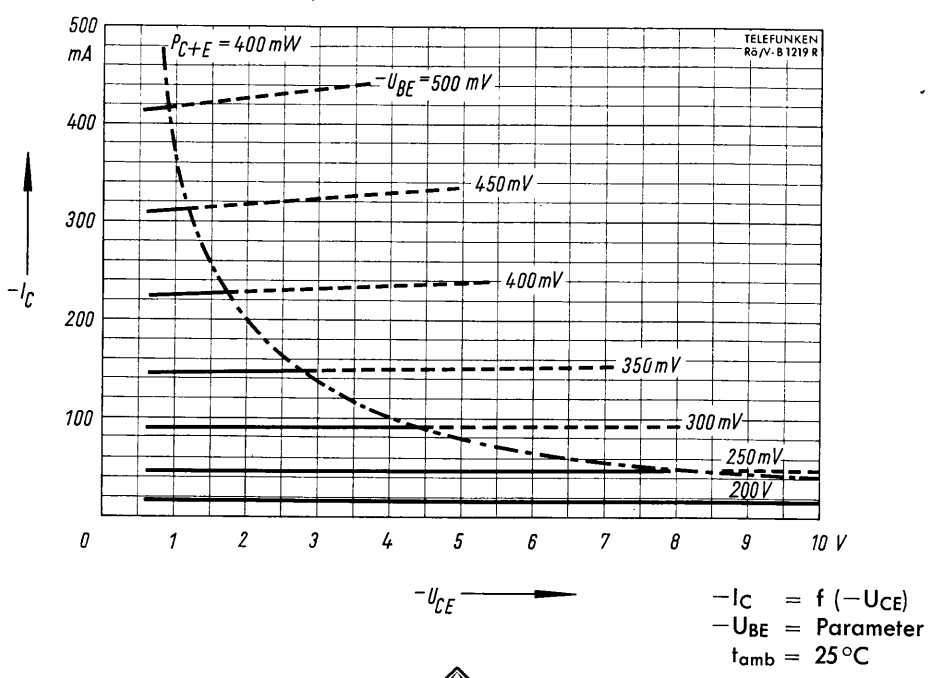
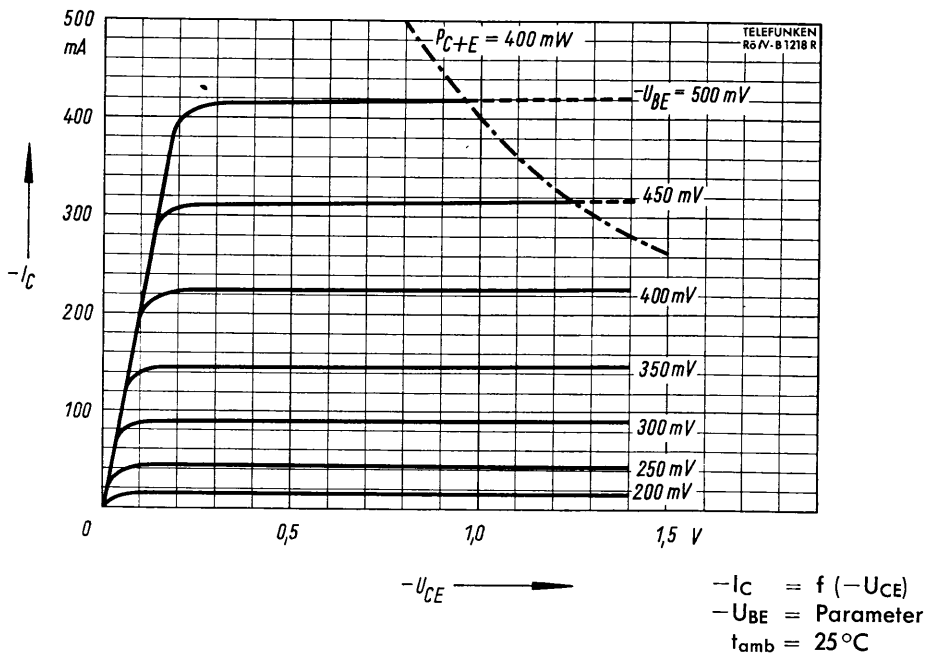
Grenzwerte, absolute Maxima

