

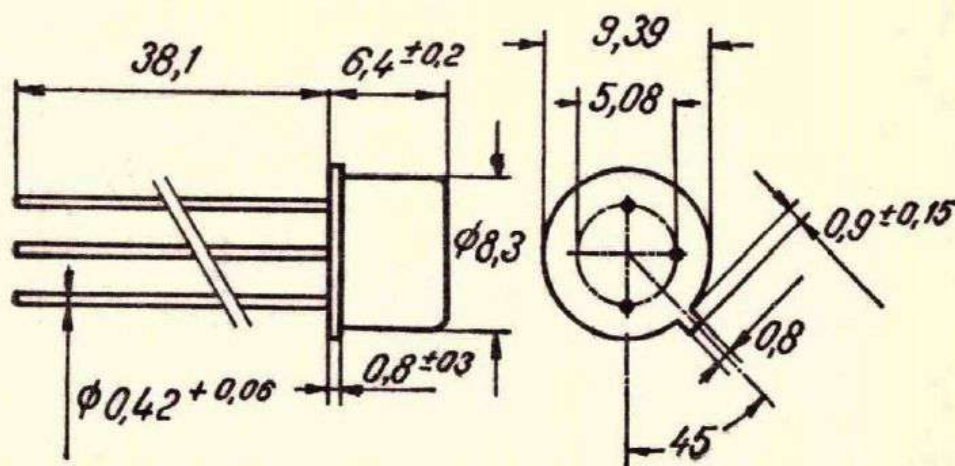
TRANZISTOR Si-PLANAR-npn
Si-PLANAR-npn TRANSISTOR

BF 179

Tranzistoarele BF 179 A, BF 179 B și BF 179 C sînt destinate utilizării în etajele de amplificare în video frecvență a receptoarelor TV în culori.
The transistors BF 179 A, BF 179 B and BF 179 C are intended for use in video amplifiers of colour television receivers.

CARACTERISTICI PRINCIPALE
QUICK REFERENCE DATA

	BF 179 A	BF 179 B	BF 179 C	
$V_{CBO \text{ max}}$	160	220	250	V
$V_{CEO \text{ max}}$		115		V
$I_C \text{ max}$		50		mA
$P_{tct \text{ max}}$	$T_A = 25^\circ\text{C}/T_C = 25^\circ\text{C}$		0,6/1,7	W
f_T	$I_C = 10 \text{ mA}; V_{CE} = 10 \text{ V};$ $f = 100 \text{ MHz}$		120	MHz
C_{12e}	$I_C = 10 \text{ mA}; V_{CE} = 10 \text{ V};$ $f = 1 \text{ MHz}$		1,8	pF



Capsulă metalică J.E.D.E.C. TO-5
Metal case

Dimensiuni
Greutate

(Dimensions)
(Weight)

în mm
1,5 g.

BF 179

VALORI LIMITĂ ABSOLUTE ABSOLUTE MAXIMUM RATINGS

$T_A = 25^\circ\text{C}$

Cu excepția altor specificații
Unless otherwise specified

	BF 179 A	BF 179 B	BF 179 C
Tensiunea colector-bază Collector-base voltage	V_{CBO} 160	220	250 V
Tensiunea emitor-bază Emitter-base voltage	V_{EBO} 5	5	5 V
Tensiunea colector-emitor Collector-emitter voltage	V_{CEO} 115	115	115 V
Curentul de colector Collector current	I_{CM} 50	50	50 mA
Puterea totală disipată Total power dissipation	P_{tot} 0,6 P_{tot} 1,7	0,6 1,7	0,6 W 1,7 W
Temperatura joncțiunii Junction temperature	T_j 200	200	200 $^\circ\text{C}$
Temperatura de stocare Storage temperature	T_{stg} $-55...+175$ $^\circ\text{C}$		
Rezistența termică joncțiune ambiant Junction-ambient thermal resistance	R_{thj-a} 240	240	240 $^\circ\text{C/W}$
Rezistența termică joncțiune- capsulă Junction-case thermal resistance	R_{thj-c} 45	45	45 $^\circ\text{C/W}$

CARACTERISTICI STATICE
STATIC CHARACTERISTICS

$T_A = 25^\circ\text{C}$

Cu excepția altor specificații
Unless otherwise specified

BF 179 A BF 179 B BF 179 C

Raportul static de transfer direct
de curent

D.C. forward current transfer ratio

h_{21E}

$I_C = 20 \text{ mA}$
 $V_{CE} = 15 \text{ V}$
 $I_C = 30 \text{ mA}$
 $V_{CE} = 20 \text{ V}$

20

20

Curentul rezidual de colector
Collector cutoff current

I_{CER}

$V_{CE} = V_{CER \text{ max}}$
 $T_j = 200^\circ\text{C}$
 $R_c = 10 \text{ k}\Omega$
 $R_c = 0 \Omega$

2

3

4

mA

1

1

1

mA

Tensiunea bază-emitor
Base-emitter voltage

V_{BE}

$I_C = 20 \text{ mA}$
 $V_{CE} = 15 \text{ V}$

0,75(<1,2)

0,75(<1,2)

0,75(<1,2)

