

Description

- General small signal amplifier

Features

- Low collector saturation voltage : $V_{CE(sat)} = -0.15V(\text{Max.})$
- Extremely small size package: $0.8 \times 0.6 \times 0.4 \text{ mm}$ Typ.
- Complementary pair with NT331

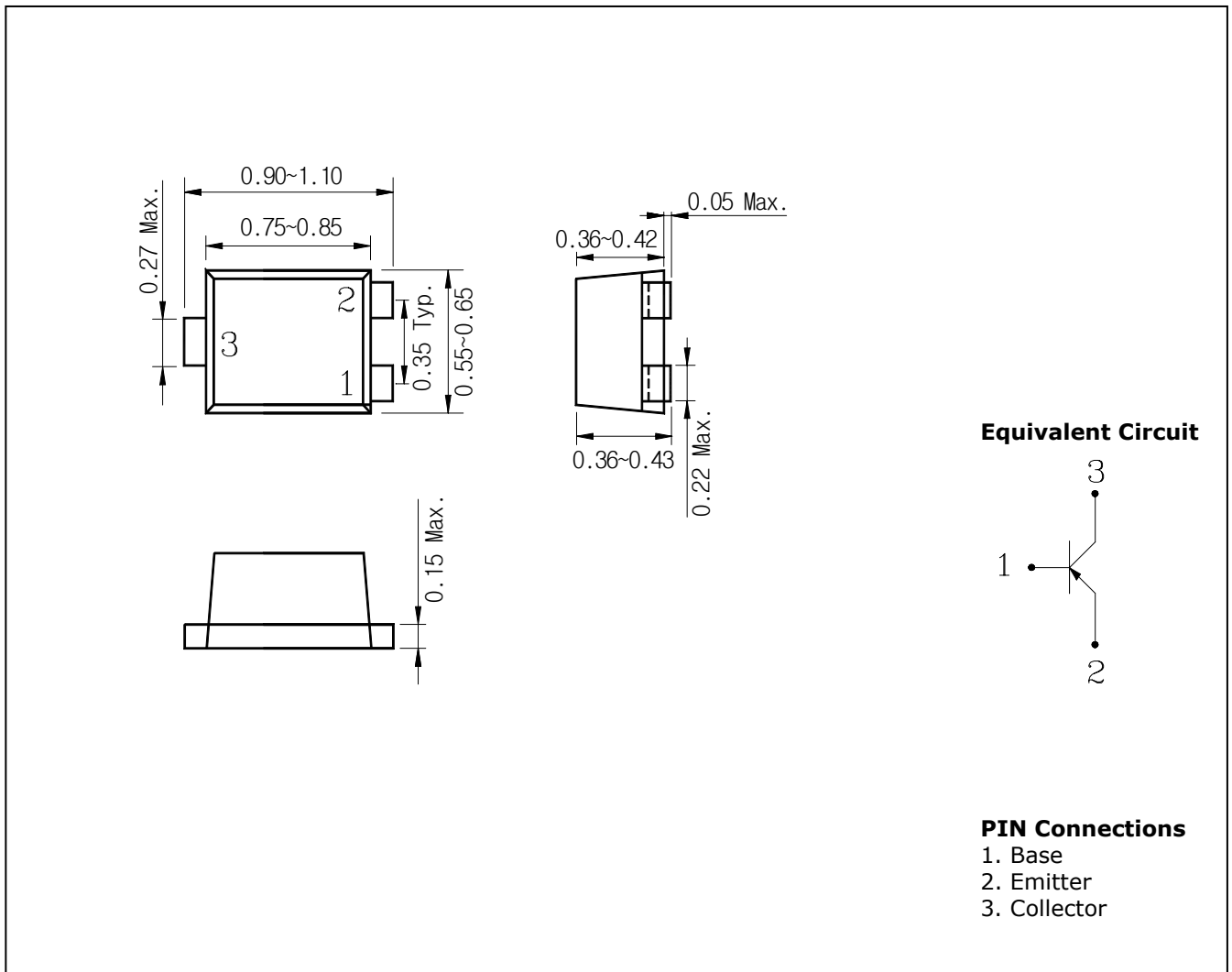
Ordering Information

Type NO.	Marking	Package Code
NT332	P□	SOT-923

□: h_{FE} rank

Outline Dimensions

unit : mm



Absolute Maximum Ratings

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-20	V
Collector-emitter voltage	V_{CEO}	-20	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current	I_C	-50	mA
Collector power dissipation	P_C	50	mW
Junction temperature	T_J	150	°C
Storage temperature range	T_{stg}	-55~150	°C

