

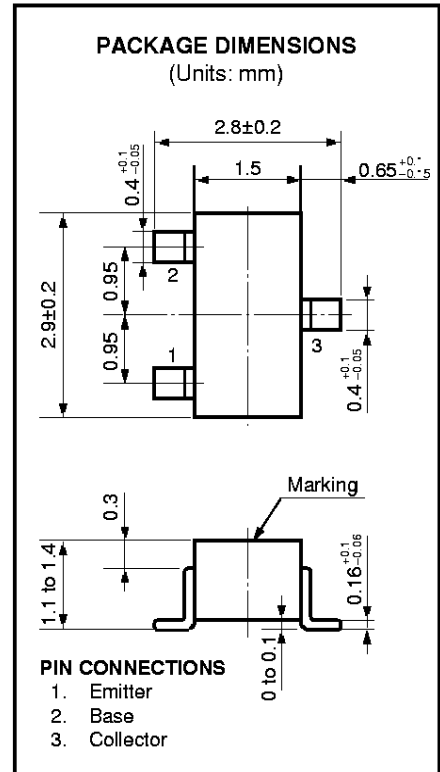
HIGH FREQUENCY LOW NOISE AMPLIFIER
NPN SILICON EPITAXIAL TRANSISTOR
MINI MOLD

FEATURES

- NF 1.5 dB TYP. @ f = 1.0 GHz
- MAG 14 dB TYP. @ f = 1.0 GHz

ABSOLUTE MAXIMUM RATINGS (T_A = 25 °C)

Collector to Base Voltage	V _{CB0}	25	V
Collector to Emitter Voltage	V _{CEO}	12	V
Emitter to Base Voltage	V _{EB0}	3.0	V
Collector Current	I _C	70	mA
Total Power Dissipation	P _T	250	mW
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-65 to +150	°C

ELECTRICAL CHARACTERISTICS (T_A = 25 °C)

