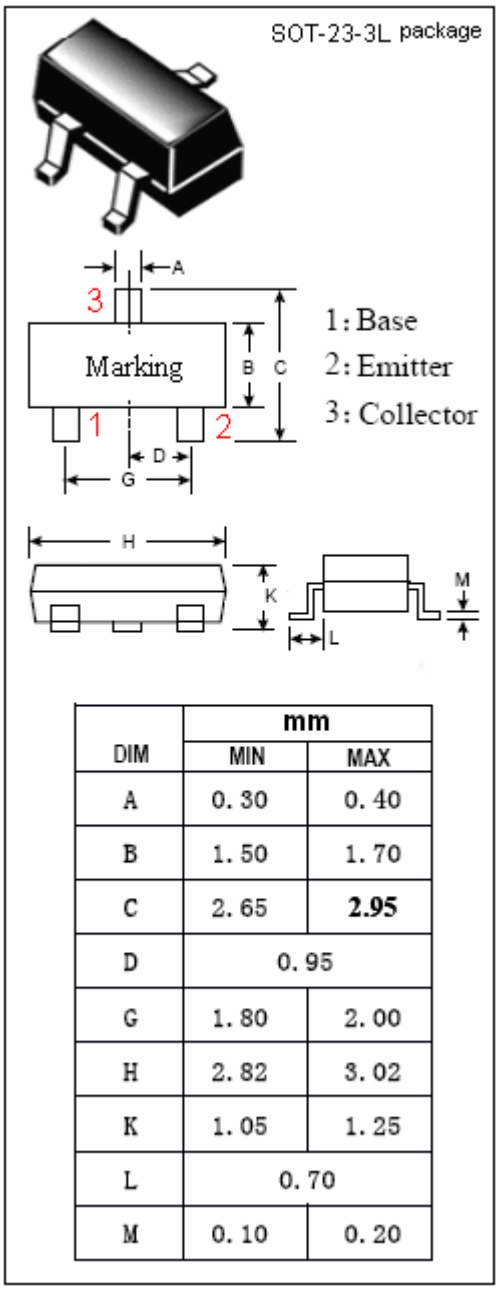
isc Silicon NPN RF Transistor 2SC4251

DESCRIPTION

- High f_T-
  f_T = 1100 MHz TYP.
- Low Output Capacitance-
  C_{OB} = 0.9 pF TYP.

APPLICATIONS

- Designed for TV tuner ,VHF oscillator applications.



DIM	mm MIN	mm 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	15	V
V_{EBO}	Emitter-Base Voltage	3	V
I_C	Collector Current-Continuous	50	mA
I_B	Base Current-Continuous	25	mA
P_C	Collector Power Dissipation @T_C=25℃	0.1	W
T_J	Junction Temperature	125	℃
T_{stg}	Storage Temperature Range	-55~125	℃

