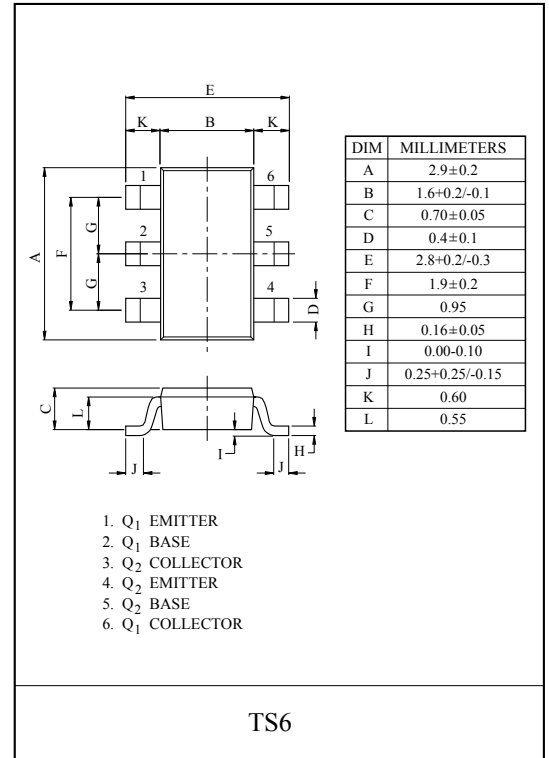
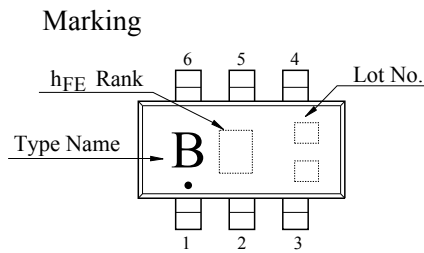
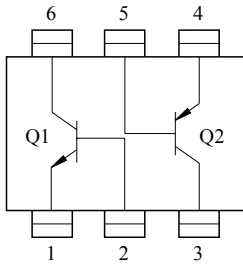


GENERAL PURPOSE APPLICATION.

FEATURES

- Including two devices in TS6.
(Thin Super Mini type with 6 pin)
- Simplify circuit design.
- Reduce a quantity of parts and manufacturing process.

EQUIVALENT CIRCUIT (TOP VIEW)



Q1 MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V _{CBO}	35	V
Collector-Emitter Voltage	V _{CEO}	30	V
Emitter-Base Voltage	V _{EBO}	5	V
Collector Current	I _C	500	mA
Emitter Current	I _E	-500	mA

Q2 MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V _{CBO}	-35	V
Collector-Emitter Voltage	V _{CEO}	-30	V
Emitter-Base Voltage	V _{EBO}	-5	V
Collector Current	I _C	-500	mA
Emitter Current	I _E	500	mA

Q1, Q2 MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector Power Dissipation	P _C *	0.9	W
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _{stg}	-55 ~ 150	°C

* Package mounted on a ceramic board (600mm² × 0.8mm)

KTX111T

Q₁ ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT.
Collector Cut-off Current	I _{CBO}	V _{CB} =35V, I _E =0	-	-	0.1	μA
Emitter Cut-off Current	I _{EBO}	V _{EB} =5V, I _C =0	-	-	0.1	μA
DC Current Gain	h _{FE} (1) (Note)	V _{CE} =1V, I _C =100mA	70	-	240	
	h _{FE} (2) (Note)	V _{CE} =6V, I _C =400mA	25	-	-	
Collector-Emitter Saturation Voltage	V _{CE(SAT)}	I _C =100mA, I _B =10mA	-	0.1	0.25	V
Base-Emitter Voltage	V _{BE}	V _{CE} =1V, I _C =100mA	-	0.8	1.0	V
Transition Frequency	f _T	V _{CE} =6V, I _C =20mA	-	300	-	MHz
Collector Output Capacitance	C _{ob}	V _{CB} =6V, I _E =0, f=1MHz	-	7.0	-	pF

Note) h_{FE}(1) Classification O:70~140, Y:120~240.

h_{FE}(2) Classification O:25(Min), Y:40(Min).

Q₂ ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT.
Collector Cut-off Current	I _{CBO}	V _{CB} =-35V, I _E =0	-	-	-0.1	μA
Emitter Cut-off Current	I _{EBO}	V _{EB} =-5V, I _C =0	-	-	-0.1	μA
DC Current Gain	h _{FE} (1) (Note)	V _{CE} =-1V, I _C =-100mA	70	-	240	
	h _{FE} (2) (Note)	V _{CE} =-6V, I _C =-400mA	25	-	-	
Collector-Emitter Saturation Voltage	V _{CE(SAT)}	I _C =-100mA, I _B =-10mA	-	-0.1	-0.25	V
Base-Emitter Voltage	V _{BE}	V _{CE} =-1V, I _C =-100mA	-	-0.8	-1.0	V
Transition Frequency	f _T	V _{CE} =-6V, I _C =-20mA	-	200	-	MHz
Collector Output Capacitance	C _{ob}	V _{CB} =-6V, I _E =0, f=1MHz	-	13	-	pF

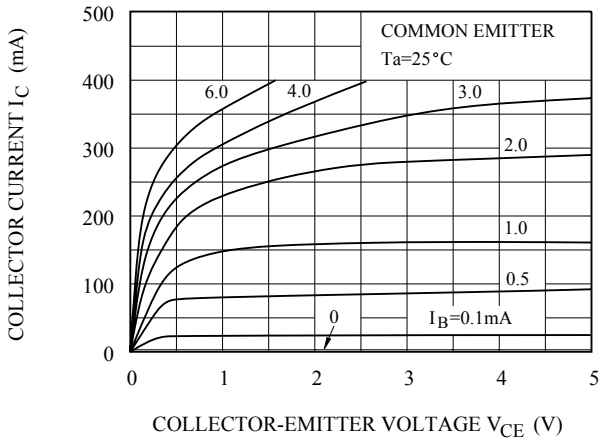
Note) h_{FE}(1) Classification O:70~140, Y:120~240.

h_{FE}(2) Classification O:25(Min), Y:40(Min).

