

### Abmessungen: Plastikgehäuse

Masse ca. 0,1 g

Zulässige Höchstwerte gültig bis  $\theta_{j\max}$

$U_{CB0} = 20\text{ V}$       $I_B = 20\text{ mA}$

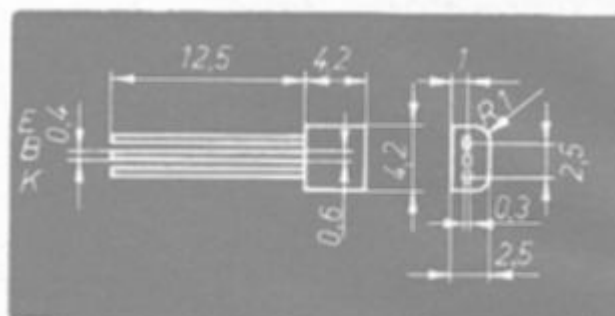
$U_{CE0} = 15\text{ V}$       $P_{\text{tot}} = 200\text{ mW}$

$U_{BE0} = 5\text{ V}$      bei  $\theta_a = 25\text{ }^\circ\text{C}$

$I_C = 100\text{ mA}$       $\theta_j = 125\text{ }^\circ\text{C}$

bei  $t_{\text{av}} = 20\text{ ms}$

$\hat{I}_C = 200\text{ mA}$



Wärmewiderstand  $R_{th} \leq 0,5 \frac{\text{grad}}{\text{mW}}$

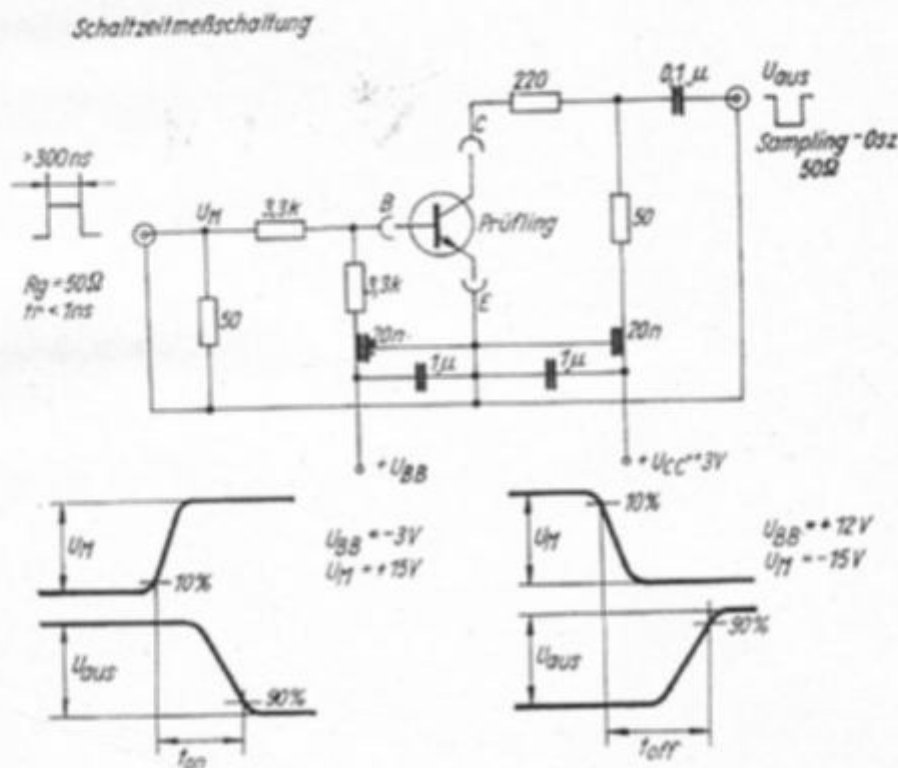
Kennwerte für  $\theta_a = 25\text{ }^\circ\text{C}$   $-5\text{ grad}$