Electrical Characteristics

(Ta=25°C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector-emitter breakdown voltage	BV_{CEO}	$I_C = -1\text{mA}$, $I_B = 0$	-20	-	-	V
Collector cut-off current	I_{CBO}	$V_{CB} = -20\text{V}$, $I_E = 0$	-	-	-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5\text{V}$, $I_C = 0$	-	-	-0.1	μA
DC current gain	h_{FE}^*	$V_{CE} = -6\text{V}$, $I_C = -2\text{mA}$	120	-	400	-
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -50\text{mA}$, $I_B = -5\text{mA}$	-	-	-0.15	V
Base-emitter voltage	V_{BE}	$V_{CE} = -6\text{V}$, $I_C = -2\text{mA}$	-	-0.7	-0.9	V
Transition frequency	f_T	$V_{CE} = -10\text{V}$, $I_C = -10\text{mA}$	-	200	-	MHz
Collector output capacitance	C_{ob}	$V_{CB} = -10\text{V}$, $I_E = 0$, $f = 1\text{MHz}$	-	4	-	pF

*: h_{FE} rank / Y : 120~240, G : 200~400

Electrical Characteristic Curves

Fig. 1 $P_C - T_a$

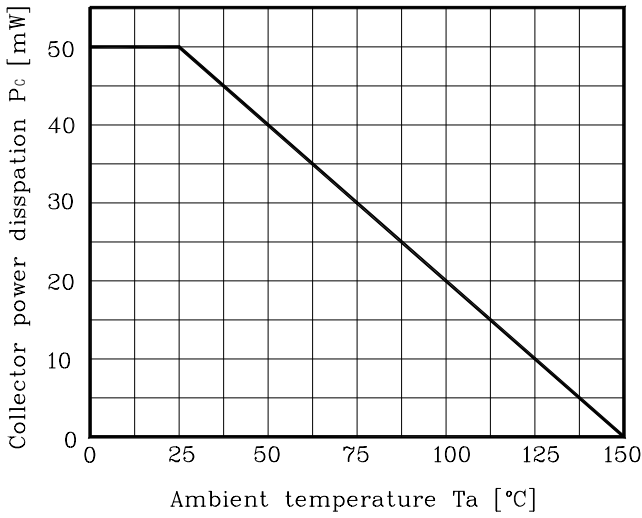


Fig. 2 $I_C - V_{BE}$

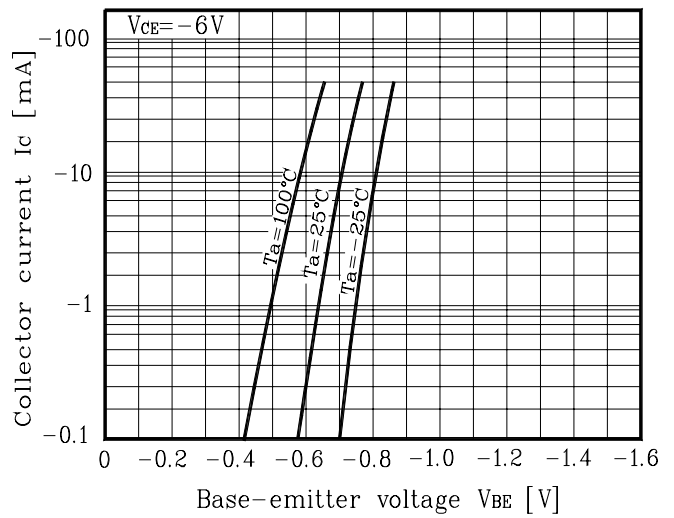


Fig. 3 $I_C - V_{CE}$

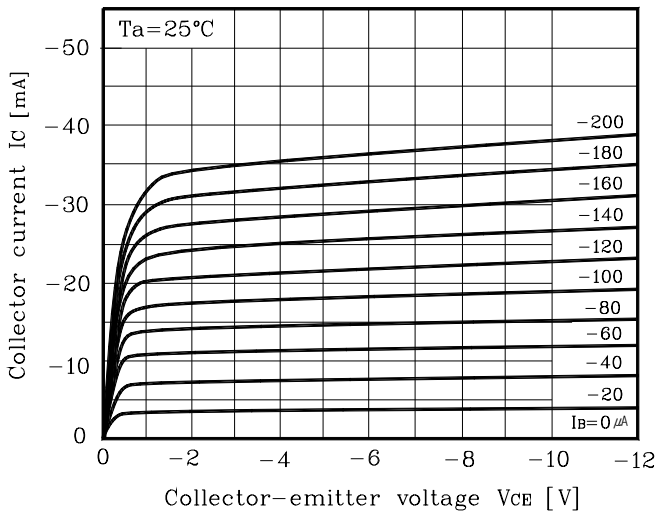


Fig. 4 $h_{FE} - I_C$

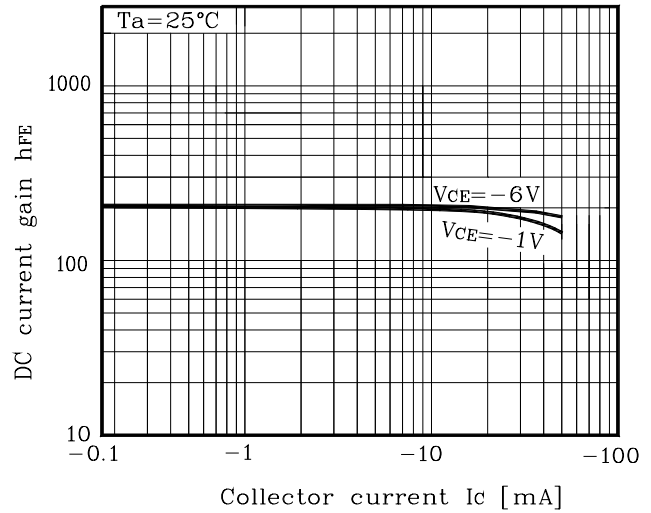


Fig. 5 $V_{CE(sat)} - I_C$

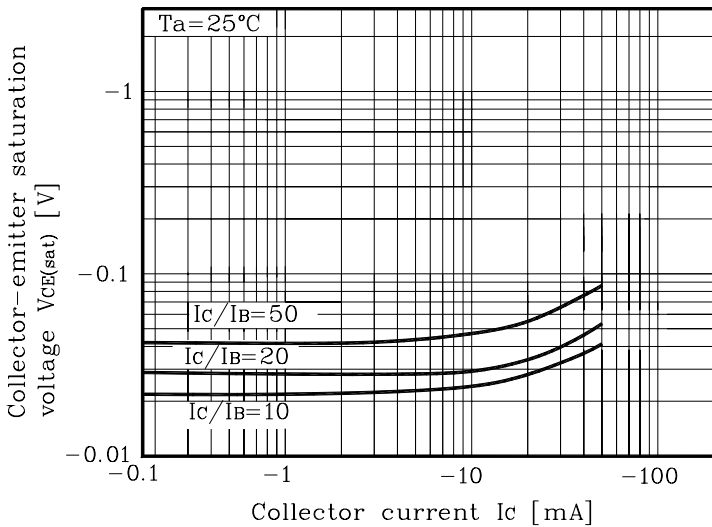
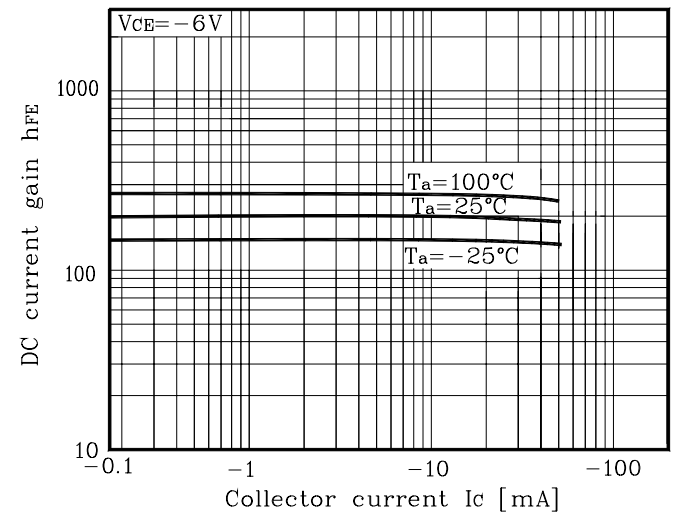


Fig. 6 $h_{FE} - I_C$



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