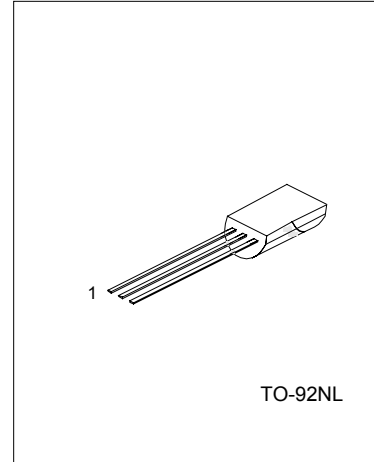


## SILICON PNP EPITAXIAL

## APPLICATION

\* Low frequency power amplifier



1:EMITTER 2:COLLECTOR 3:BASE

## ABSOLUTE MAXIMUM RATINGS (Ta=25°C, unless otherwise specified)

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V <sub>CB0</sub>	-120	V
Collector-Emitter Voltage	V <sub>CEO</sub>	-80	V
Emitter-Base Voltage	V <sub>EBO</sub>	-5	V
Collector Current	I <sub>c</sub>	-1	A
Collector Peak Current	I <sub>c(peak)</sub>	-2	A
Collector Power Dissipation	P <sub>c</sub>	0.9	W
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-55 ~ +150	°C

## ELECTRICAL CHARACTERISTICS (Ta=25°C, unless otherwise specified)

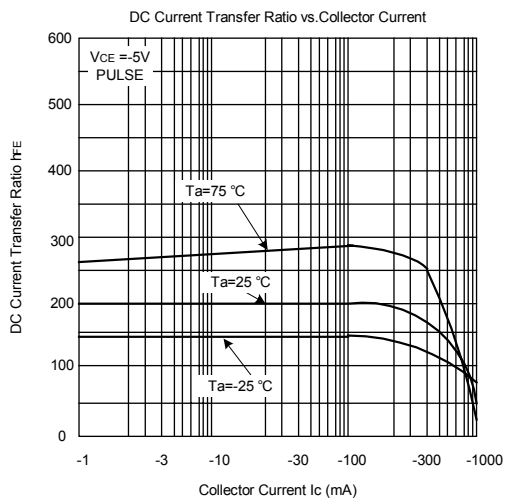
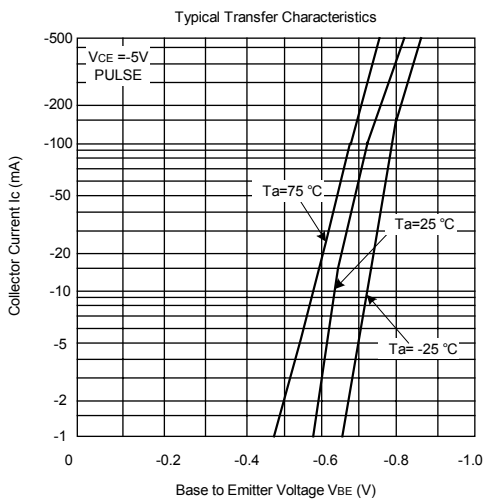
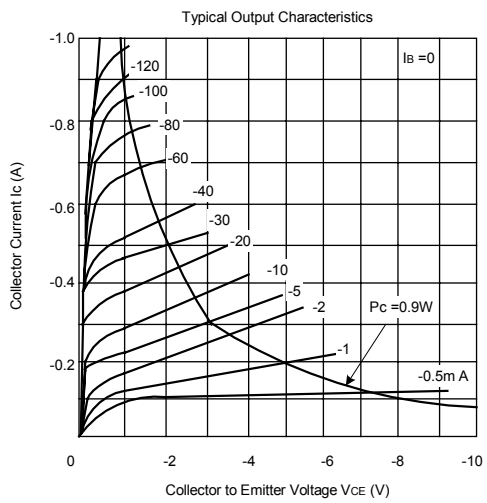
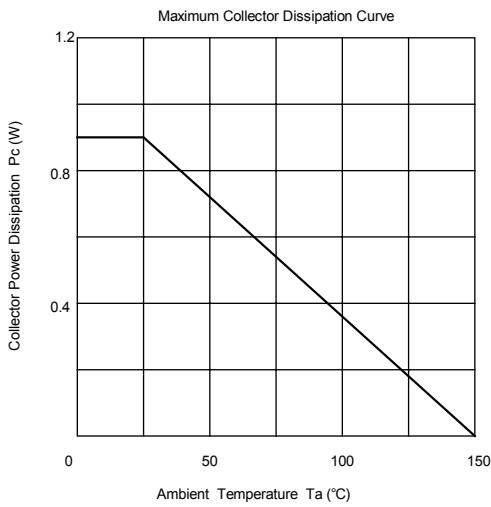
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	V(BR)CBO	I <sub>c</sub> = -10μA, I <sub>E</sub> =0	-120			V
Collector-Emitter Breakdown Voltage	V(BR)CEO	I <sub>c</sub> = -1mA, R <sub>BE</sub> =∞	-80			V
Emitter-Base Breakdown Voltage	V(BR)EBO	I <sub>E</sub> = -10μA, I <sub>c</sub> =0	-5			V
Collector Cut-Off Current	I <sub>CBO</sub>	V <sub>CB</sub> = -100V, I <sub>E</sub> =0			-10	μA
DC Current Transfer Ratio	h <sub>FE1</sub>	V <sub>CE</sub> = -5V, I <sub>c</sub> = -150mA(note)	60		320	
	h <sub>FE2</sub>	V <sub>CE</sub> = -5V, I <sub>c</sub> = -500mA(note)	30			
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>c</sub> = -500mA, I <sub>B</sub> = -50 mA(note)			-1	V
Base-Emitter Saturation Voltage	V <sub>BE</sub>	V <sub>CE</sub> = -5V, I <sub>c</sub> = -150mA(note)			-1.5	V
Gain Bandwidth Product	f <sub>t</sub>	V <sub>CE</sub> = -5V, I <sub>c</sub> = -150mA		140		MHz
Collector Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> = -10V, I <sub>E</sub> =0, f=1MHz		20		pF