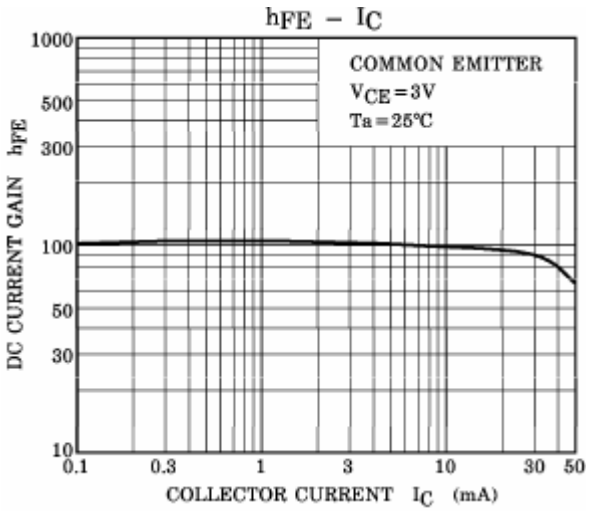
isc Silicon NPN RF Transistor 2SC4251

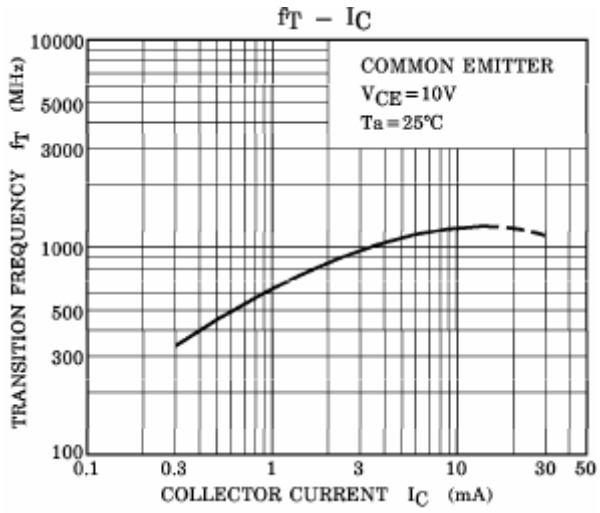
ELECTRICAL CHARACTERISTICS

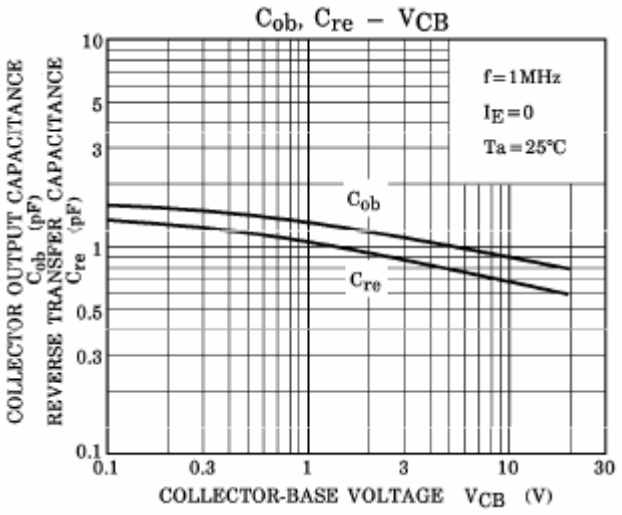
T_C=25℃ unless otherwise specified

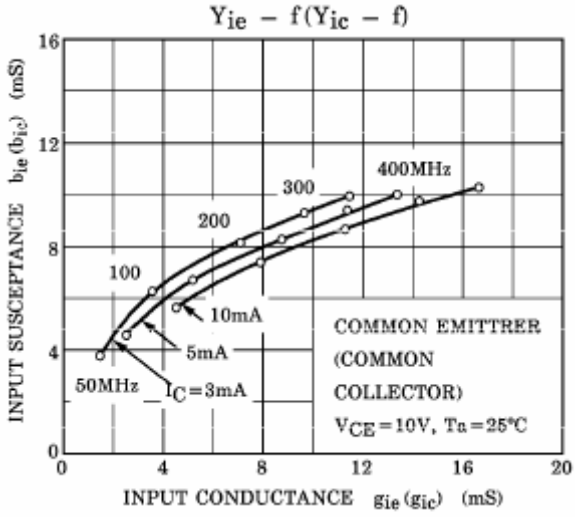
SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
I_{CBO}	Collector Cutoff Current	V_{CB}= 15V; I_E= 0			0.1	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 3V; I_C= 0			1.0	μA
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= 1mA ; I_B= 0	15			V
h_{FE}	DC Current Gain	I_C= 8mA ; V_{CE}= 3V	40		200	
f_T	Current-Gain—Bandwidth Product	I_C= 8mA;V_{CE}= 10V	650	1100		MHz
C_{OB}	Output Capacitance	I_E= 0 ; V_{CB}= 10V; f= 1MHz		0.9	1.3	pF
$r_{bb'} \cdot C_C$	Base Time Constant	I_C= 8mA ; V_{CB}= 10V;f= 30MHz		7	12	ps

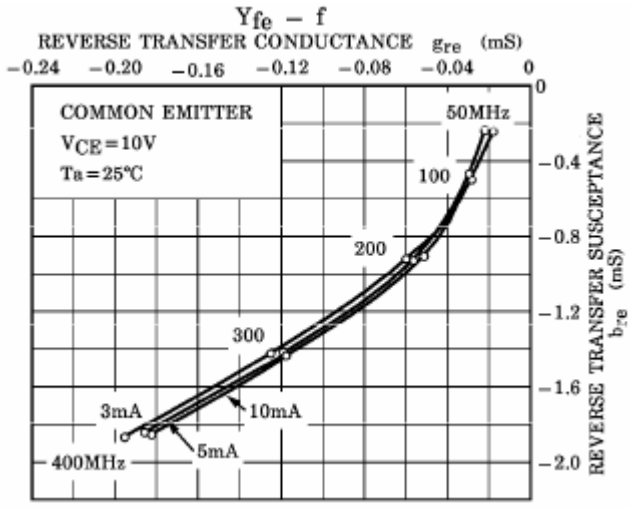
isc Silicon NPN RF Transistor 2SC4251

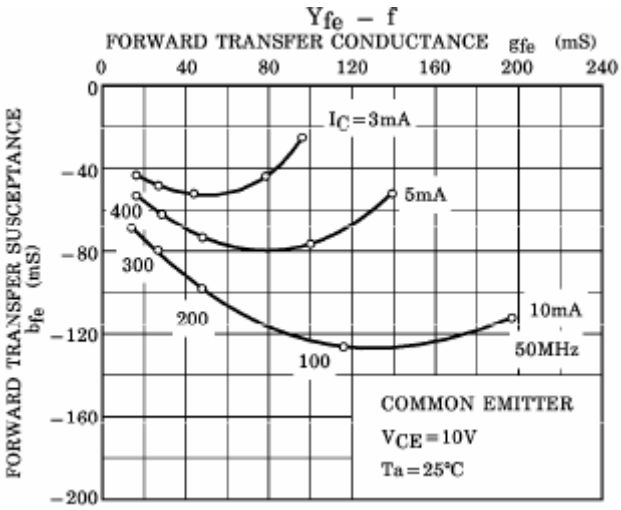












isc Silicon NPN RF Transistor 2SC4251