

HIGH CURRENT APPLICATION.

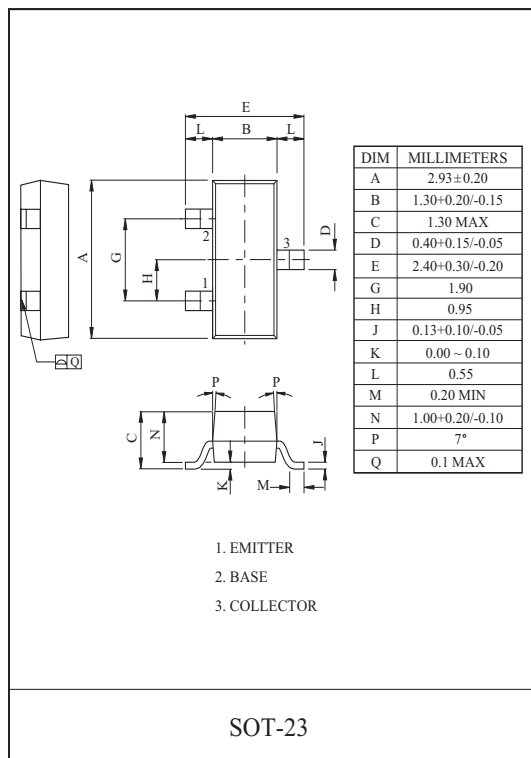
### FEATURE

- Complementary to KTC8550S.
- Suffix U : Qualified to AEC-Q101.  
ex) KTC8050S-C-RTK/PU

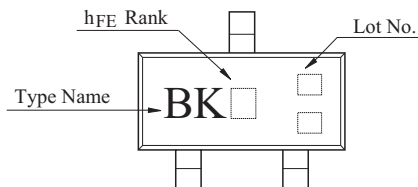
### MAXIMUM RATING (Ta=25 °C)

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	$I_C$	800	mA
Emitter Current	$I_E$	-800	mA
Collector Power Dissipation	$P_C^*$	350	mW
Junction Temperature	$T_j$	150	
Storage Temperature Range	$T_{stg}$	-55 ~ 150	

\*  $P_C$  : Package Mounted On 99.5% Alumina (10 × 8 × 0.6mm)



### Marking



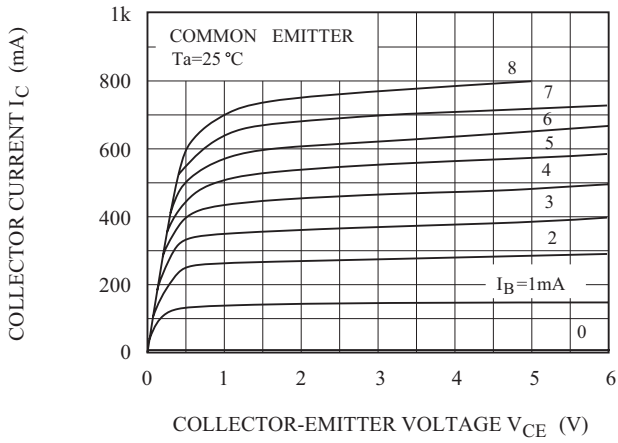
### ELECTRICAL CHARACTERISTICS (Ta=25 °C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=15V, I_E=0$	-	-	50	nA
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=0.5mA, I_E=0$	35	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	30	-	-	V
DC Current Gain	$h_{FE(1)}$ (Note)	$V_{CE}=1V, I_C=50mA$	100	-	300	
	$h_{FE(2)}$	$V_{CE}=1V, I_C=350mA$	60	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500mA, I_B=20mA$	-	-	0.5	V
Base-Emitter Voltage	$V_{BE}$	$V_{CE}=1V, I_C=500mA$	-	-	1.2	V
Transition Frequency	$f_T$	$V_{CE}=5V, I_C=10mA$	-	120	-	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB}=10V, f=1MHz, I_E=0$	-	13	-	pF

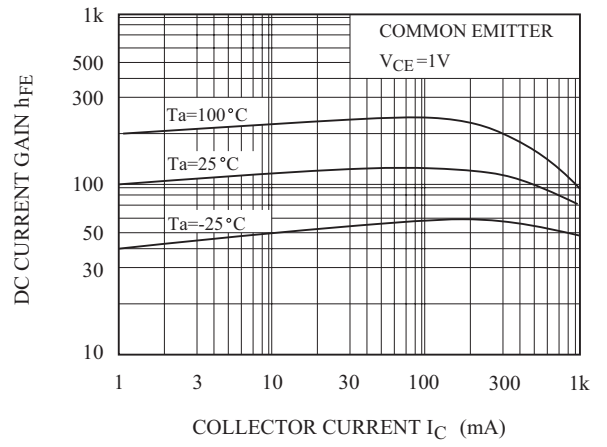
Note :  $h_{FE(1)}$  Classification C : 100 ~ 200, D : 150 ~ 300

# KTC8050S

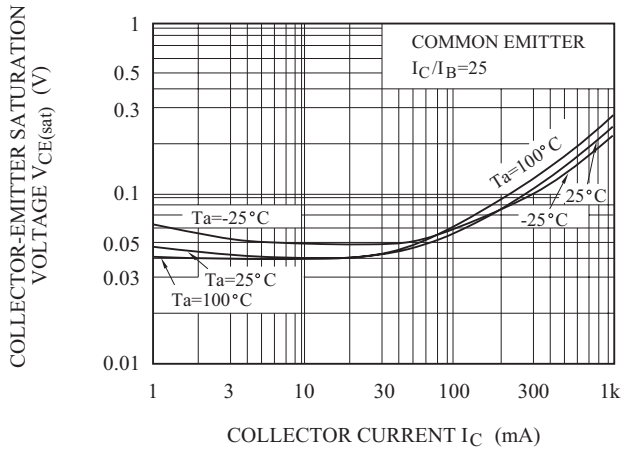
$I_C - V_{CE}$



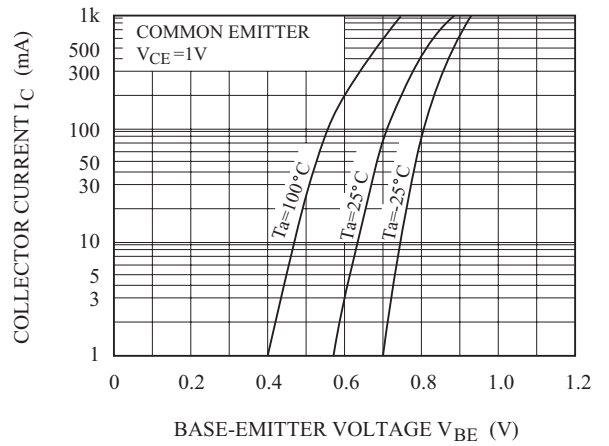
$h_{FE} - I_C$



$V_{CE(sat)} - I_C$



$I_C - V_{BE}$



$P_c - T_a$

