

isc Silicon NPN RF Transistor

2SC3125

DESCRIPTION

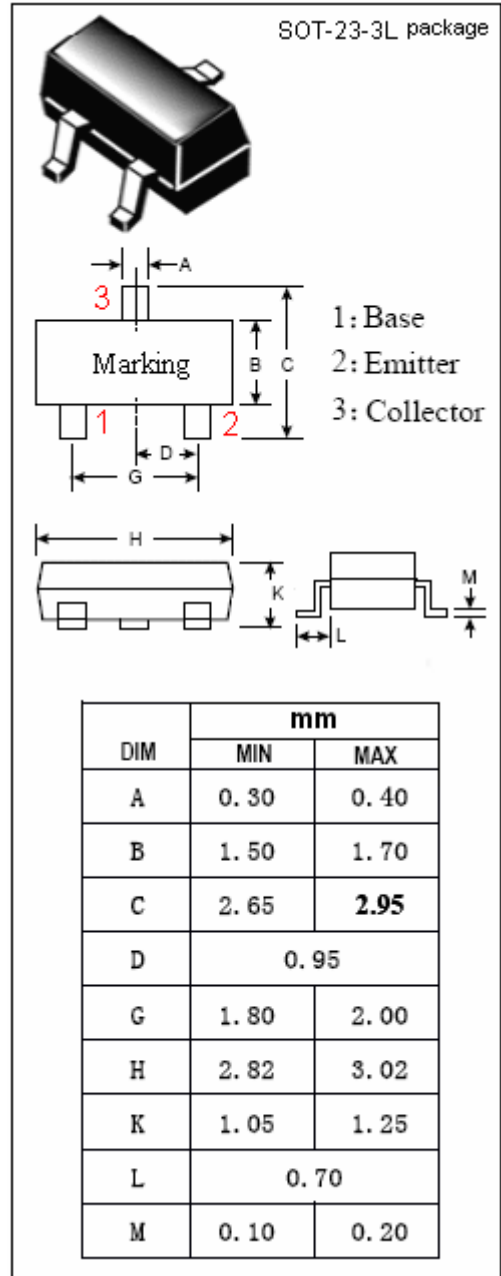
- Good Linearity of  $f_T$

APPLICATIONS

- Designed for TV Final Picture IF amplifier applications.

ABSOLUTE MAXIMUM RATINGS( $T_a=25^\circ\text{C}$ )

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	30	V
$V_{CEO}$	Collector-Emitter Voltage	25	V
$V_{EBO}$	Emitter-Base Voltage	4	V
$I_C$	Collector Current-Continuous	50	mA
$I_B$	Base Current-Continuous	25	mA
$P_C$	Collector Power Dissipation @ $T_c=25^\circ\text{C}$	0.15	W
$T_J$	Junction Temperature	125	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-55~125	$^\circ\text{C}$

