

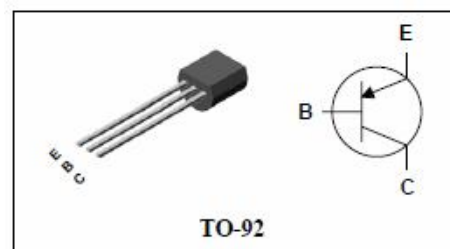
Descriptions

- General purpose application.
- Switching application.

Features

- Excellent h_{FE} linearity : $h_{FE}(I_C=0.1mA) / h_{FE}(I_C=2mA) = 0.95(Typ.)$
- Low noise : $NF = 10dB(Max.)$
- Complementary pair with KTS9014

PIN Connection



Ordering Information

Type NO.	Marking	Package Code
KTS9015	KTS9015 ●	TO-92

● Dalian

Absolute maximum ratings

$T_a=25^{\circ}C$

Characteristic	Symbol	Ratings	Unit
Collector-Base voltage	V_{CBO}	-50	V
Collector-Emitter voltage	V_{CEO}	-50	V
Emitter-Base voltage	V_{EBO}	-5	V
Collector current	I_C	-150	mA
Emitter current	I_E	150	mA
Collector dissipation	P_C	625	mW
Junction temperature	T_j	150	$^{\circ}C$
Storage temperature	T_{stg}	-55~150	$^{\circ}C$

Electrical Characteristics

$T_a=25^{\circ}C$

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector cut-off current	I_{CBO}	$V_{CB}=-50V, I_E=0$	-	-	-50	nA
Emitter cut-off current	I_{EBO}	$V_{EB}=-5V, I_C=0$	-	-	-100	nA
DC current gain	h_{FE}^*	$V_{CE}=-5V, I_C=-1mA$	100	-	1000	-
Collector-Emitter saturation voltage	$V_{CE(sat)}$	$I_C=-100mA, I_B=-10mA$	-	-0.1	-0.3	V
Transition frequency	f_T	$V_{CE}=-10V, I_C=-1mA$	60	-	-	MHz
Collector output capacitance	C_{ob}	$V_{CB}=-10V, I_E=0, f=1MHz$	-	4	7	pF
Noise figure	NF	$V_{CE}=-6V, I_C=-0.1mA$ $f=1KHz, R_g=10K\Omega$	-	-	10	dB

*: h_{FE} rank / B : 100~300, C : 200~600, D : 400~1000.

