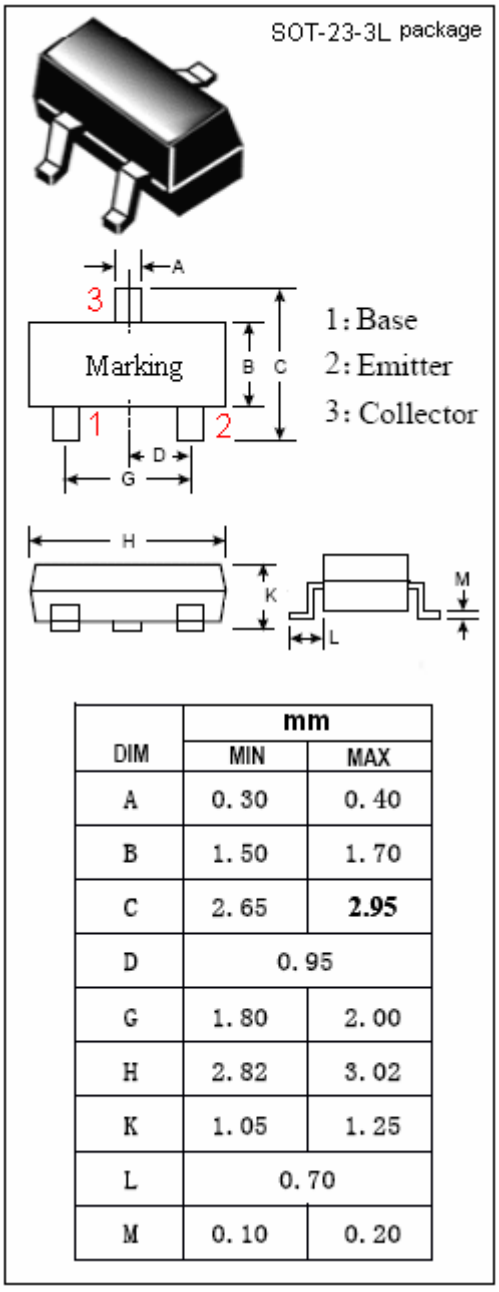
isc Silicon NPN RF Transistor 2SC3122

DESCRIPTION

- High Gain-
  : G_{pe}= 24dB TYP. @ f= 200MHz
- Low Noise-
  : NF= 2.0dB TYP. @ f= 200MHz

APPLICATIONS

- Designed for TV VHF RF amplifier applications.



DIM	mm MIN	MAX
A	0.30	0.40
B	1.50	1.70
C	2.65	2.95
D	0.95	
G	1.80	2.00
H	2.82	3.02
K	1.05	1.25
L	0.70	
M	0.10	0.20

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	30	V
V_{CEO}	Collector-Emitter Voltage	30	V
V_{EBO}	Emitter-Base Voltage	3	V
I_C	Collector Current-Continuous	20	mA
I_B	Base Current-Continuous	10	mA
P_C	Collector Power Dissipation @T_C=25℃	0.15	W
T_J	Junction Temperature	125	℃
T_{stg}	Storage Temperature Range	-55~125	℃

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= 1mA ; I_B= 0	30			V
I_{CBO}	Collector Cutoff Current	V_{CB}= 25V; I_E= 0			0.1	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 2V; I_C= 0			0.1	μA
h_{FE}	DC Current Gain	I_C= 2mA ; V_{CE}= 10V	60		300	
C_{re}	Feed-Back Capacitance	I_E= 0 ; V_{CB}= 10V; f= 1.0MHz		0.3	0.45	pF
f_T	Current-Gain—Bandwidth Product	I_C= 2mA ; V_{CE}= 10V	400	650		MHz
G_{pe}	Power Gain	V_{CE}= 12V; V_{AGC}= 1.4V;f= 200MHz	20	24	28	dB
NF	Noise Figure			2.0	3.2	dB

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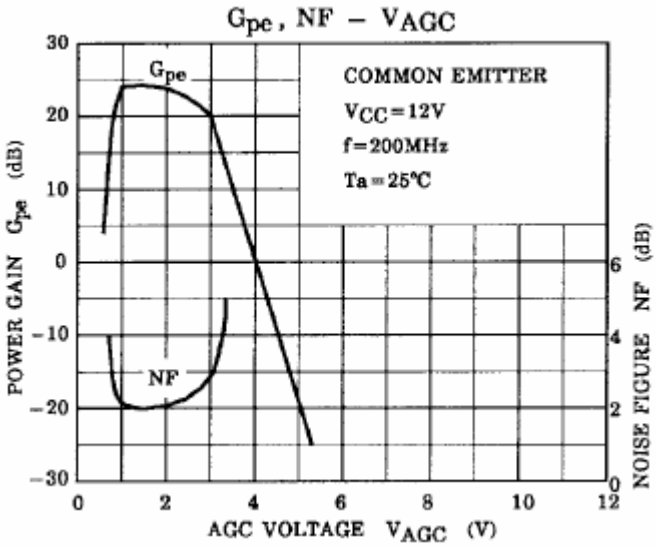