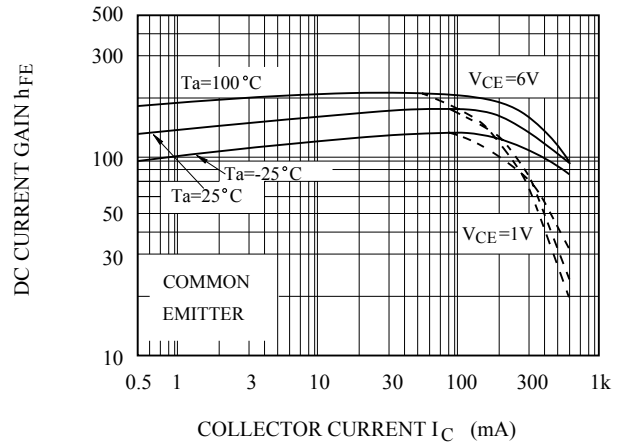
KTX111T

Q₁ (NPN TRANSISOR)

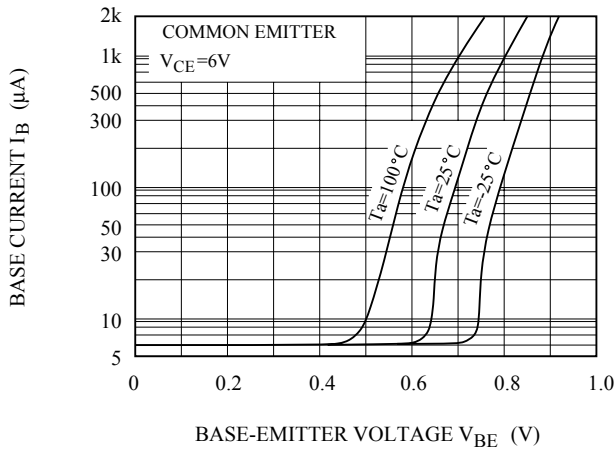
$I_C - V_{CE}$



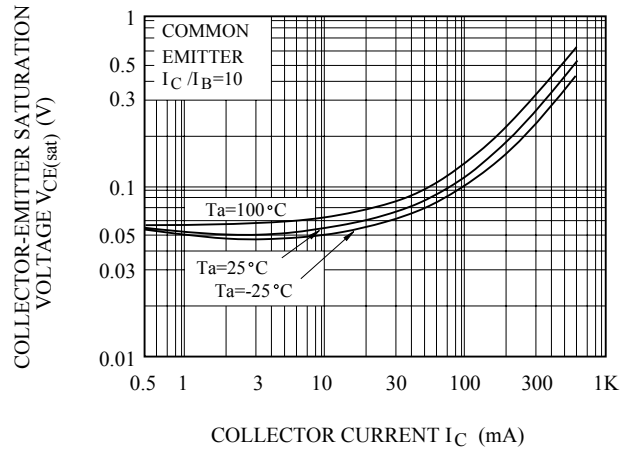
$h_{FE} - I_C$



$I_B - V_{BE}$

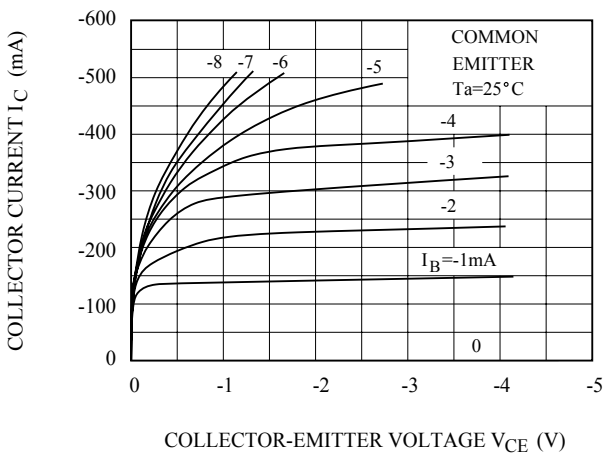


$V_{CE(sat)} - I_C$

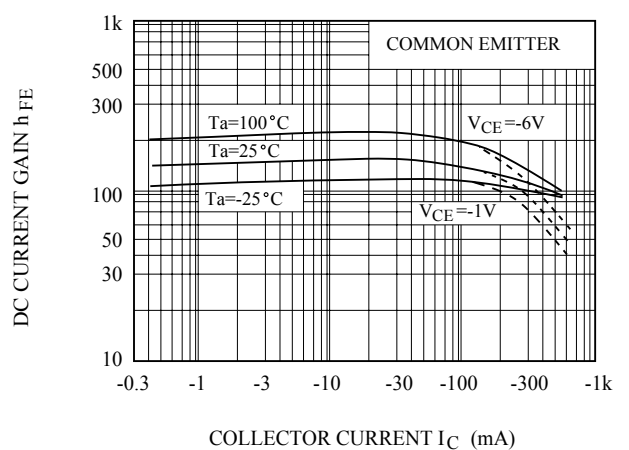


Q₂ (PNP TRANSISOR)

$I_C - V_{CE}$



$h_{FE} - I_C$



KTX111T