	Min.	Typ	Max.	Meßbedingungen	Stromverstärkungsgruppen
<b>Restströme</b>					
$I_{CB0}$	7,5 nA	< 100 nA	300 nA	$U_{CB} = 20\text{ V}$	
<b>Durchbruchspannungen</b>					
$U_{(BR)CBO}$	20 V	60 V		$I_C = 10\text{ }\mu\text{A}$	
$U_{(BR)CEO}$	15 V	25 V		$I_C = 10\text{ mA}$	
$U_{(BR)EBO}$	5 V	6,5 V		$I_E = 10\text{ }\mu\text{A}$	
<b>Sättigungsspannung</b>					
$U_{CEsat}$		0,2 V	0,45 V	$I_C = 30\text{ mA}, I_B = 3\text{ mA}$	
$U_{BEsat}$		0,85 V		$I_C = 30\text{ mA}, I_B = 3\text{ mA}$	
<b>Gleichstromverstärkung</b>					
B	18		35	$I_C = 30\text{ mA}, U_{CE} = 0,5\text{ V}$	A
	28		71		B
	56		140		C
	112		280		D
	224		560		E
<b>Schaltzeiten</b>					
$t_{on}$		20 ns	35 ns	$I_C = 10\text{ mA}, I_{B1} = 3\text{ mA}$ $-I_{B2} = 1,5\text{ mA}, R_L = 270\text{ }\Omega$ (siehe Meßschaltung)	
$t_{off}$		35 ns	60 ns	$I_C = 10\text{ mA}, I_{B1} = 3\text{ mA}$ $-I_{B2} = 1,5\text{ mA}, R_L = 270\text{ }\Omega$ (siehe Meßschaltung)	

	Min.	Typ	Max.	Meßbedingungen
<b>Übergangsfrequenz</b>				
$f_T$		350 MHz		$U_C = 10 \text{ V}$ , $I_C = 5 \text{ mA}$ , $f = 100 \text{ MHz}$
<b>Ausgangskapazität</b>				
$C_{22b}$		2,6 pF		$U_{CB} = 10 \text{ V}$ , $I_{E_s} = 0$ , $f = 2 \text{ MHz}$

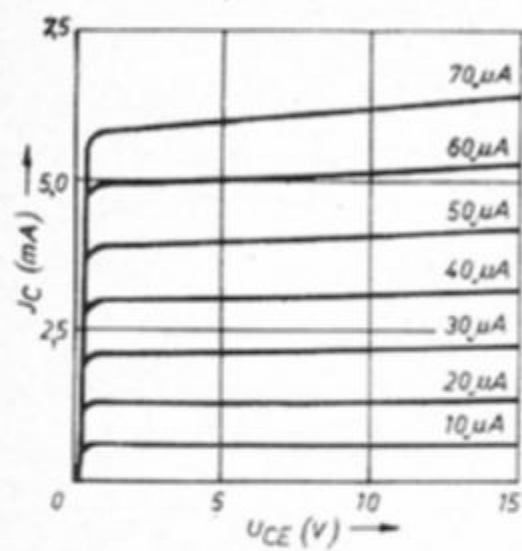
Bestellbeispiel für einen Transistor  
der Stromverstärkungsgruppe C