V

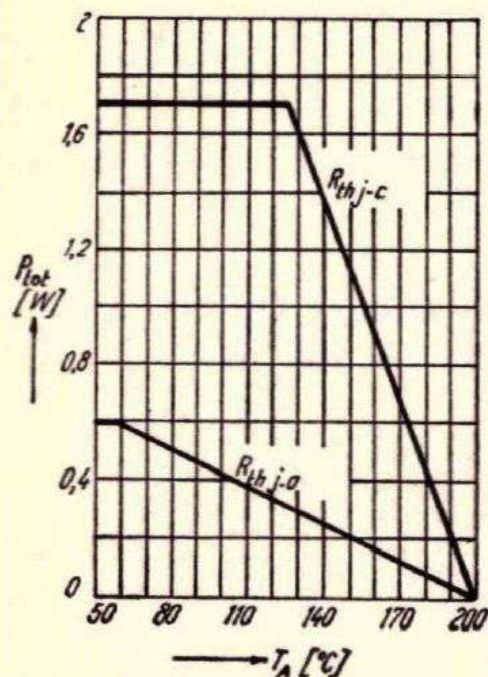
BF 179

CARACTERISTICI DINAMICE DYNAMIC CHARACTERISTICS

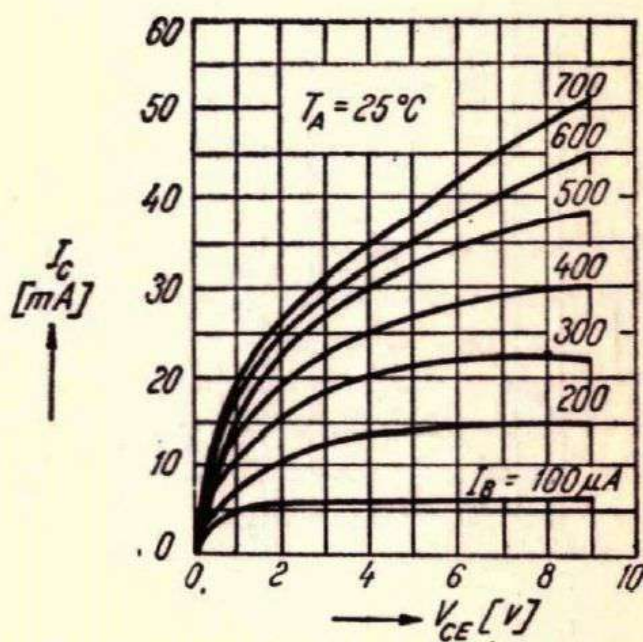
 $T_A = 25^\circ\text{C}$

Cu excepția altor specificații
Unless otherwise specified

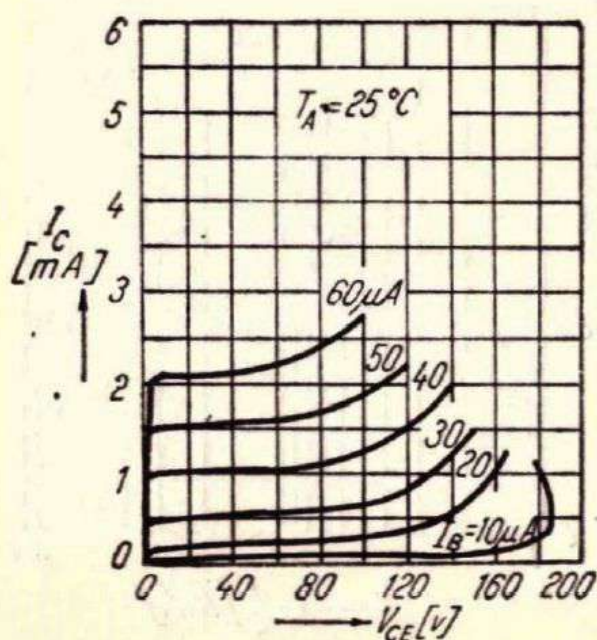
Frecvența de tranziție Transition frequency	$I_C = 20\text{ mA}$ $V_{CE} = 10\text{ V}$ $f = 100\text{ MHz}$	f_T	120	MHz
Capacitatea de transfer invers Feedback capacitance	$I_C = 10\text{ mA}$ $V_{CE} = 20\text{ V}$ $f = \text{MHz}$	$-C_{12e}$	1,8(<3,5)	pF
Constanta de timp colector-bază Collector-base time constant	$I_C = 10\text{ mA}$ $V_{CE} = 10\text{ V}$ $f = 25\text{ MHz}$	$r_{bb'} C_{b'c}$	100	ps
Tensiunea colector-emitor în înalță frecvență High frequency collector-emitter voltage	$I_C = 20\text{ mA}$ $T_j = 150^\circ\text{C}$	$V_{CE\text{ sat HF}}$	15	V



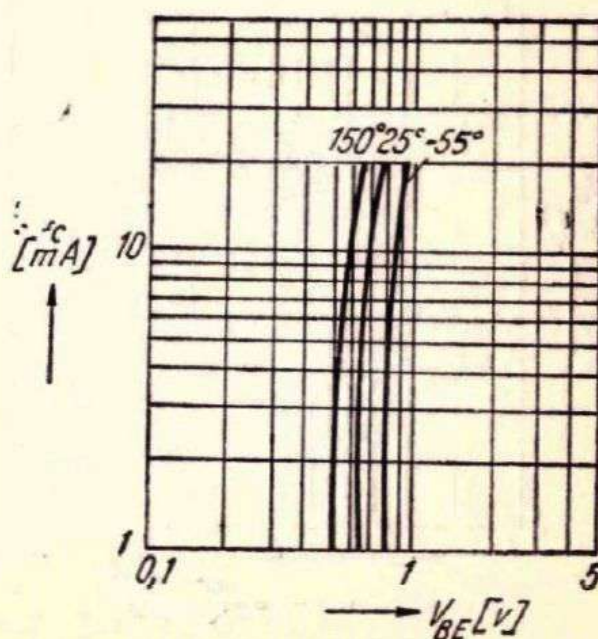
Puterea totală disipată
Total power dissipation