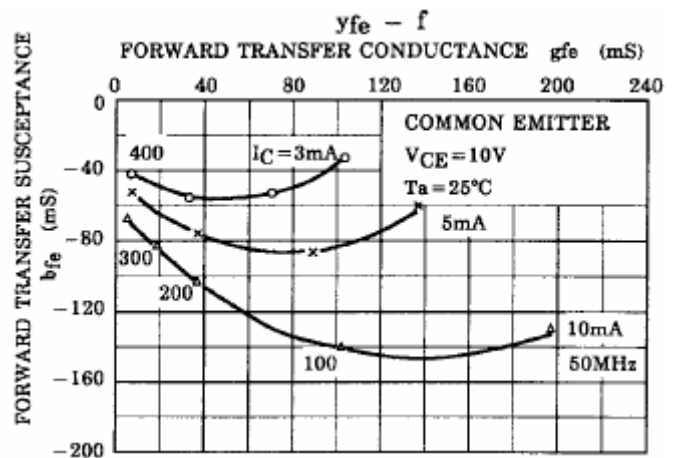
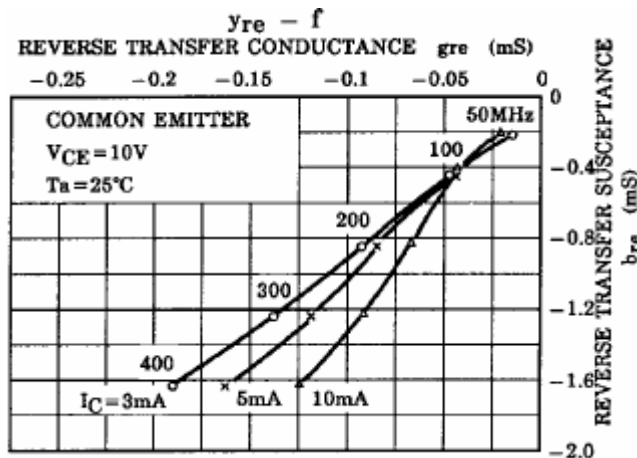
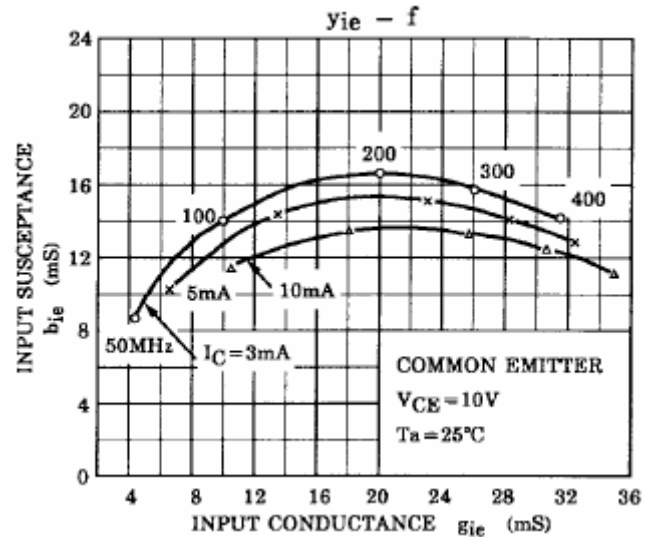
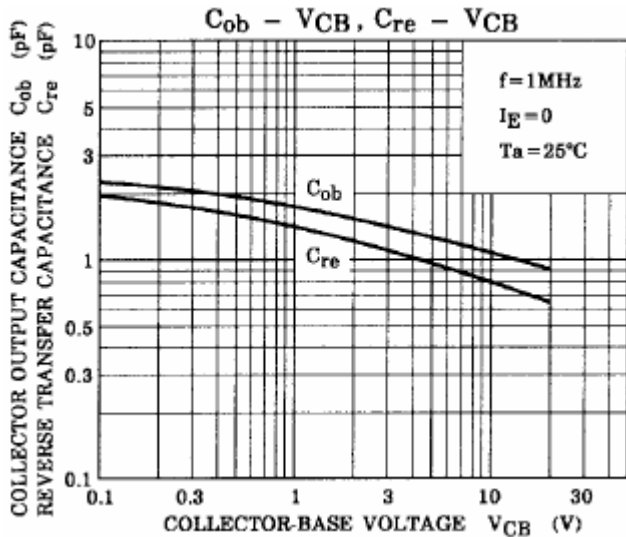
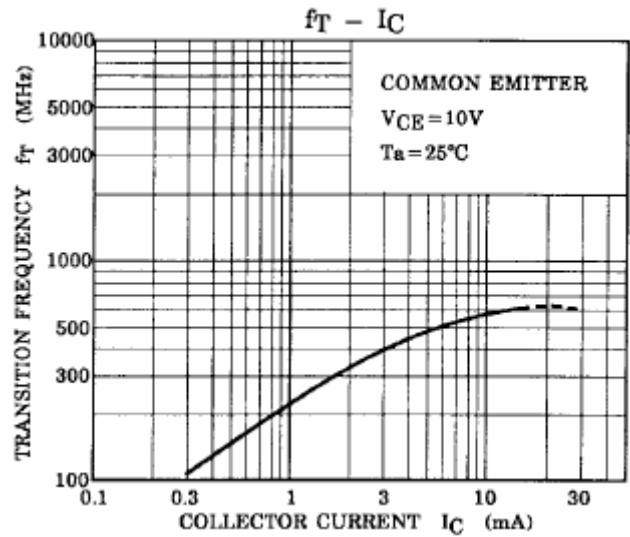
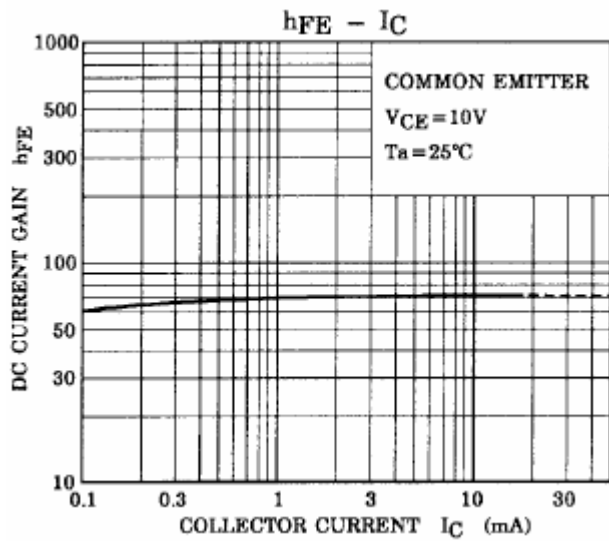


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SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C=10\text{mA}$ ; $I_B=0$	25			V
$I_{CBO}$	Collector Cutoff Current	$V_{CB}=30\text{V}$ ; $I_E=0$			0.1	$\mu\text{A}$
$I_{EBO}$	Emitter Cutoff Current	$V_{EB}=3\text{V}$ ; $I_C=0$			0.1	$\mu\text{A}$
$h_{FE}$	DC Current Gain	$I_C=10\text{mA}$ ; $V_{CE}=10\text{V}$	20		200	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=15\text{mA}$ ; $I_B=1.5\text{mA}$			0.2	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=15\text{mA}$ ; $I_B=1.5\text{mA}$			1.5	V
$C_{OB}$	Output Capacitance	$I_E=0$ ; $V_{CB}=10\text{V}$ ; $f=1.0\text{MHz}$		1.1	1.6	pF
$r_{bb'} \cdot C_C$	Base Time Constant	$I_C=1\text{mA}$ ; $V_{CB}=10\text{V}$ ; $f=30\text{MHz}$			25	ps
$f_T$	Current-Gain—Bandwidth Product	$I_C=10\text{mA}$ ; $V_{CE}=10\text{V}$	250	600		MHz

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