Transistor SS 218 C



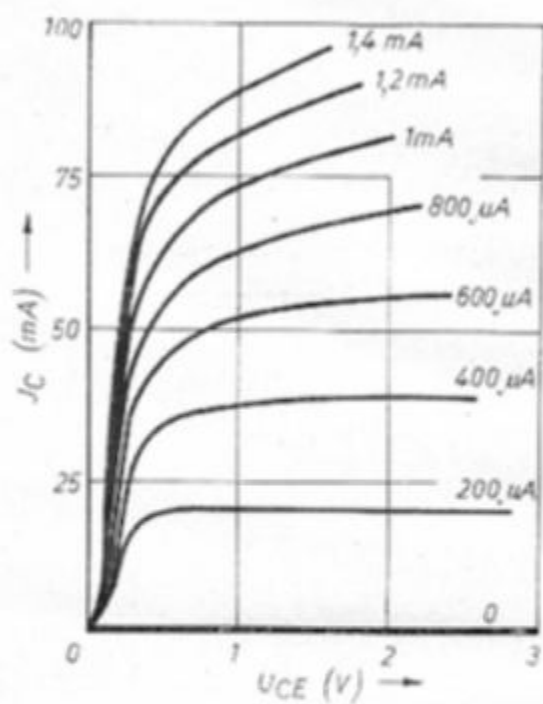
$$J_C = f(U_{CE})$$

$J_B = \text{Parameter}$



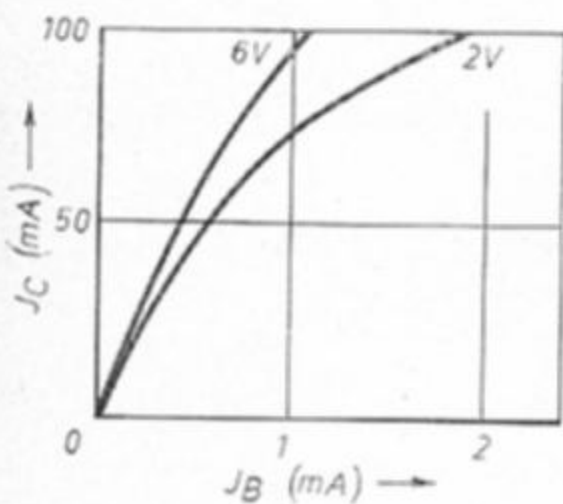
$$J_C = f(U_{CE})$$

$J_B = \text{Parameter}$



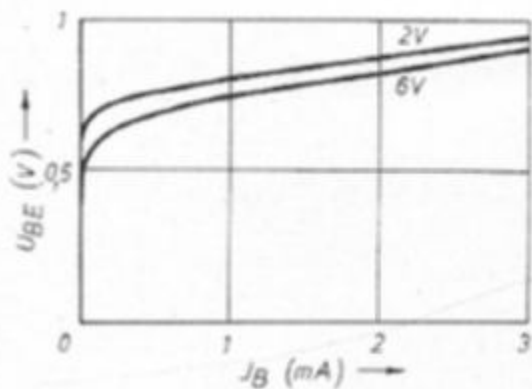
$$J_C = f(J_B)$$

$U_{CE} = \text{Parameter}$



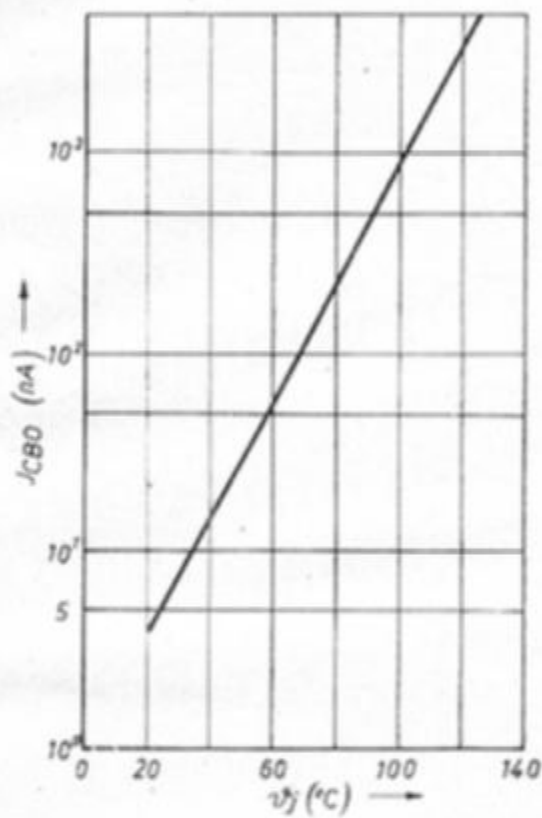
$$U_{BE} = f(J_B)$$