Caracteristici de ieșire
Output characteristics

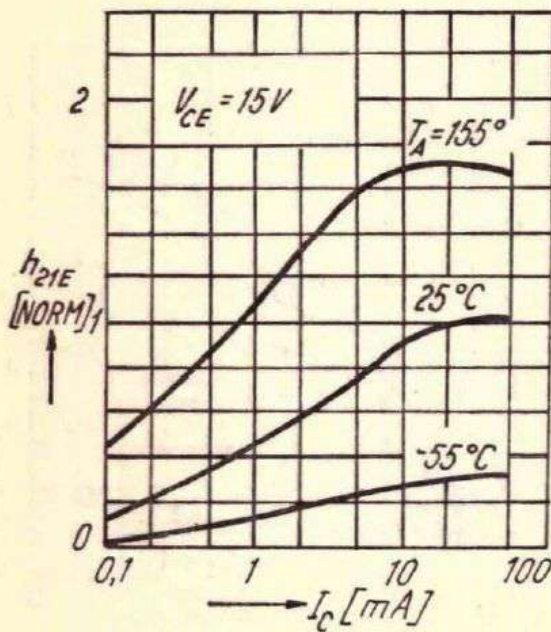


Caracteristici de ieșire
Output characteristics

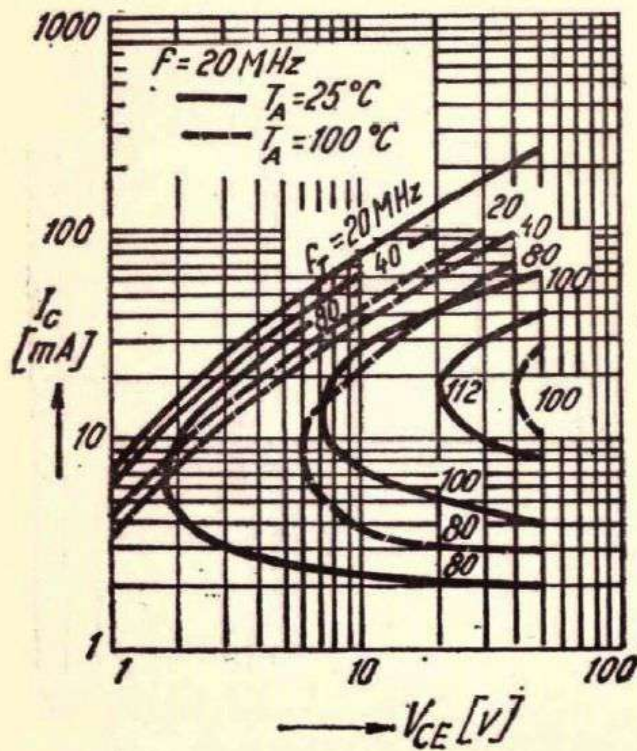


Transconductanța
Transconductance

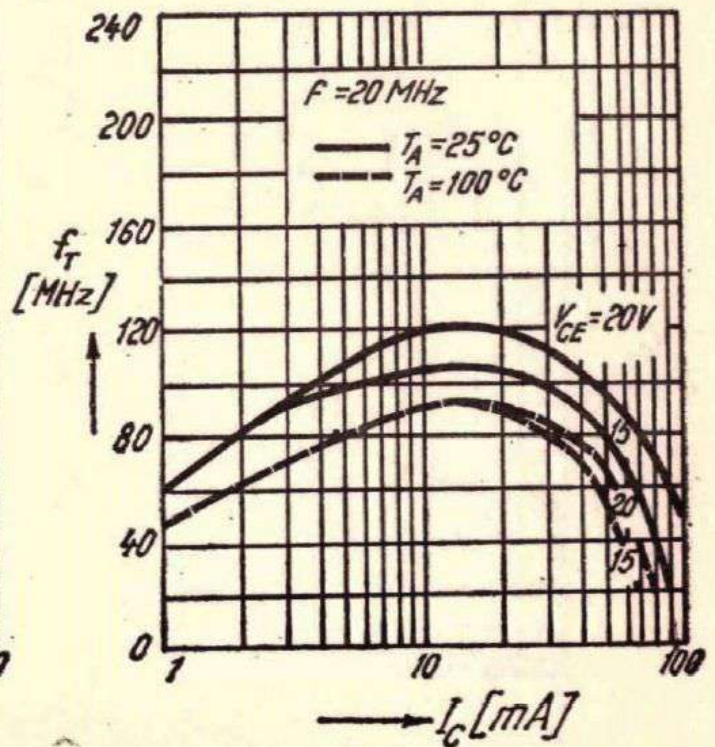
BF 179



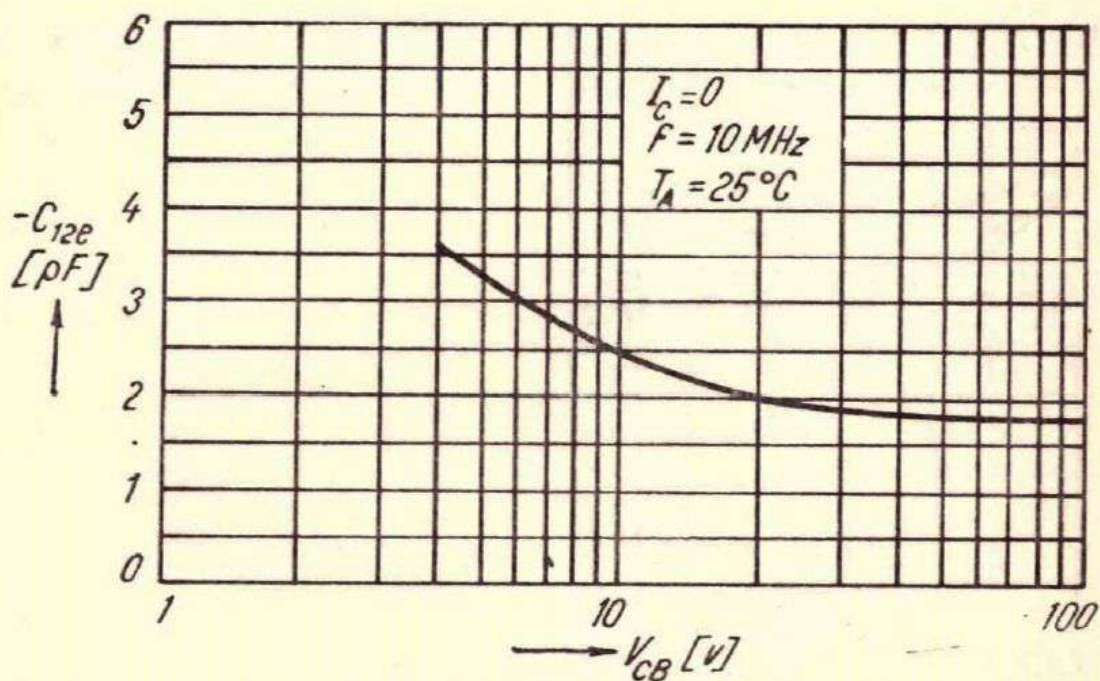
Raportul static de transfer direct de curent
D.C. forward transfer current ratio