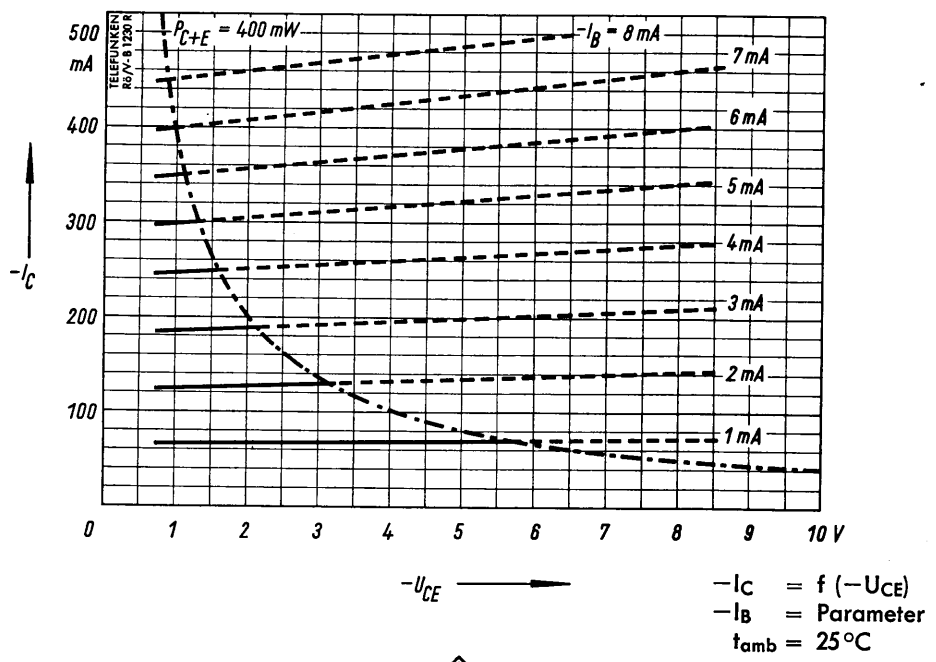
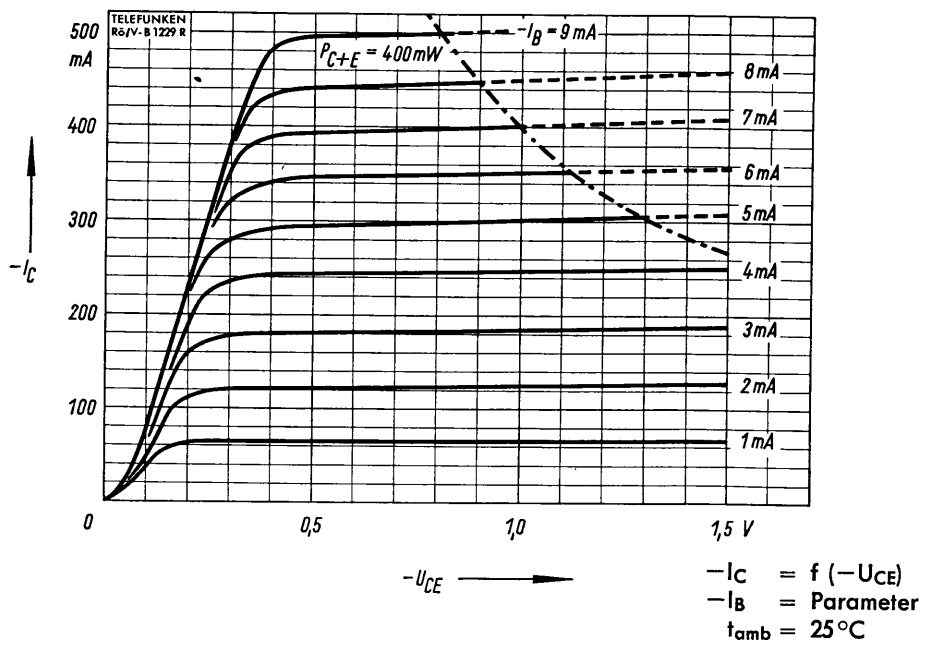
