KEC

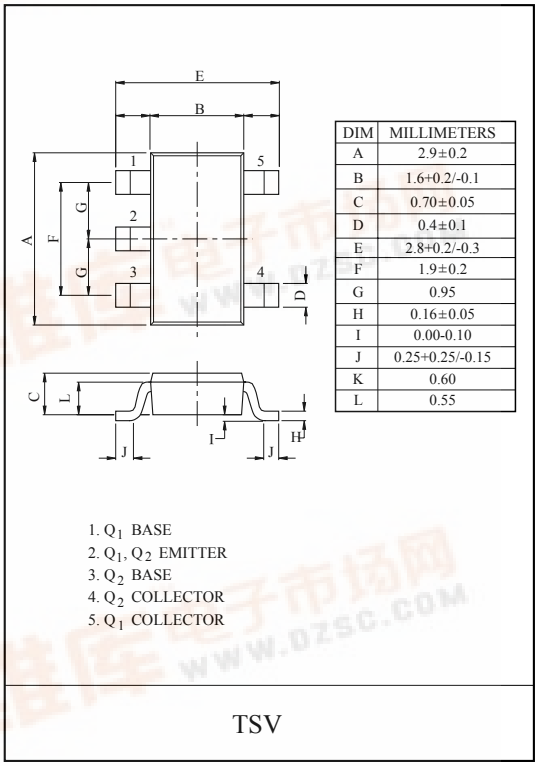
SEMICONDUCTOR
TECHNICAL DATA

KTA511T
EPITAXIAL PLANAR PNP TRANSISTOR

GENERAL PURPOSE APPLICATION.
SWITCHING APPLICATION.

FEATURES

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



DIM	MILLIMETERS
A	2.9±0.2
B	1.6+0.2/-0.1
C	0.70±0.05
D	0.4±0.1
E	2.8+0.2/-0.3
F	1.9±0.2
G	0.95
H	0.16±0.05
I	0.00-0.10
J	0.25+0.25/-0.15
K	0.60
L	0.55

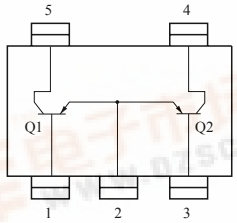
TSV

MAXIMUM RATING (Ta=25℃)

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	℃
Storage Temperature Range	T_{stg}	-55～150	℃

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

EQUIVALENT CIRCUIT(TOP VIEW)

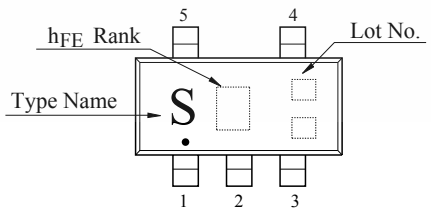


ELECTRICAL CHARACTERISTICS (Ta=25℃)

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

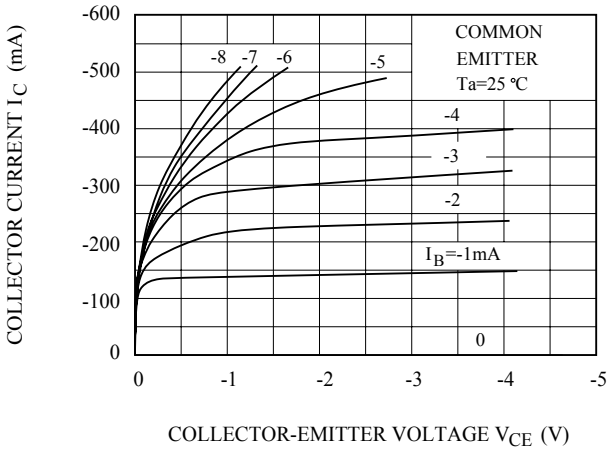
Note : $h_{FE}(1)$ Classification 0:70～140, Y:120～240
$h_{FE}(2)$ Classification 0:25Min., Y:40Min.

Marking

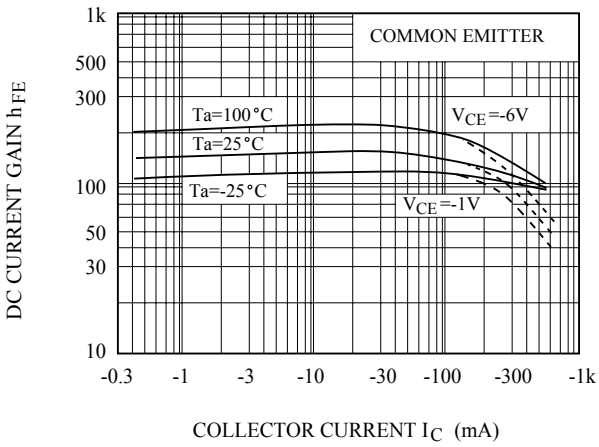


KTA511T

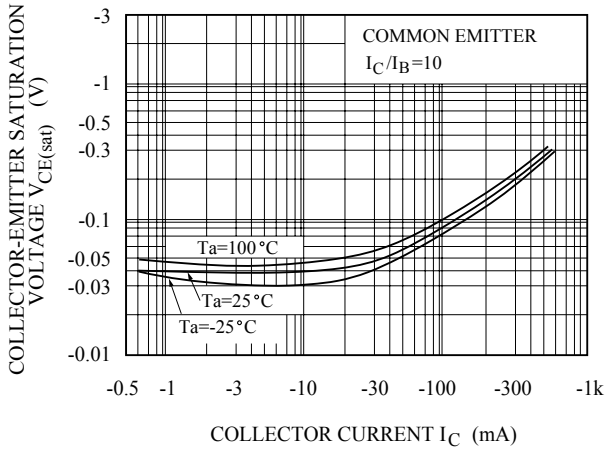
I_C - V_{CE}



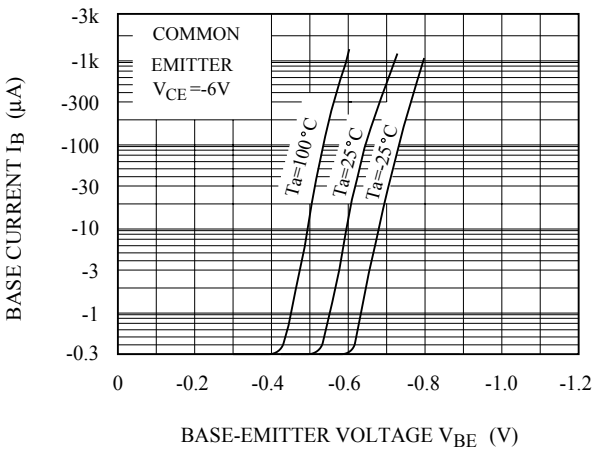
h_{FE} - I_C



$V_{CE(sat)}$ - I_C



I_B - V_{BE}



Pc - Ta