

GENERAL PURPOSE APPLICATION.  
SWITCHING APPLICATION.

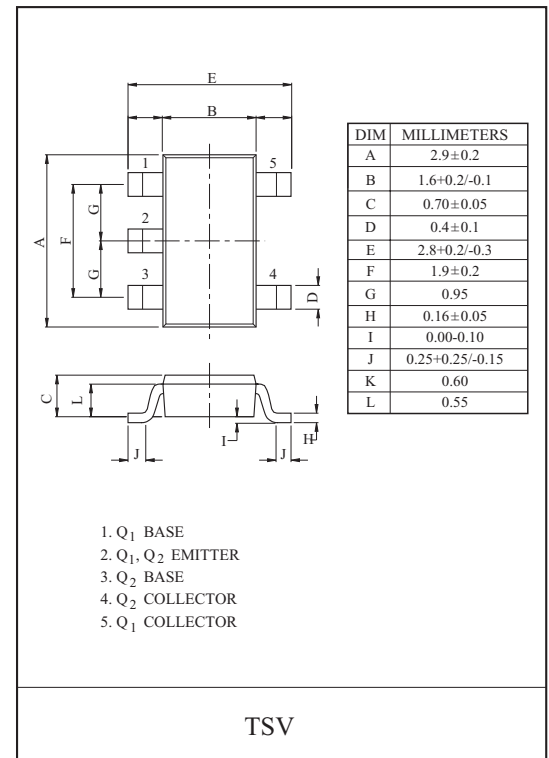
#### FEATURES

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

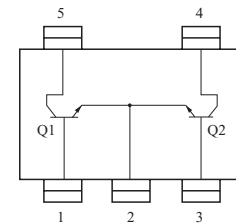
#### MAXIMUM RATING (Ta=25 °C)

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 (600mm<sup>2</sup> × 0.8mm)



#### EQUIVALENT CIRCUIT(TOP VIEW)



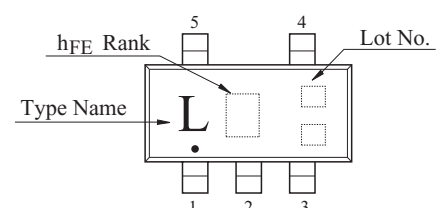
#### ELECTRICAL CHARACTERISTICS (Ta=25 °C)

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	$f_T$	$V_{CE}=6V, I_C=20\text{mA}$	-	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

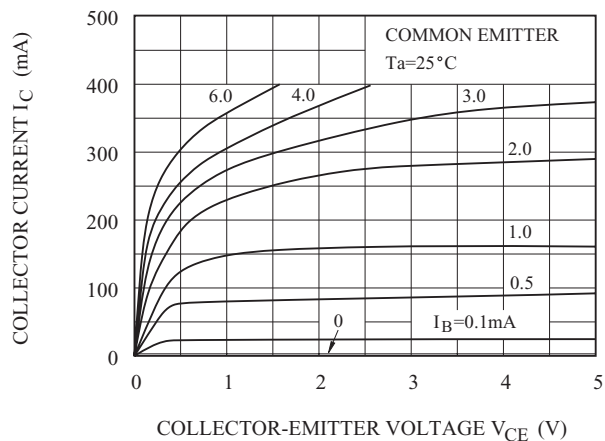
$h_{FE}(2)$  Classification 0:25Min., Y:40Min.

#### Marking

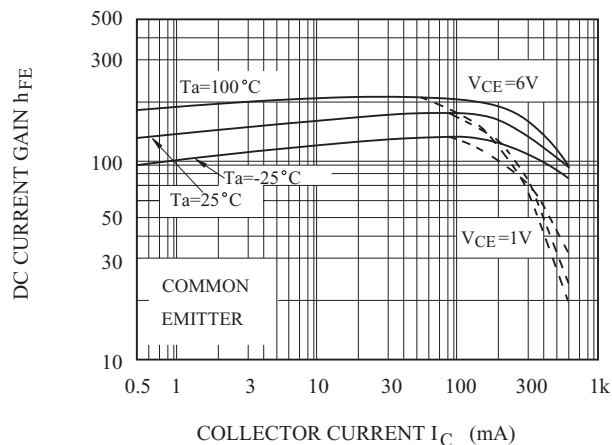


# KTC611T

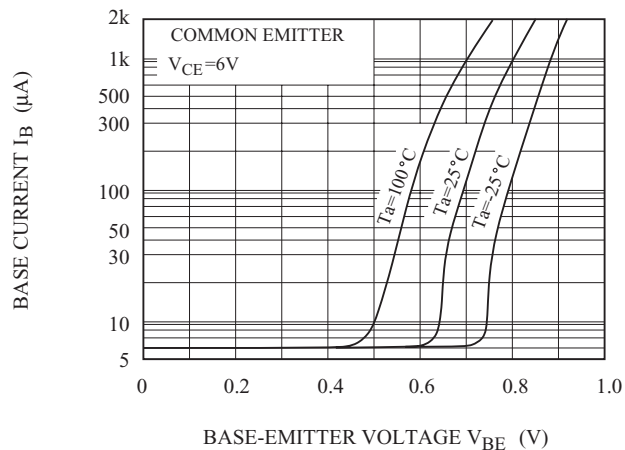
$I_C - V_{CE}$



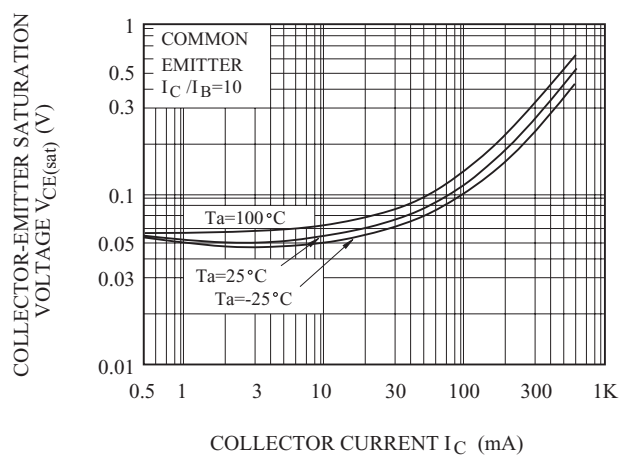
$h_{FE} - I_C$



$I_B - V_{BE}$



$V_{CE(sat)} - I_C$



$P_c - T_a$