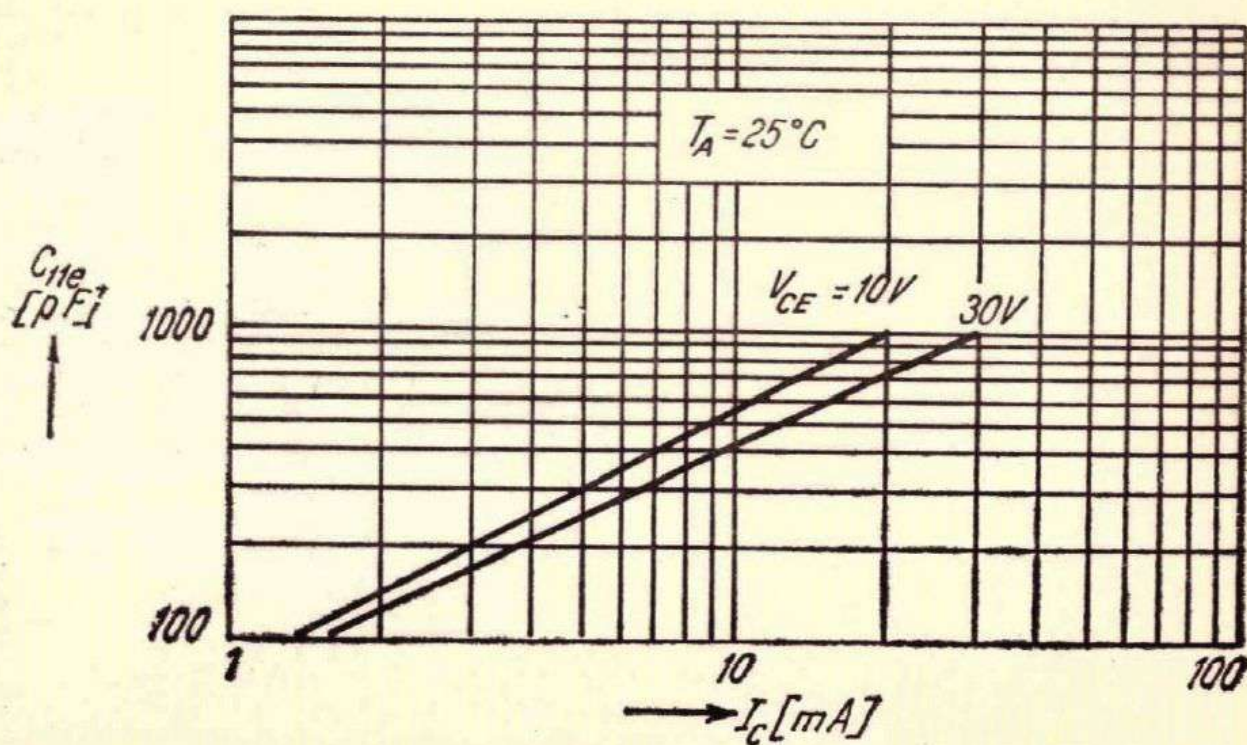
Curbe_izo-ft
Iso-ft curves



Frecvența de tranziție
Transition frequency

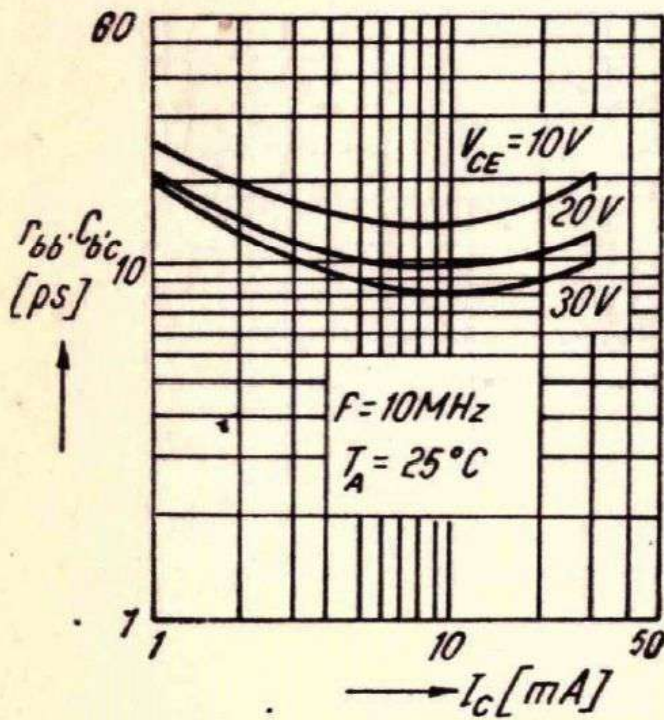


Capacitatea de transfer invers
