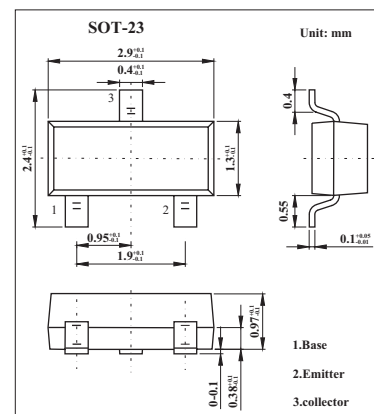


PNP Epitaxial Silicon Transistor

■ Features

- High f_T : $f_T = 5.0$ GHz TYP.
- High gain
 $|S_{21e}|^2 = 15.0$ dB TYP. @ $f = 1.0$ GHz, $V_{CE} = -8$ V, $I_C = -20$ mA
- High-speed switching characteristics



■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

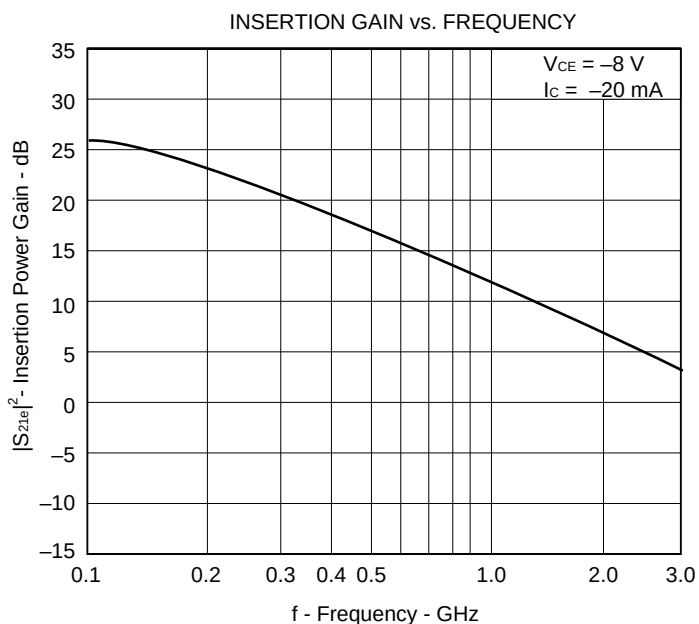
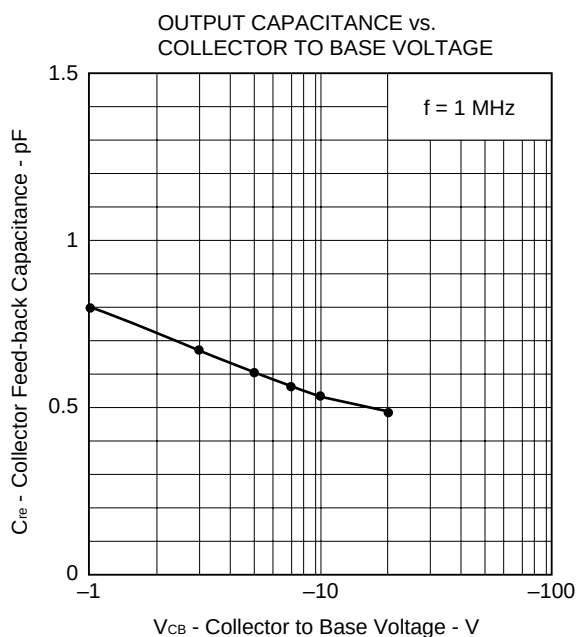
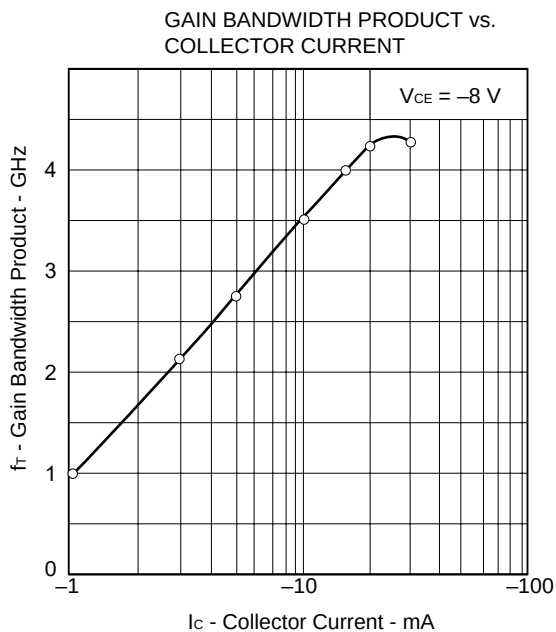
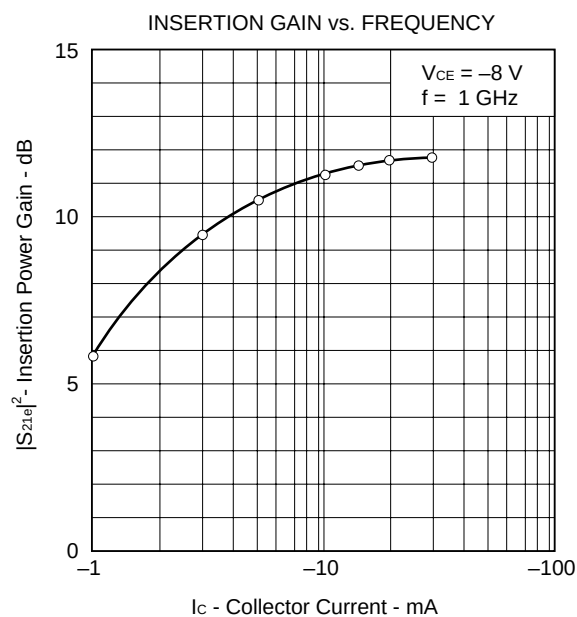
Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-20	V
Collector-emitter voltage	V_{CEO}	-12	V
Emitter-base voltage	V_{EBO}	-3.0	V
Collector current	I_C	-50	mA
Total power dissipation	P_T	200	mW
Junction temperature	T_J	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = -10$ V			-0.1	μA
Emitter cutoff current	I_{EBO}	$V_{EB} = -1$ V			-0.1	μA
DC current gain	h_{FE}	$V_{CE} = -8$ V, $I_C = -20$ mA	35		200	
Gain Bandwidth Product	f_T	$V_{CE} = -8$ V, $I_C = -20$ mA, $f = 1$ GHz		8.0		V
Collector Capacitance	C_{re}^*	$V_{CB} = -10$ V, $I_E = 0$, $f = 1$ MHz		0.5		V
Insertion Power Gain	$ S_{21e} ^2$	$V_{CE} = -8$ V, $I_C = -20$ mA, $f = 1.0$ GHz		15.0		MHz
Noise Figure	NF	$V_{CE} = -8$ V, $I_C = -3$ mA, $f = 1$ GHz		1.5		pF

