

GENERAL PURPOSE APPLICATION.
SWITCHING APPLICATION.

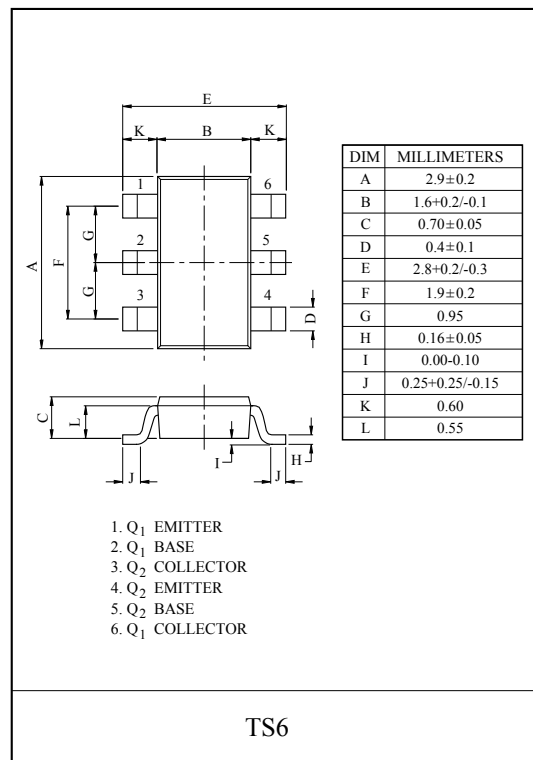
FEATURES

- Excellent h_{FE} Linearity
: $h_{FE}(2)=25(\text{Min.})$ at $V_{CE}=-6V$, $I_C=-400\text{mA}$.
- Complementary to KTC811T.

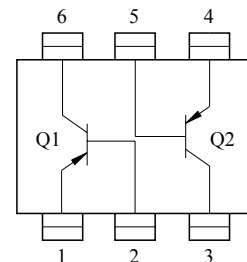
MAXIMUM RATING ($T_a=25^\circ\text{C}$)

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
Collector Power Dissipation	P_C^*	0.9	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 ~ 150	$^\circ\text{C}$

* Package mounted on a ceramic board ($600\text{mm}^2 \times 0.8\text{mm}$)



EQUIVALENT CIRCUIT (TOP VIEW)

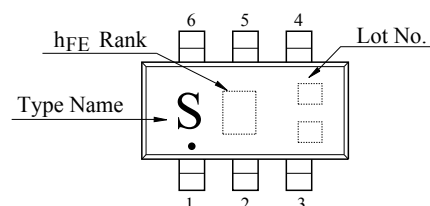
ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

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)	$V_{CE}=-1V$, $I_C=-100\text{mA}$	70	-	240	
	$h_{FE}(2)$ (Note)	$V_{CE}=-6V$, $I_C=-400\text{mA}$	25	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-100\text{mA}$, $I_B=-10\text{mA}$	-	-0.1	-0.25	V
Base-Emitter Voltage	V_{BE}	$V_{CE}=-1V$, $I_C=-100\text{mA}$	-	-0.8	-1.0	V
Transition Frequency	f_T	$V_{CE}=-6V$, $I_C=-20\text{mA}$	-	200	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=-6V$, $I_E=0$, $f=1\text{MHz}$	-	13	-	pF

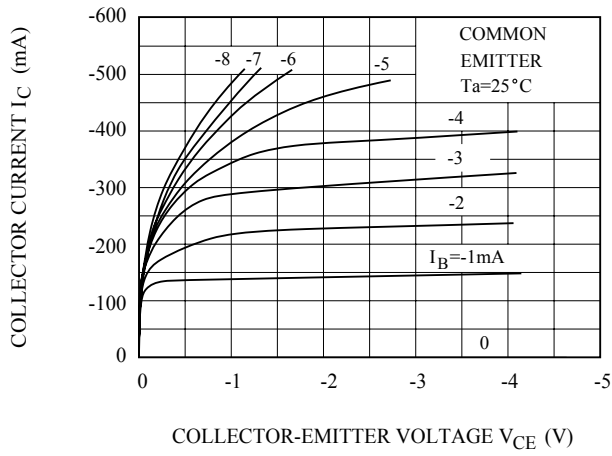
Note : $h_{FE}(1)$ Classification 0:70 ~ 140, Y:120 ~ 240

$h_{FE}(2)$ Classification 0:25Min., Y:40Min.

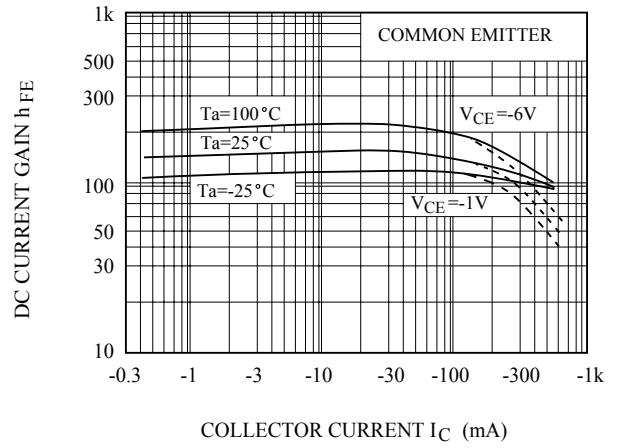
Marking



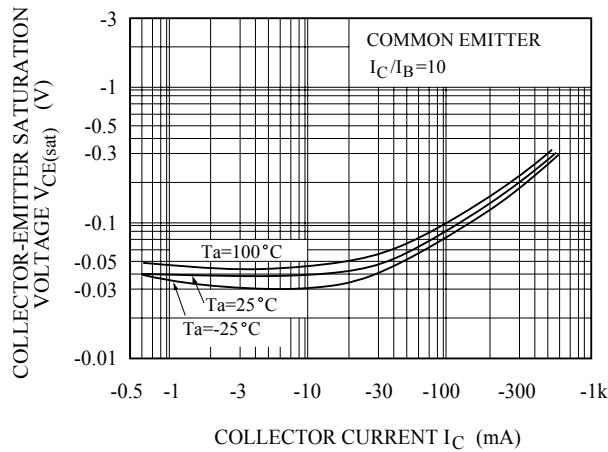
$I_C - V_{CE}$



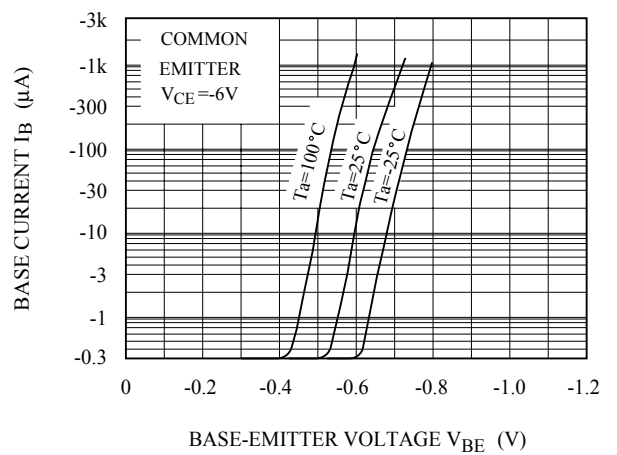
$h_{FE} - I_C$



$V_{CE(sat)} - I_C$



$I_B - V_{BE}$



$P_C - T_a$