Feedback capacitance

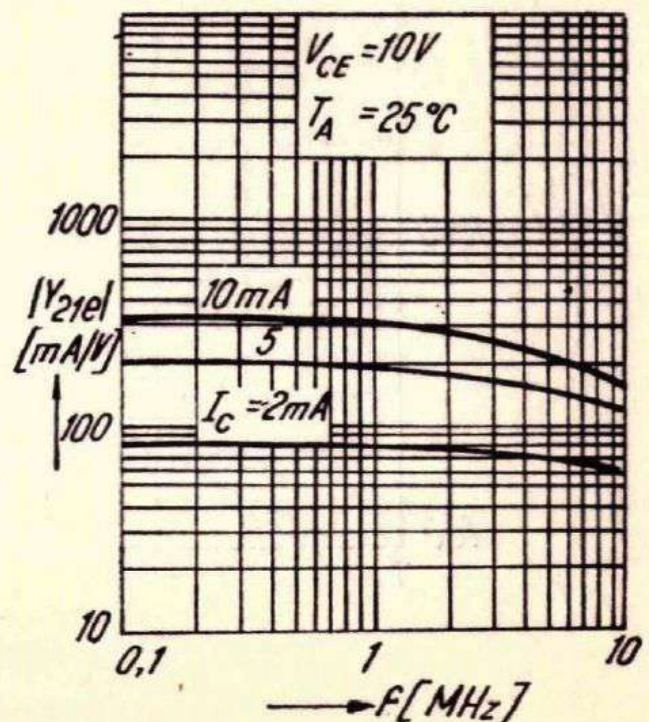


Capacitatea de intrare
Input capacitance

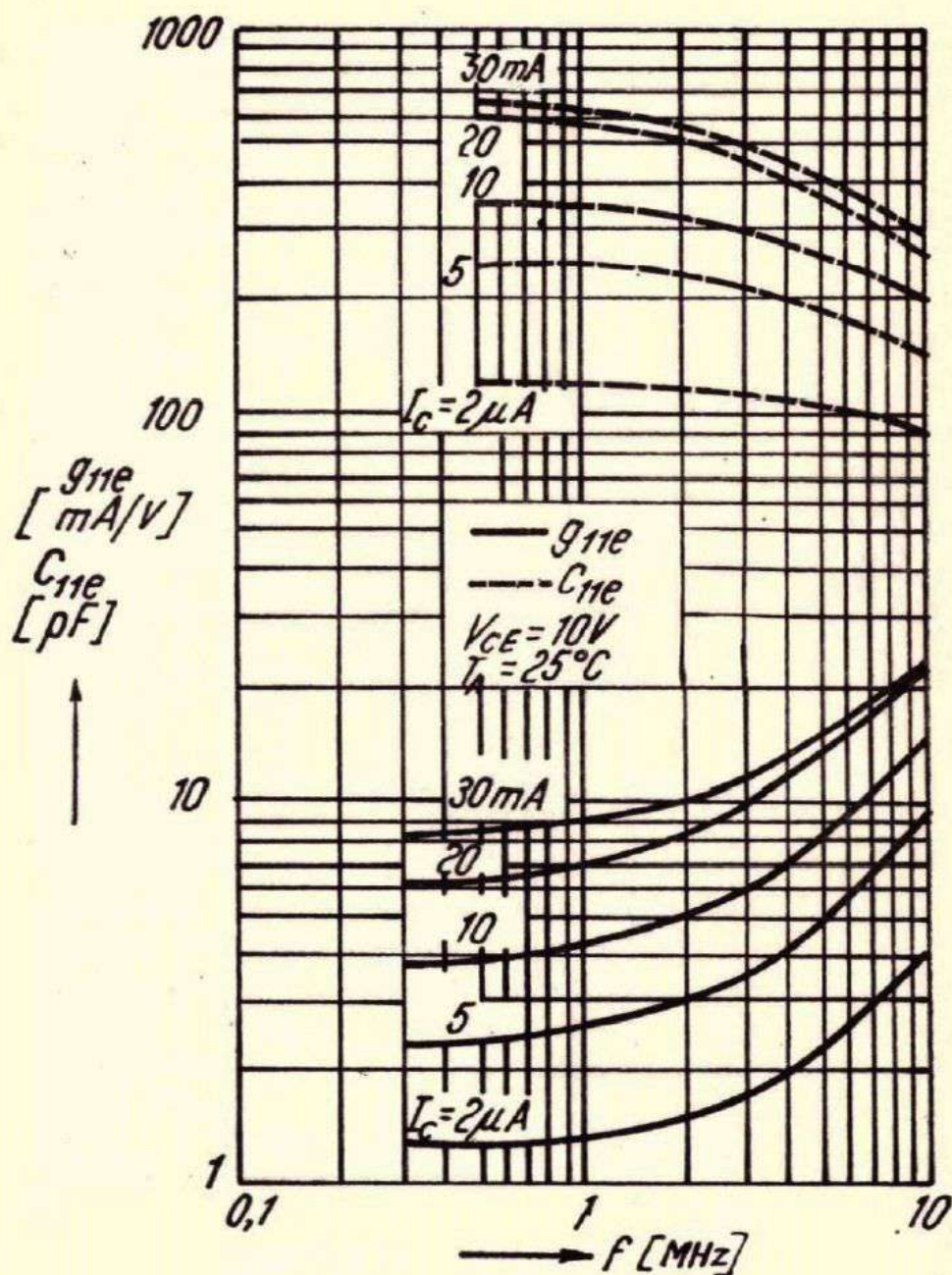
BF 179



Constanta de timp colector-bază