PNP Epitaxial Silicon Transistor

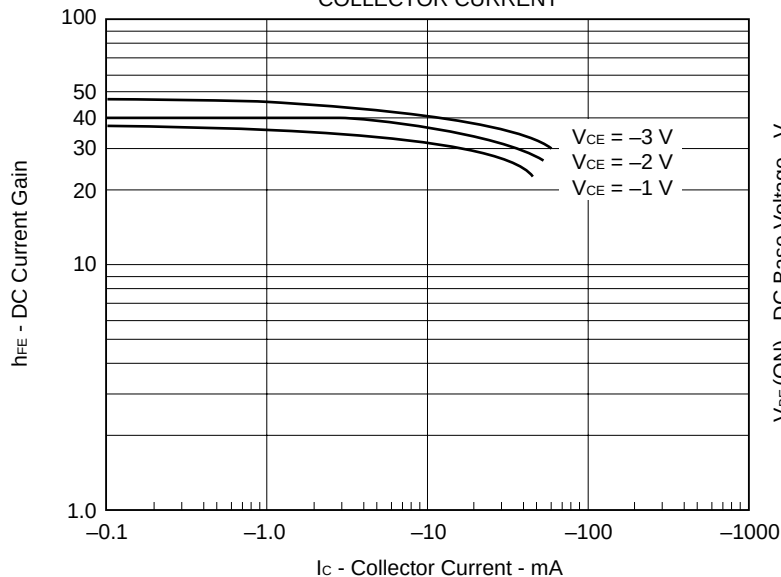
TYPICAL CHARACTERISTICS



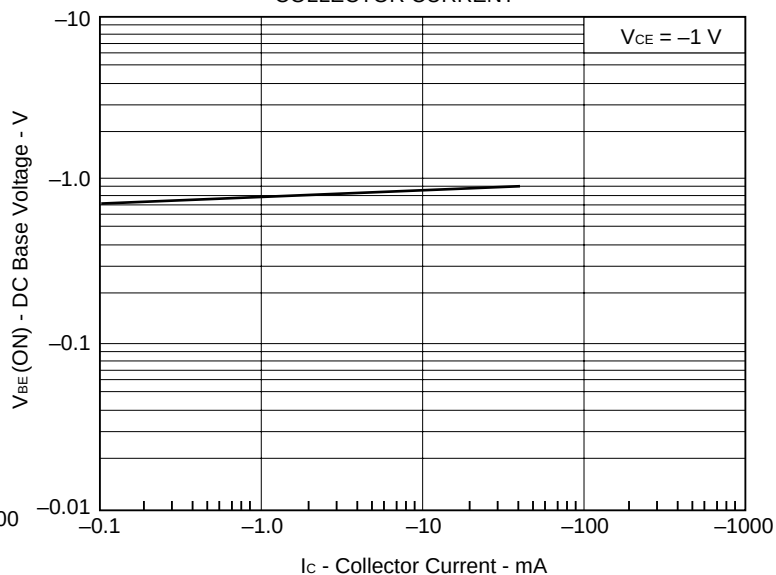
PNP Epitaxial Silicon Transistor

TYPICAL CHARACTERISTICS

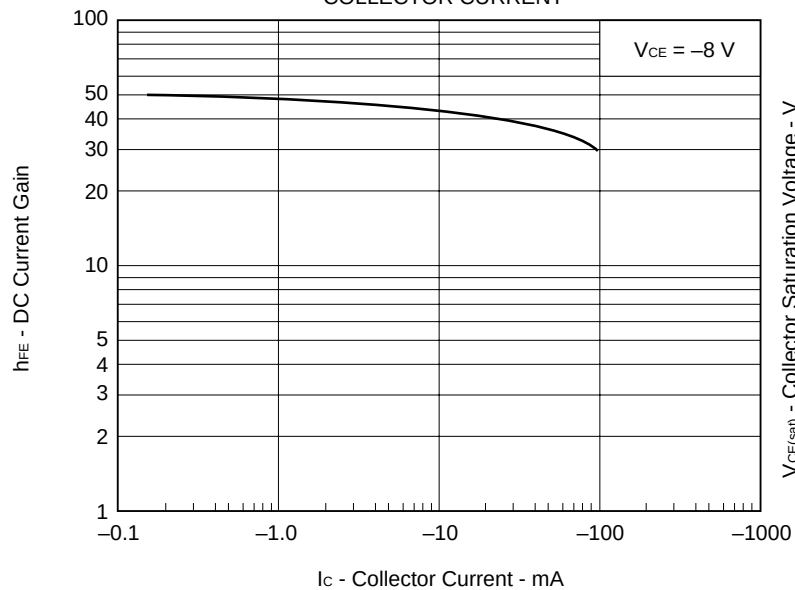
DC CURRENT GAIN vs.
COLLECTOR CURRENT



BASE TO EMITTER VOLTAGE vs.
COLLECTOR CURRENT



DC CURRENT GAIN vs.
COLLECTOR CURRENT



COLLECTOR AND BASE SATURATION VOLTAGE vs.
COLLECTOR CURRENT

