

GENERAL PURPOSE APPLICATION.
SWITCHING APPLICATION.

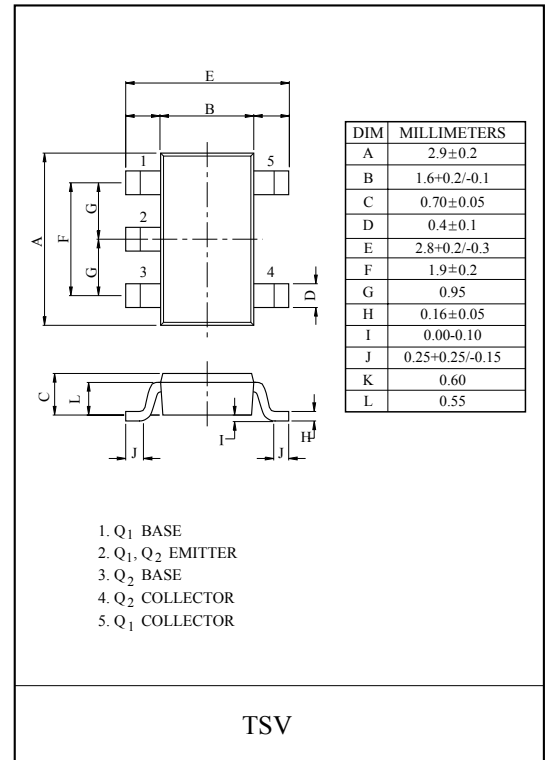
FEATURES

- Excellent h_{FE} Linearity
: $h_{FE(2)}=25(\text{Min.})$ at $V_{CE}=-6V, I_C=-400\text{mA}$.
- Complementary to KTC611T.

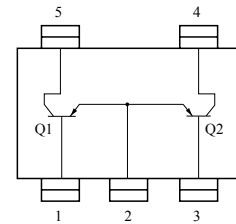
MAXIMUM RATING (Ta=25°C)

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
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)



EQUIVALENT CIRCUIT(TOP VIEW)



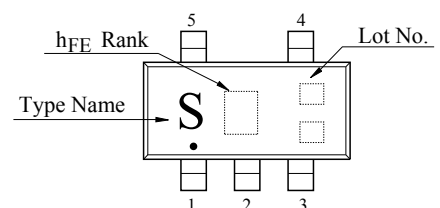
ELECTRICAL CHARACTERISTICS (Ta=25°C)

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)	$V_{CE}=-1V, I_C=-100\text{mA}$	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

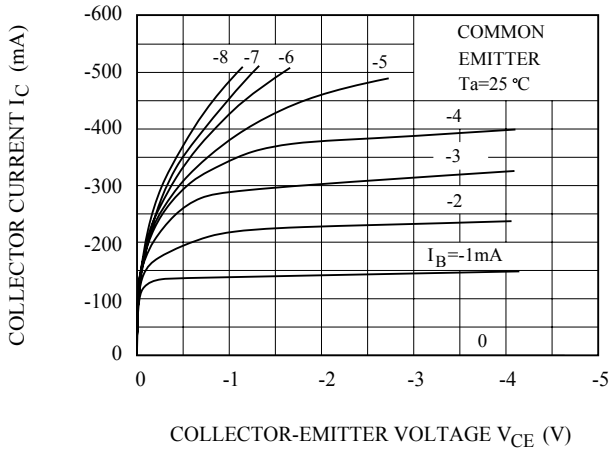
$h_{FE(2)}$ Classification 0:25Min., Y:40Min.

Marking

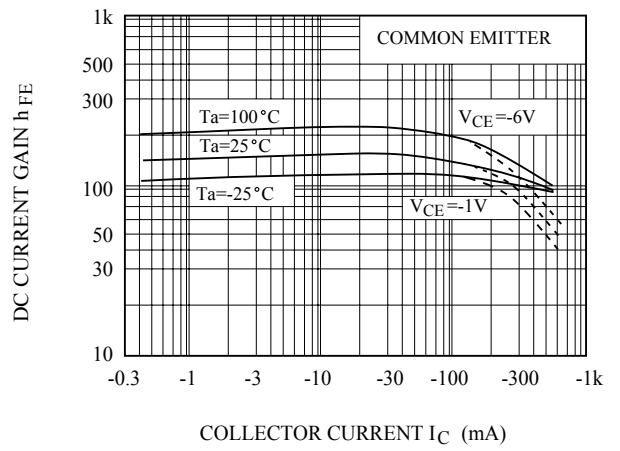


KTA511T

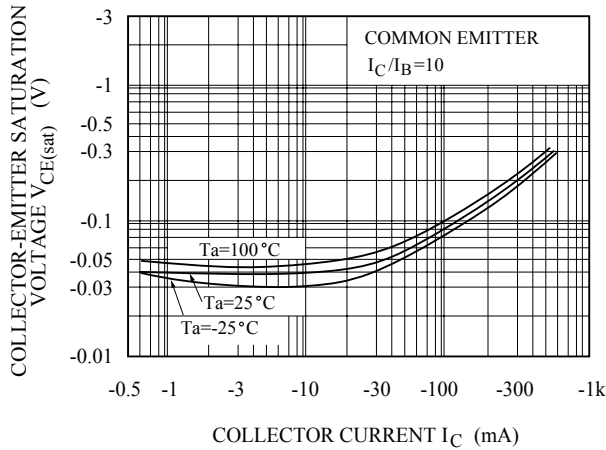
$I_C - V_{CE}$



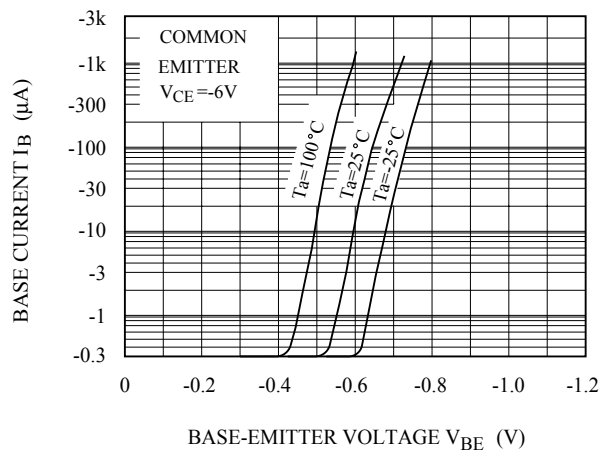
$h_{FE} - I_C$



$V_{CE(sat)} - I_C$



$I_B - V_{BE}$



$P_c - T_a$