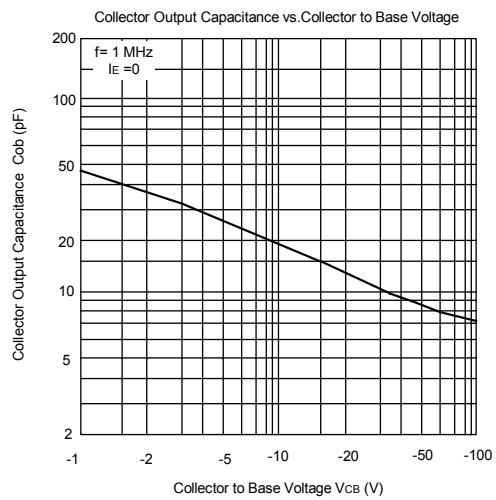
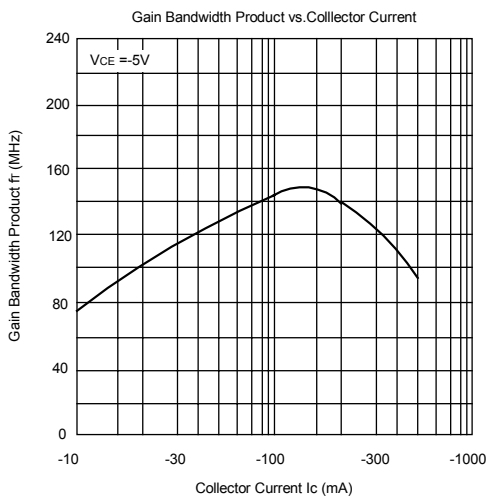
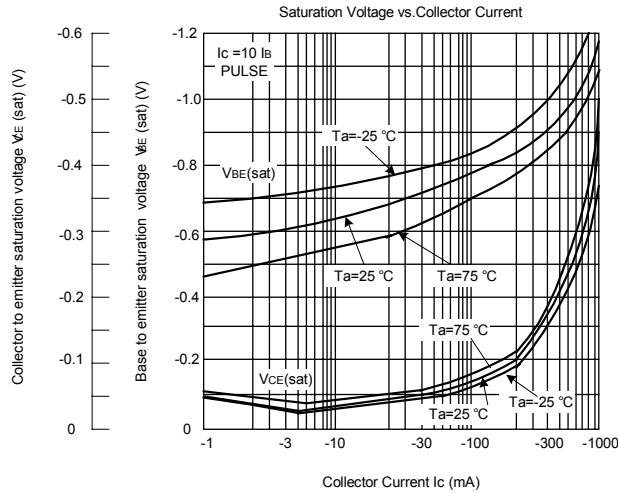
Note: Pulse test

CLASSIFICATION OF  $h_{FE1}$

RANK	B	C	D
RANGE	60-120	100-200	160-320

TYPICAL PERFORMANCE CHARACTERISTICS





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