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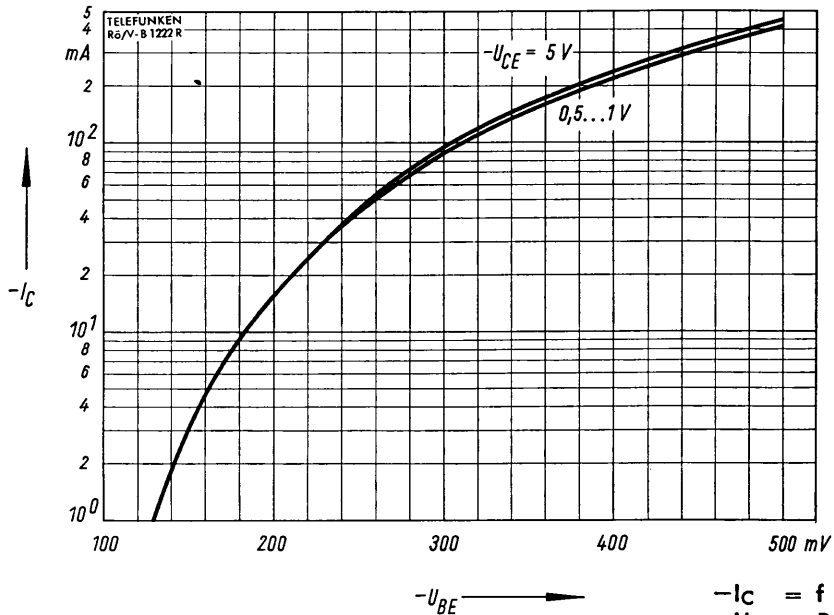
max. Abmessungen