Collector-base time constant

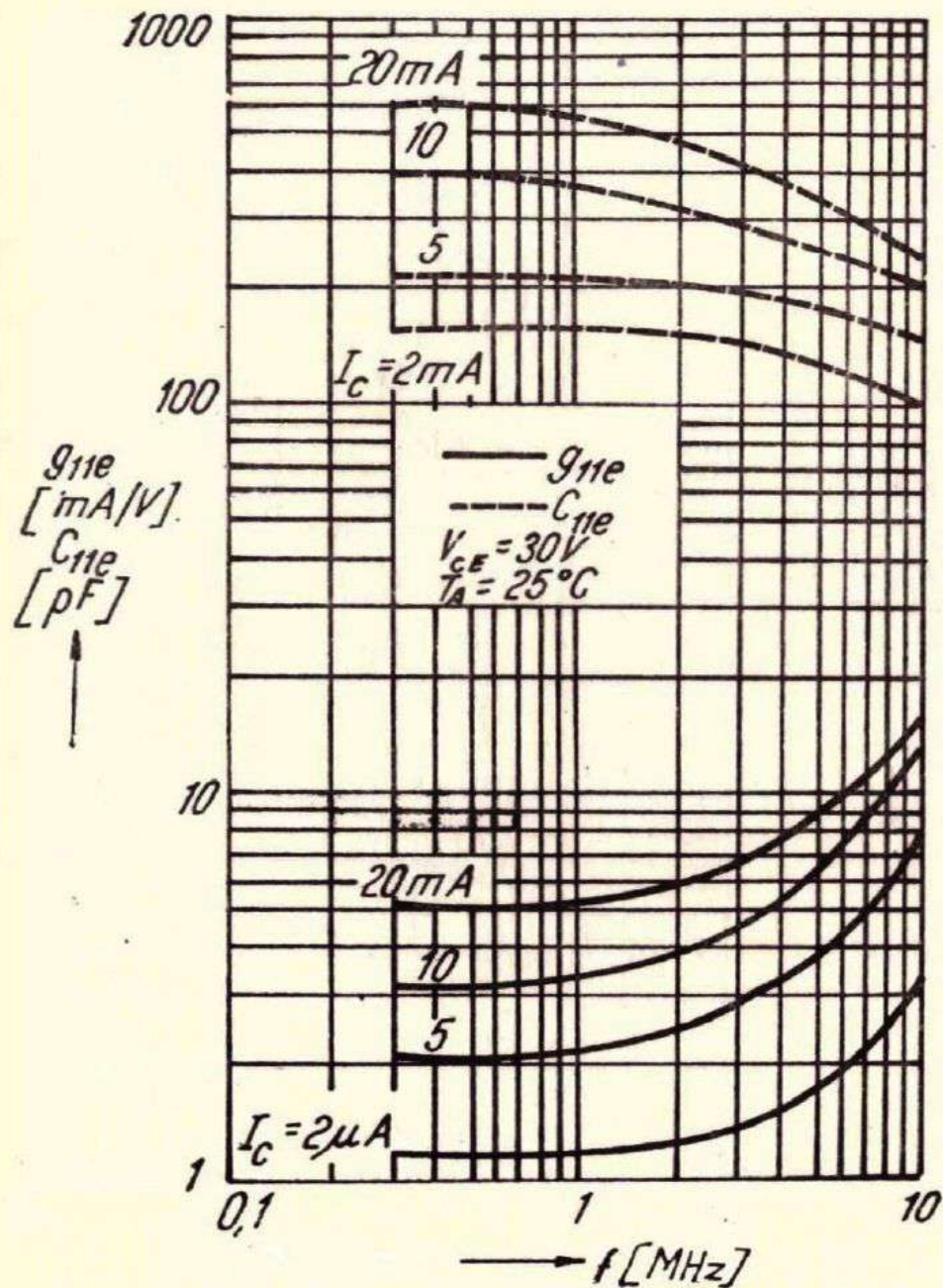


Admitanța de transfer direct
Forward transfer admittance

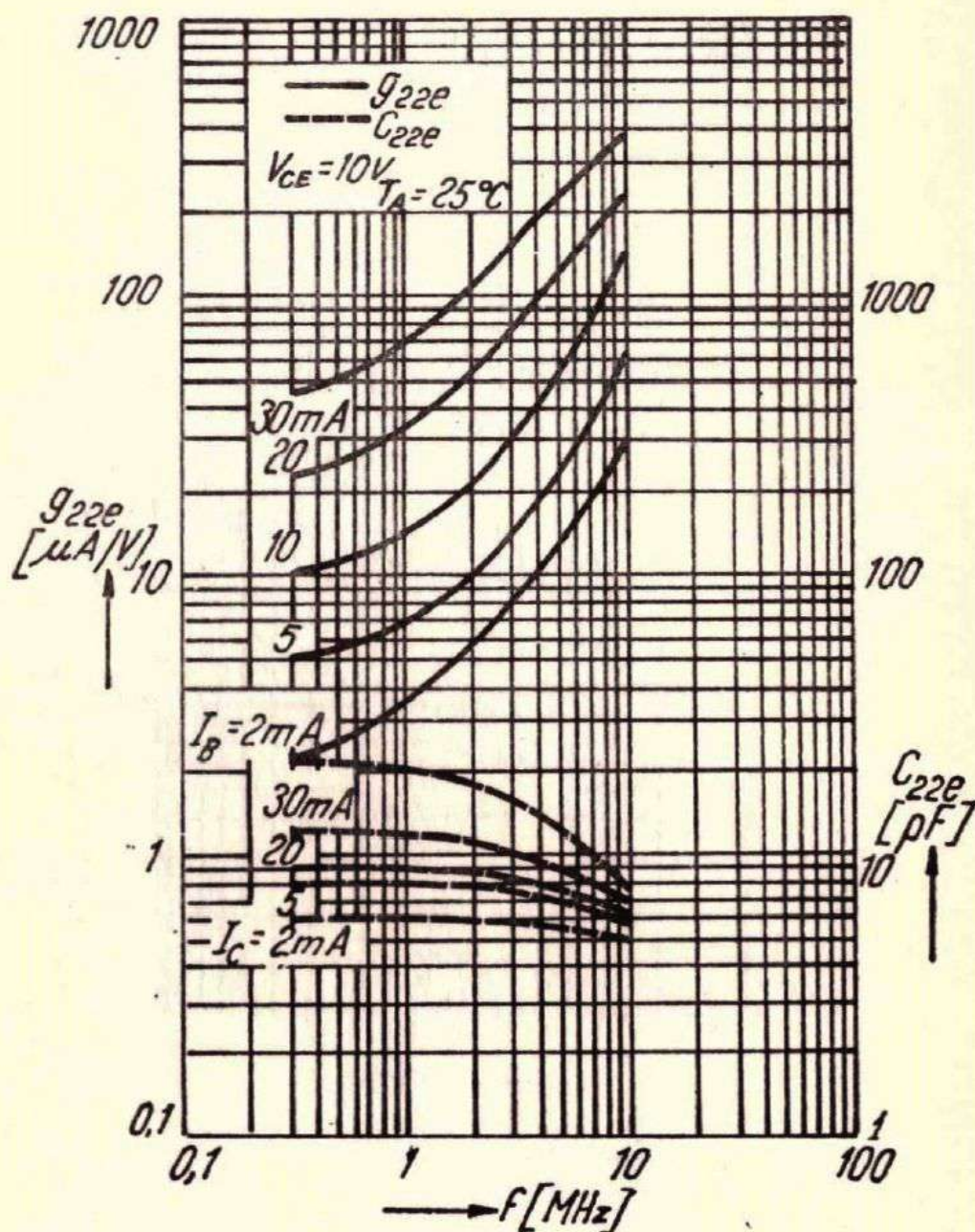


Admitanța de intrare