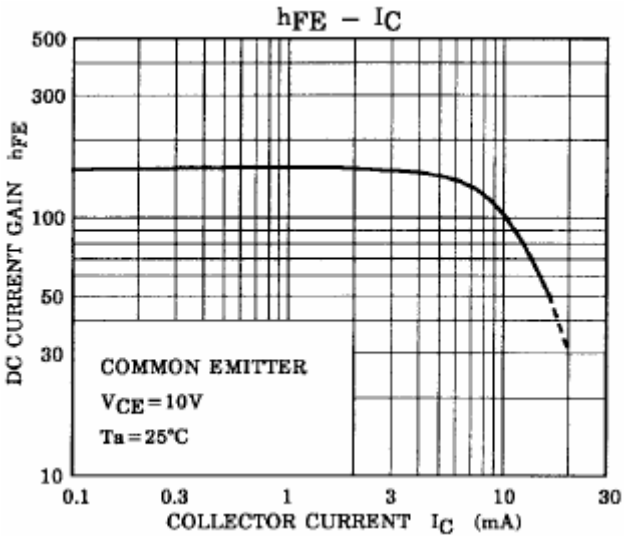

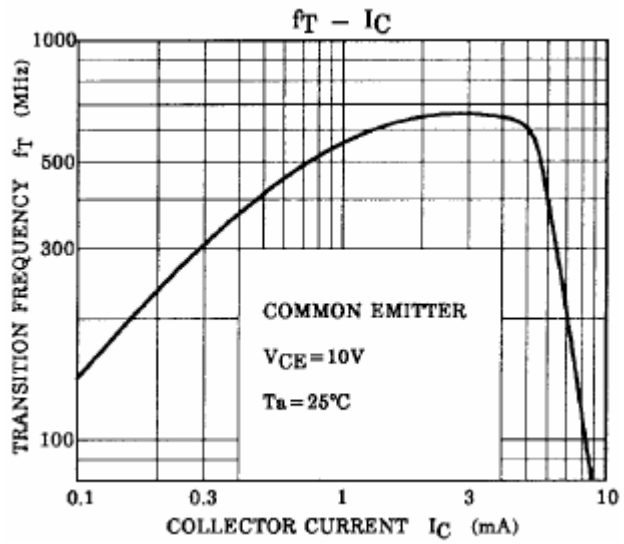

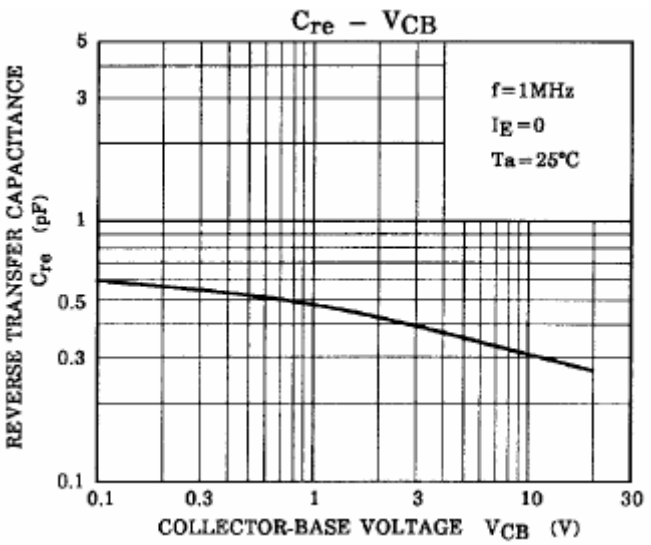

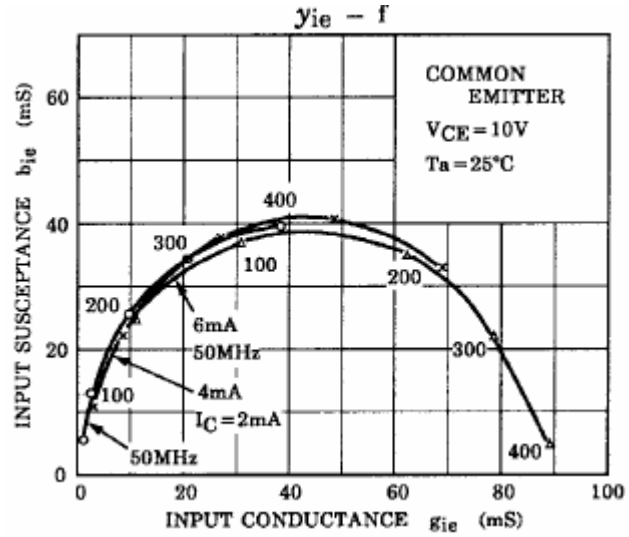

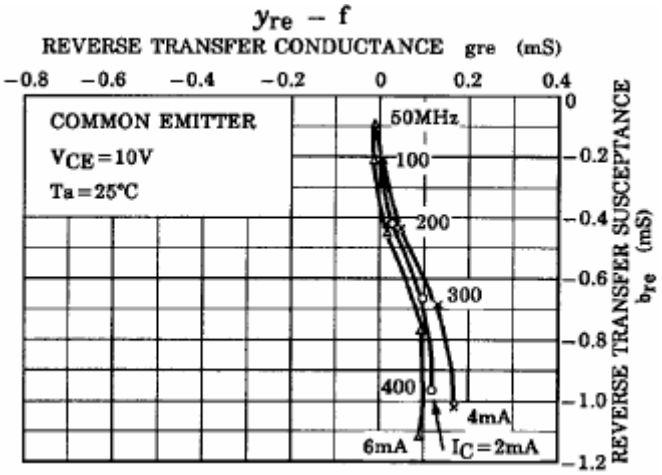

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