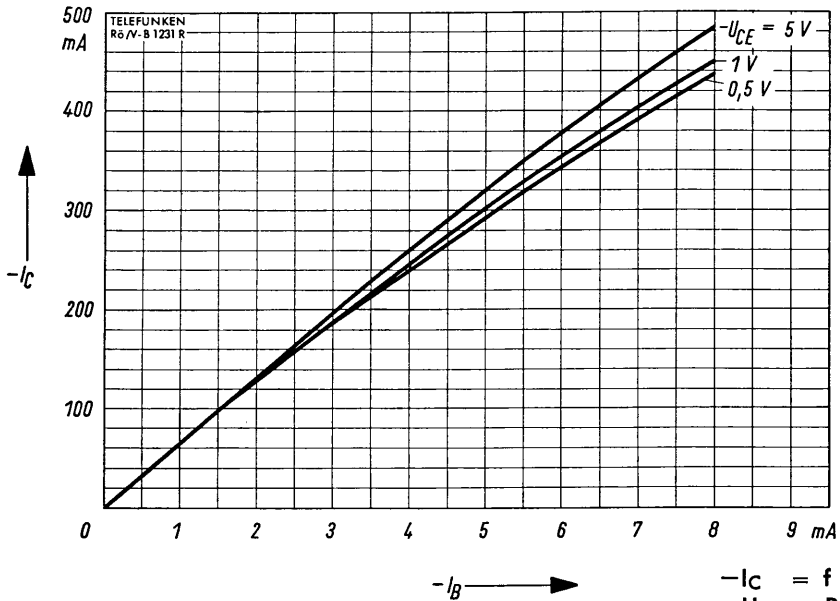
Gewicht: max. 2,5 g





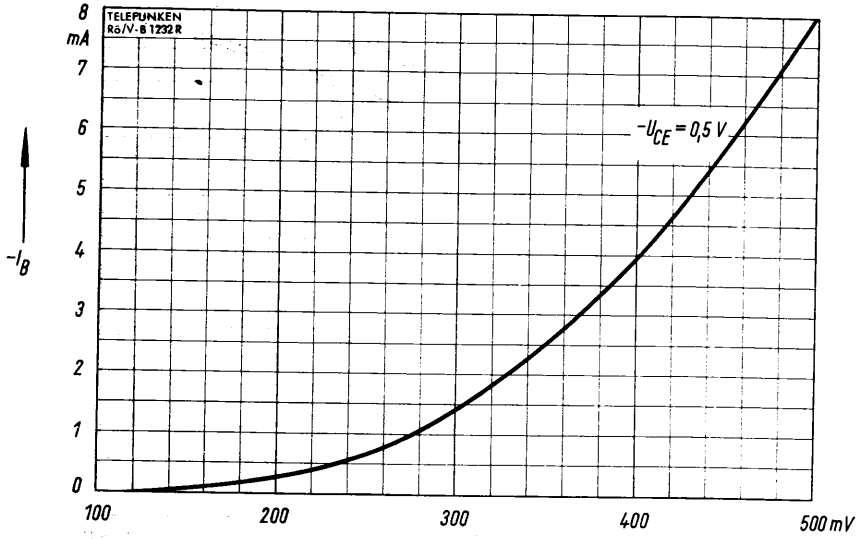


$-I_C = f(-U_{BE})$
 $-U_{CE} = \text{Parameter}$
 $t_{amb} = 25^\circ C$



$-I_C = f(-I_B)$
 $-U_{CE} = \text{Parameter}$
 $t_{amb} = 25^\circ C$

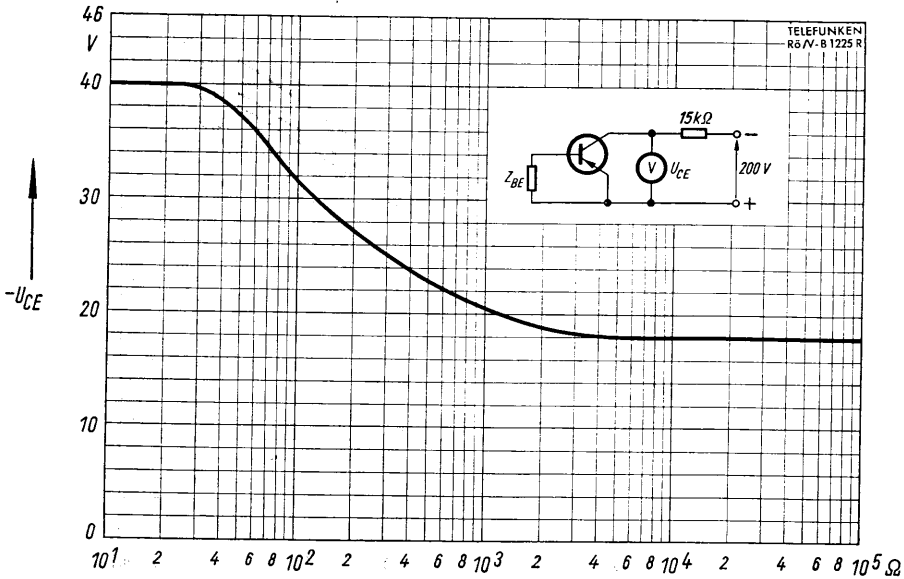




Graph showing the relationship between base current $-I_B$ and base-emitter voltage $-U_{BE}$ for a TELEFUNKEN R6/V-B 1232 R transistor. The y-axis is labeled $-I_B$ (mA) and the x-axis is labeled $-U_{BE}$ (mV). The curve shows an exponential relationship. A note indicates $-U_{CE} = 0,5 V$.