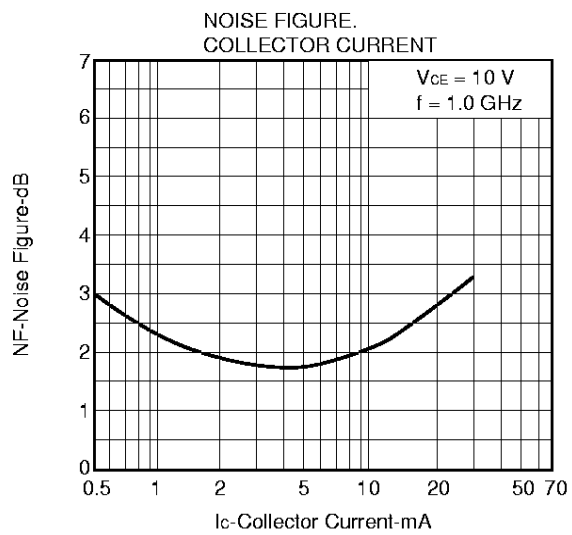
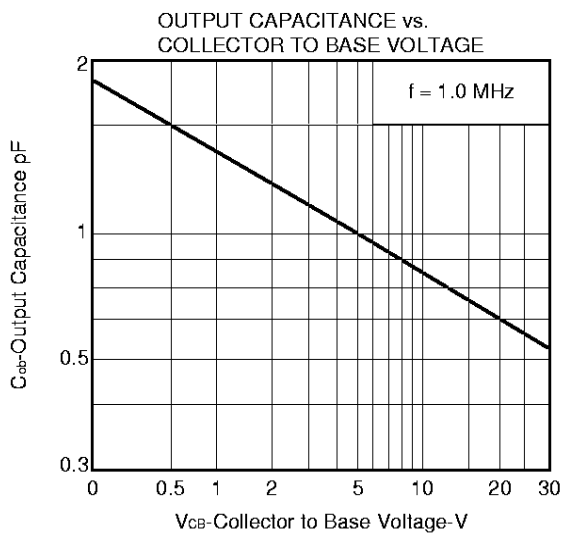
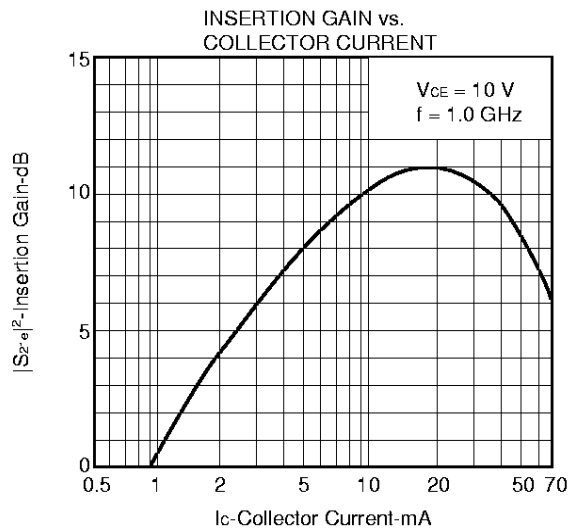
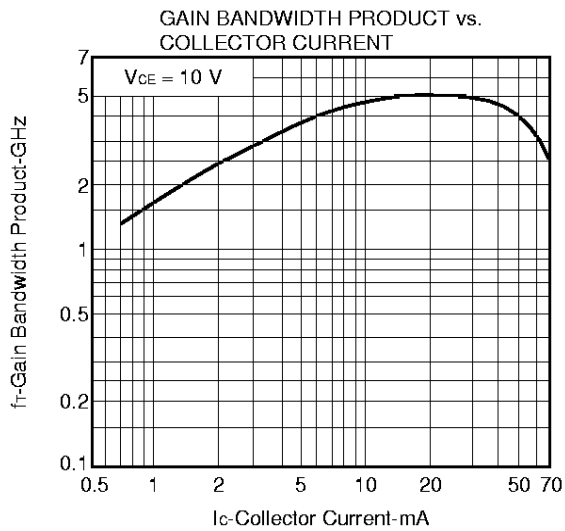
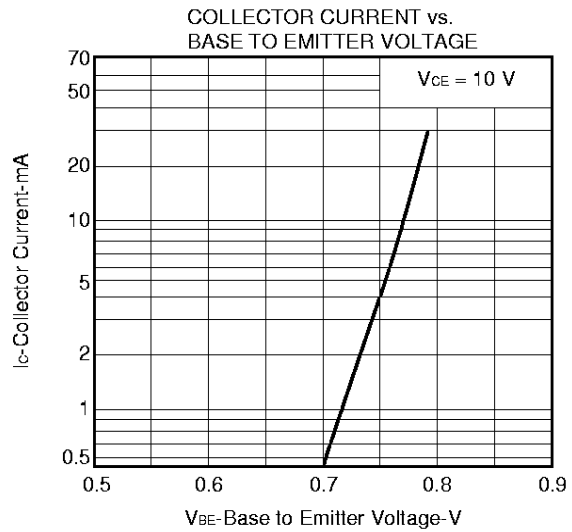
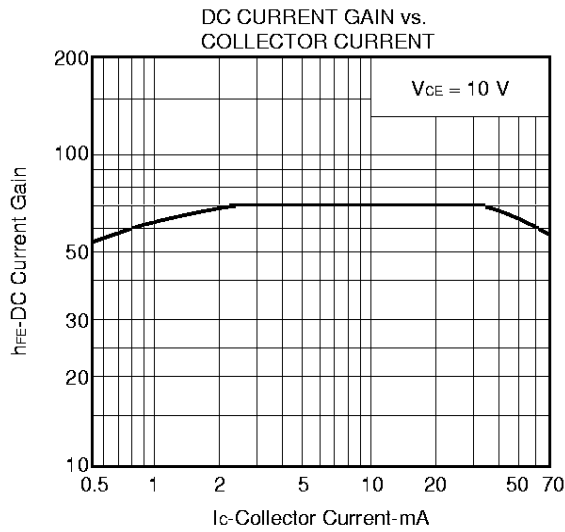
CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
Collector Cutoff Current	I _{CB0}			0.1	μA	V _{CB} = 15 V, I _E = 0
Emitter Cutoff Current	I _{EB0}			0.1	μA	V _{EB} = 2.0 V, I _C = 0
DC Current Gain	h _{FE}	40		200		V _{CE} = 10 V, I _C = 20 mA
Gain Bandwidth Product	f _T		4.5		GHz	V _{CE} = 10 V, I _C = 20 mA
Output Capacitance	C _{ob}		0.75	1.0	pF	V _{CB} = 10 V, I _E = 0, f = 1.0 MHz
Insertion Power Gain	S _{21e} ²	9	11		dB	V _{CE} = 10 V, I _C = 20 mA, f = 1.0 GHz
Noise Figure	NF		1.5	3.0	dB	V _{CE} = 10 V, I _C = 5 mA, f = 1.0 GHz
Maximum Available Gain	MAG		14		dB	V _{CE} = 10 V, I _C = 20 mA, f = 1.0 GHz

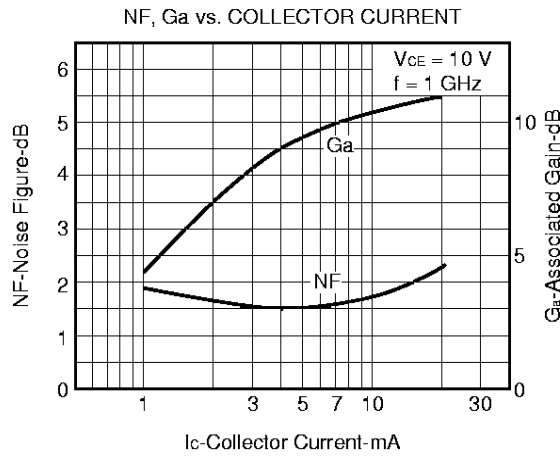
h_{FE} Classification

Class	E/P *	F/Q *
Marking	R2	R3
h _{FE}	40 to 120	100 to 200

* Old Specification / New Specification

TYPICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$)





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Anti-radioactive design is not implemented in this product.