Input admittance

BF 179

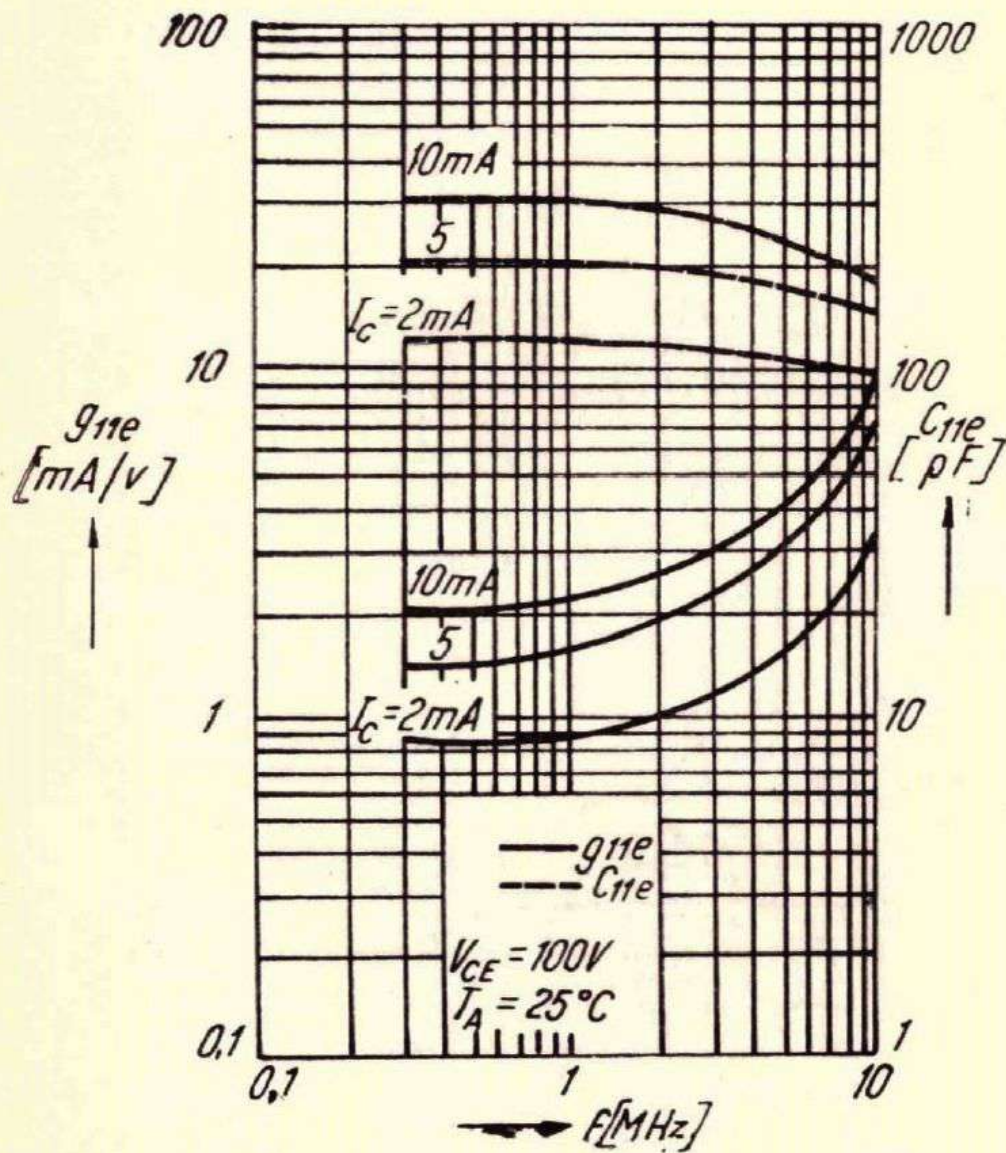


Admitanța de intrare
Input admittance

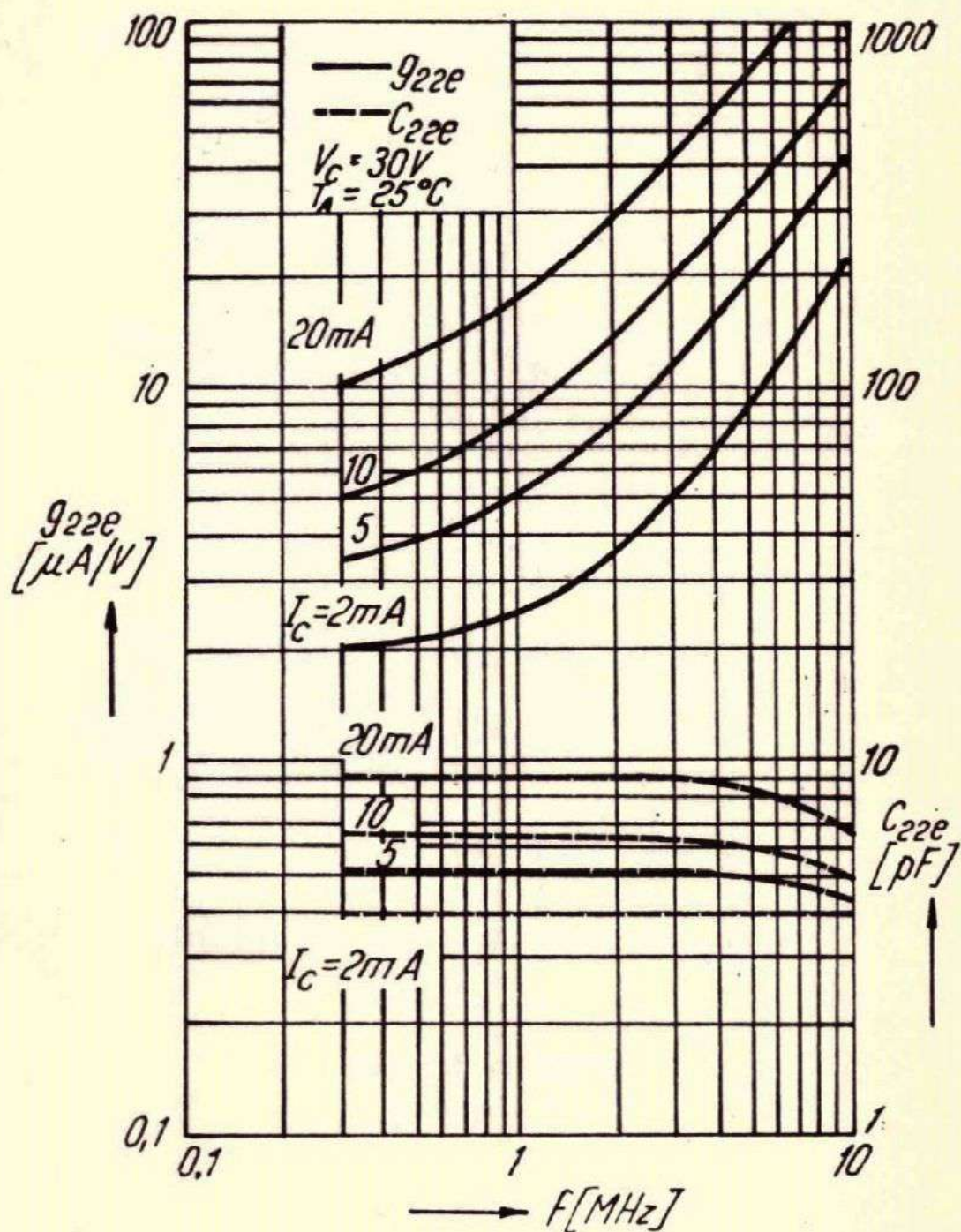


Admitanța de ieșire