$U_{CE} = \text{Parameter}$



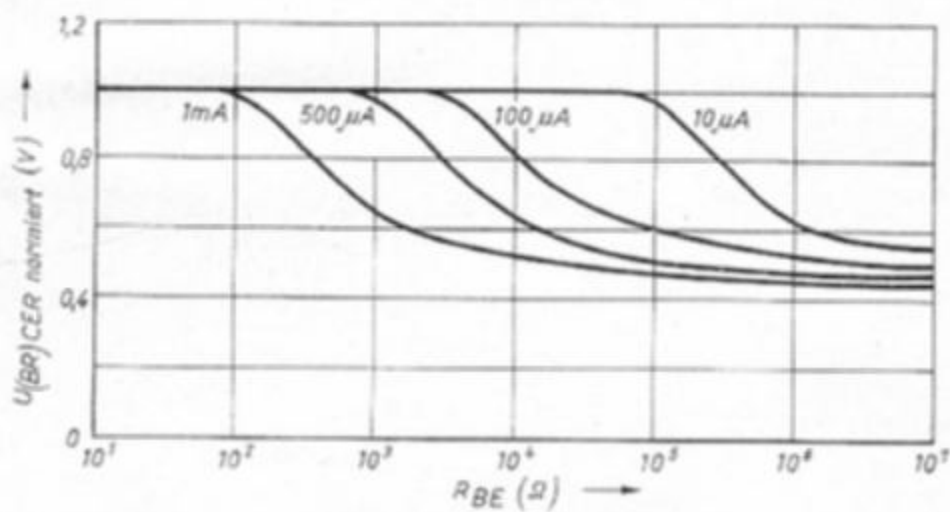
$$J_{CB0} = f(\vartheta_j)$$

$$U_{CB} = 20V$$

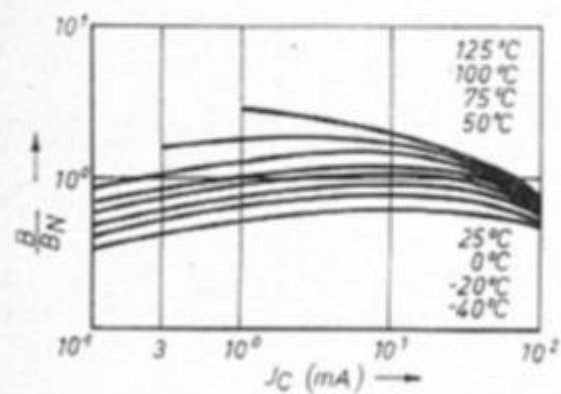


$$U_{(BR)CER} = f(R_{BE})$$

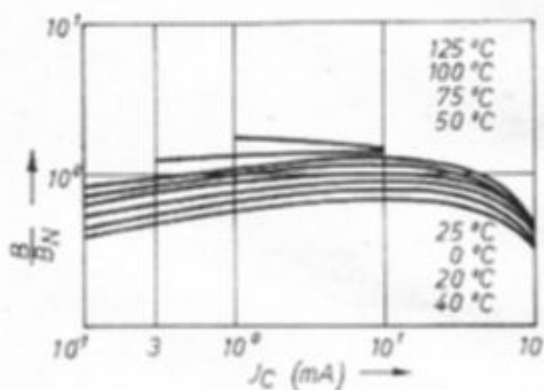
$$J_C = \text{Parameter}$$



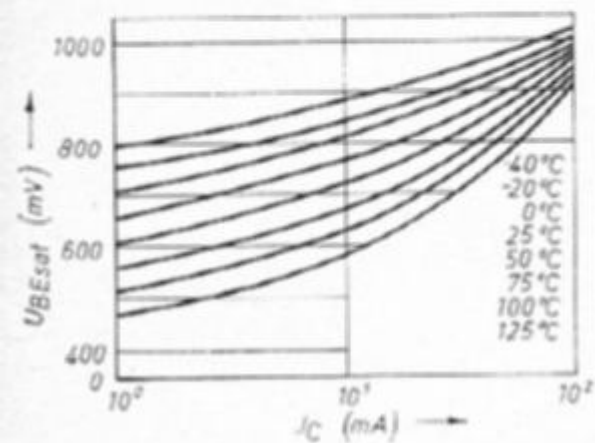
$B_N = f(J_C)$   
 $U_{CE} = 1V$   
 $\psi_G = \text{Parameter}$



