

GENERAL PURPOSE APPLICATION.  
SWITCHING APPLICATION.

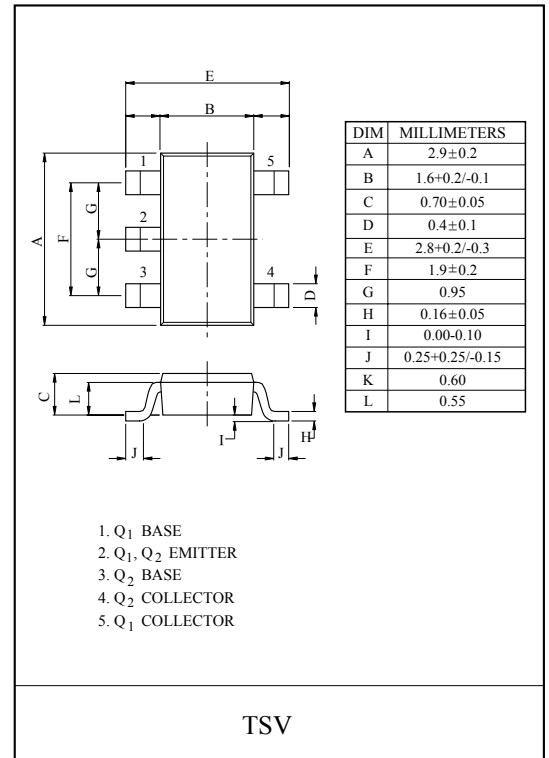
### FEATURES

- Excellent  $h_{FE}$  Linearity  
:  $h_{FE(2)}=25(\text{Min.})$  at  $V_{CE}=6V, I_C=400\text{mA}$ .
- Complementary to KTA511T.

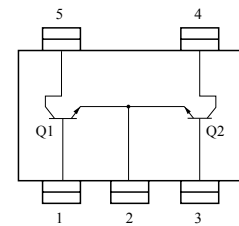
### MAXIMUM RATING ( $T_a=25^\circ\text{C}$ )

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)



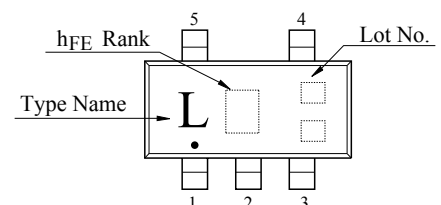
### ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$ )

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=35V, I_E=0$	-	-	0.1	$\mu\text{A}$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=5V, I_C=0$	-	-	0.1	$\mu\text{A}$
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	$f_T$	$V_{CE}=6V, I_C=20\text{mA}$	-	300	-	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB}=6V, I_E=0, f=1\text{MHz}$	-	7.0	-	pF

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

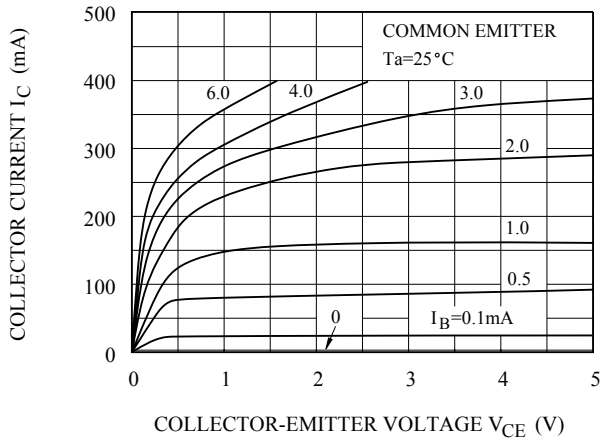
$h_{FE(2)}$  Classification 0:25Min., Y:40Min.

### Marking

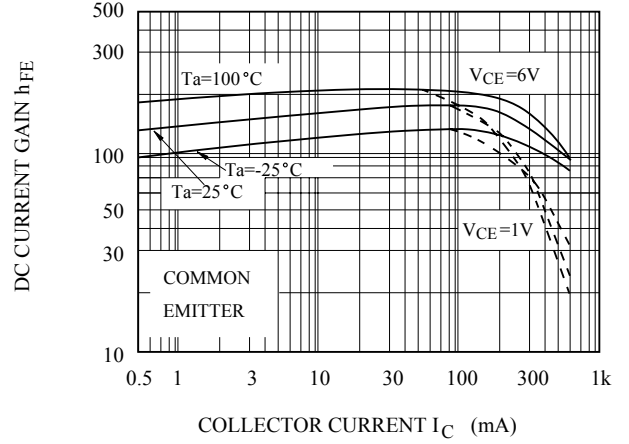


# KTC611T

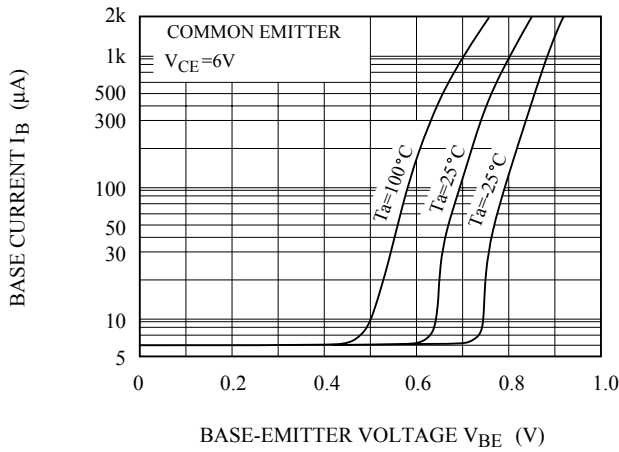
$I_C - V_{CE}$



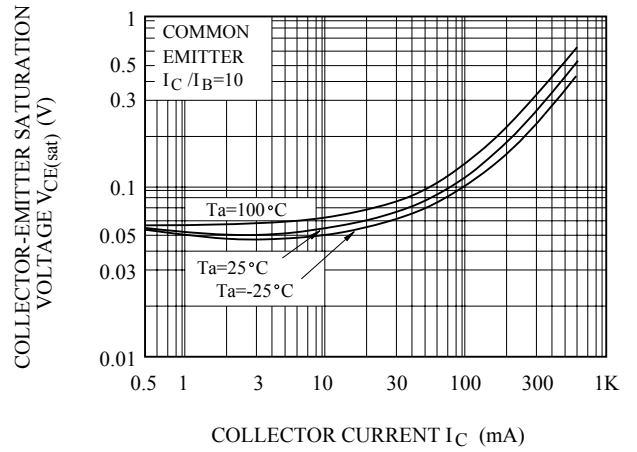
$h_{FE} - I_C$



$I_B - V_{BE}$



$V_{CE(sat)} - I_C$



$P_c - T_a$