$-U_{BE}$ →

$-I_B = f(-U_{BE})$
 $-U_{CE} = \text{Parameter}$
 $t_{amb} = 25^\circ C$

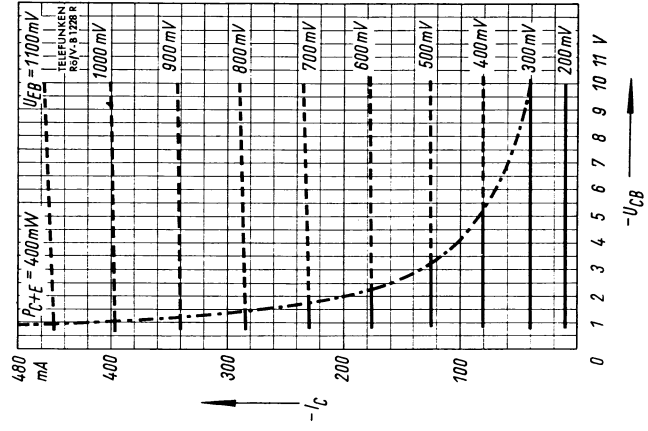


Graph showing the relationship between collector-emitter voltage $-U_{CE}$ and base-emitter impedance Z_{BE} for a TELEFUNKEN R6/V-B 1225 R transistor. The y-axis is labeled $-U_{CE}$ (V) and the x-axis is labeled Z_{BE} (Ω). The curve shows a decreasing relationship. A note indicates $t_{amb} = 25^\circ C$.

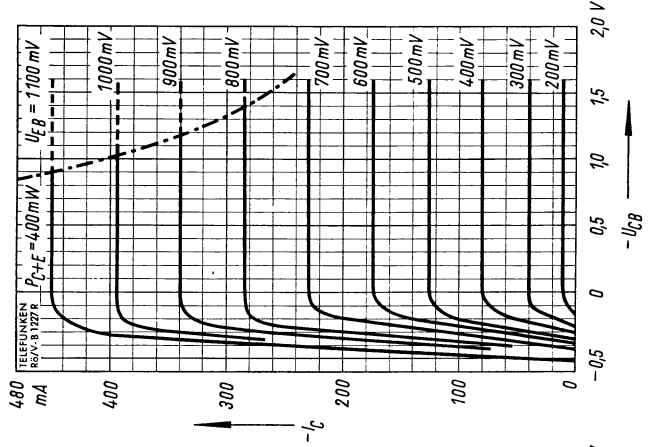
Z_{BE} →

$-U_{CE} = f(Z_{BE})$
 $t_{amb} = 25^\circ C$

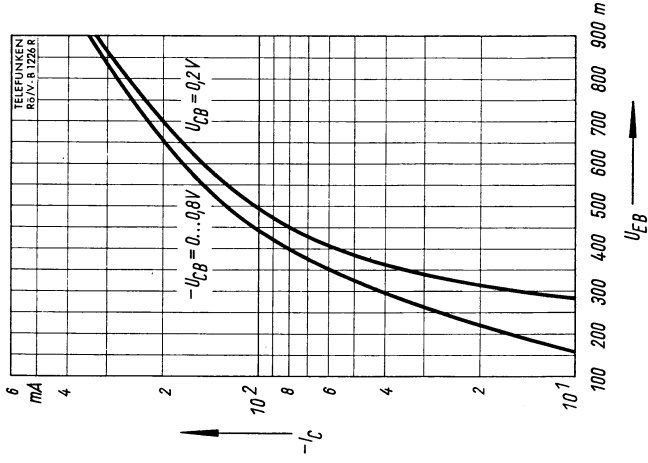




$-I_C = f(-U_{CB})$
 $U_{EB} = \text{Parameter}$
 $t_{amb} = 25^\circ\text{C}$



$-I_C = f(-U_{CB})$
 $U_{EB} = \text{Parameter}$
 $t_{amb} = 25^\circ\text{C}$



$-I_C = f(U_{EB})$
 $-U_{CB} = \text{Parameter}$
 $t_{amb} = 25^\circ\text{C}$