Electrical Characteristic Curves

Fig. 1 P_C - T_a

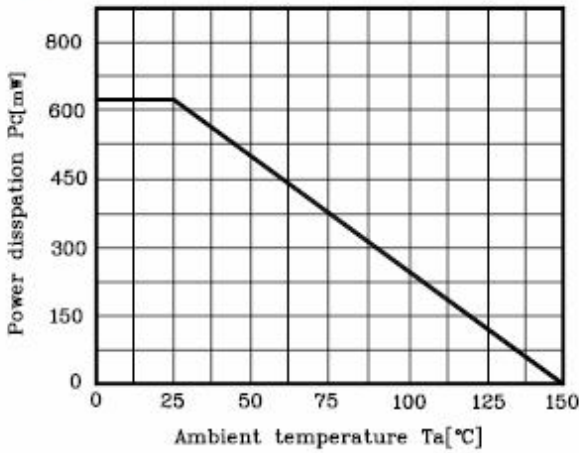


Fig. 2 I_C - V_{BE}

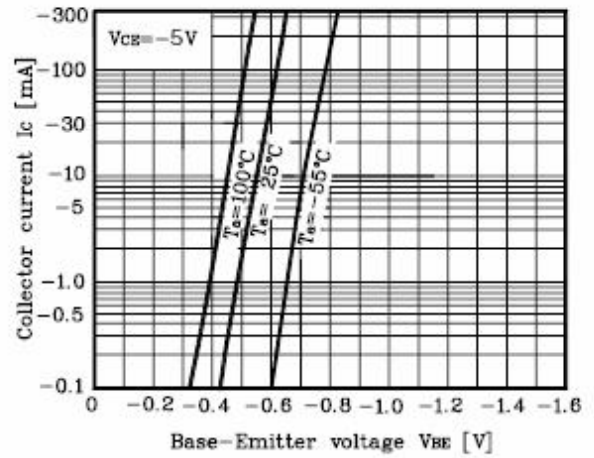


Fig. 3 I_C - V_{CE}

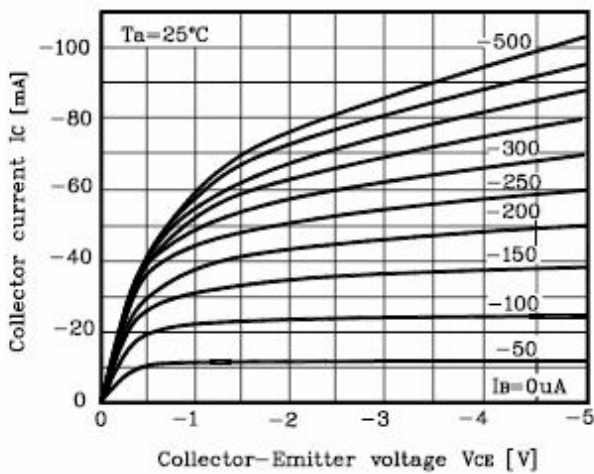


Fig. 4 h_{FE} - I_C

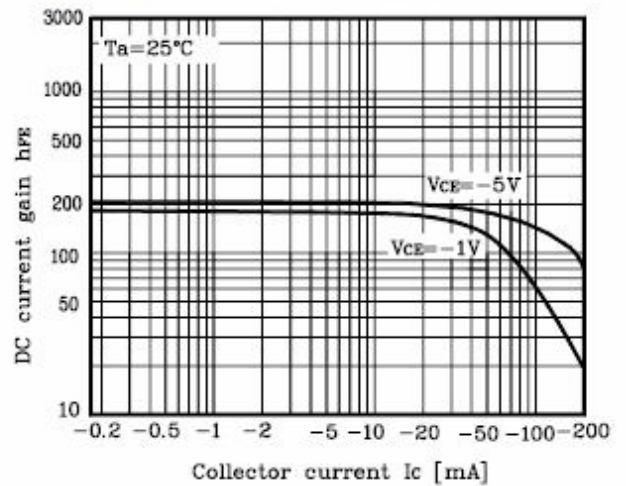
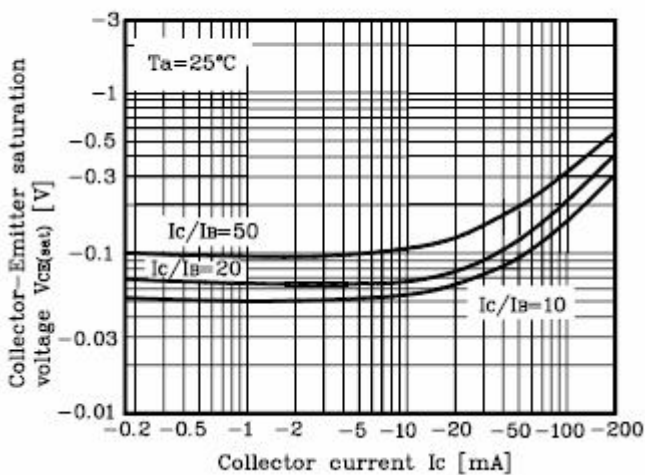
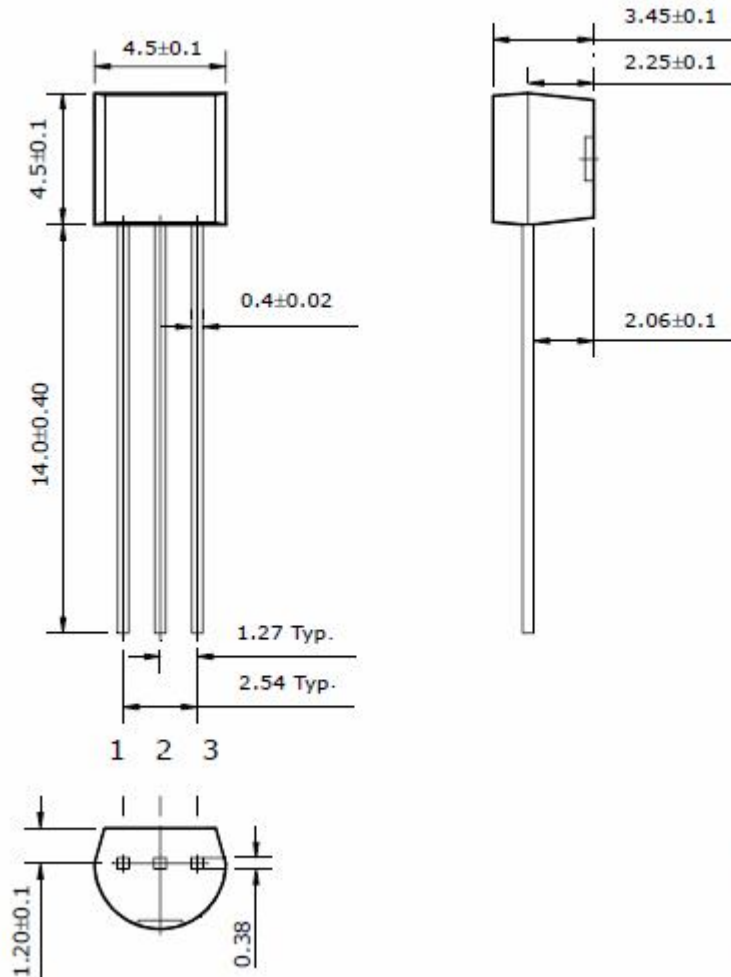


Fig. 5 $V_{CE(sat)}$ - I_C



Outline Dimensions

unit : mm



PIN Connections

1. Emitter
2. Base
3. Collector

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