Output admittance

BF 179

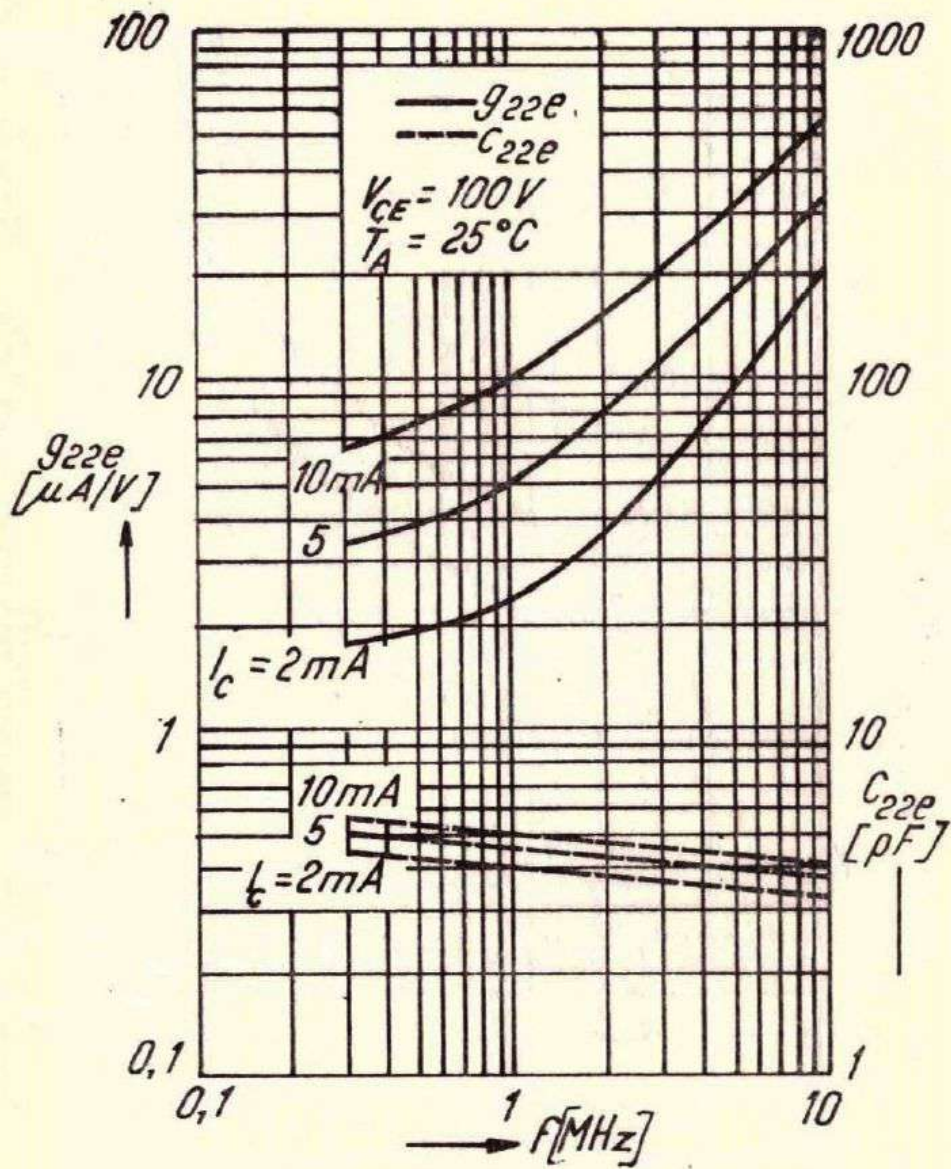


Admitanța de intrare
Input admittance



Admitanța de ieșire
Output admittance

BF 179



Admitanța de ieșire
Output admittance