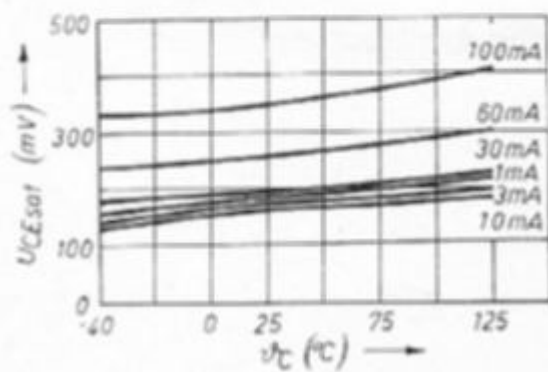
$B_N = f(J_C)$   
 $U_{CE} = 0.5V$   
 $\psi_G = \text{Parameter}$



$U_{BEsat} = f(J_C)$   
 $\frac{J_C}{J_B} = 10$   
 $\psi_G = \text{Parameter}$

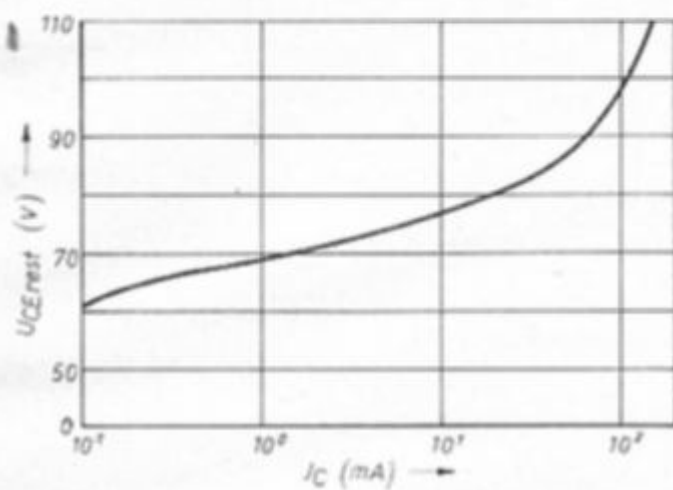


$U_{CEsat} = f(\psi_G)$   
 $\frac{J_C}{J_B} = 10$   
 $J_C = \text{Parameter}$



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

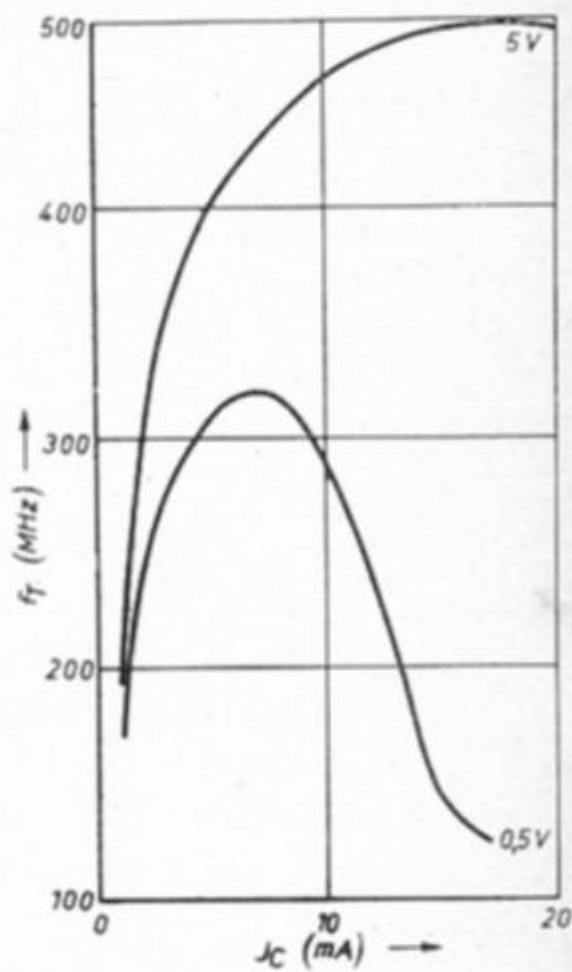
$$U_{CB} = 0$$



$$f_T = f(I_C)$$

$$U_{CE} = \text{Parameter}$$

$$f = 100 \text{ MHz}$$



$$C_{22b} = f(U_{CB})$$

$$f = 2 \text{ MHz}$$

