

GENERAL PURPOSE APPLICATION.
SWITCHING APPLICATION.

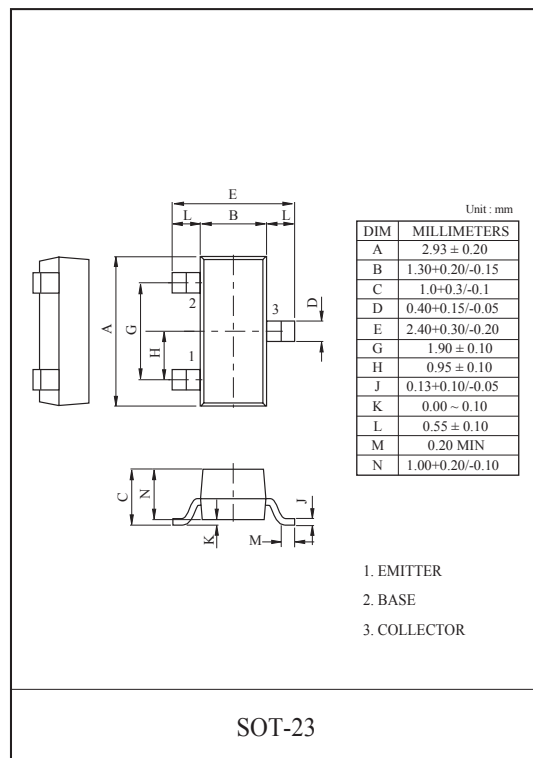
FEATURES

- Excellent h_{FE} Linearity.
- Complementary to KTC9013S.
- Suffix U : Qualified to AEC-Q101.
ex) KTC9012S-G-RTK/PU

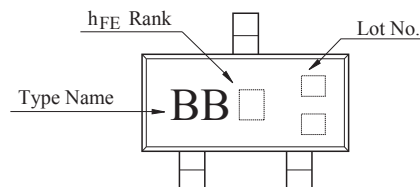
MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	-40	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 *	350	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55 ~ 150	°C

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



Marking

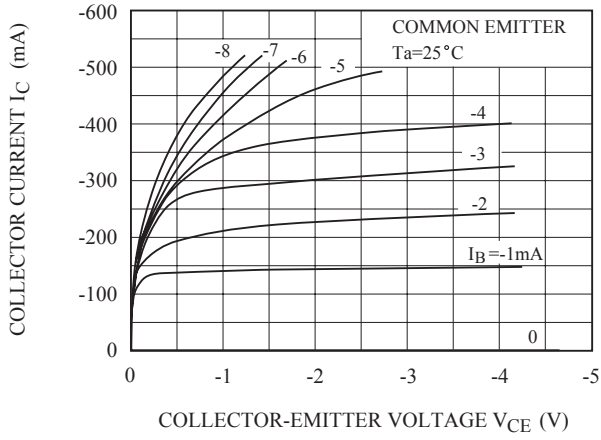


ELECTRICAL CHARACTERISTICS (Ta=25°C)

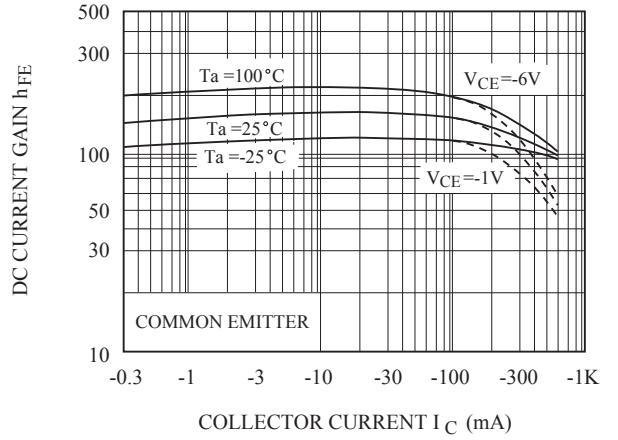
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=-35V, I_E=0$	-	-	-0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=-5V, I_C=0$	-	-	-0.1	μA
DC Current Gain	h_{FE} (Note)	$V_{CE}=-1V, I_C=-50mA$	96	-	246	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-100mA, I_B=-10mA$	-	-0.1	-0.25	V
Base-Emitter Voltage	V_{BE}	$I_C=-100mA, V_{CE}=-1V$	-	-0.8	-1.0	V
Transition Frequency	f_T	$V_{CE}=-6V, I_C=-20mA, f=100MHz$	150	-	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=-6V, I_E=0, f=1MHz$	-	7.0	-	pF

Note : h_{FE} Classification F:96 ~ 135, G:118 ~ 166, H:144 ~ 202, I:176 ~ 246

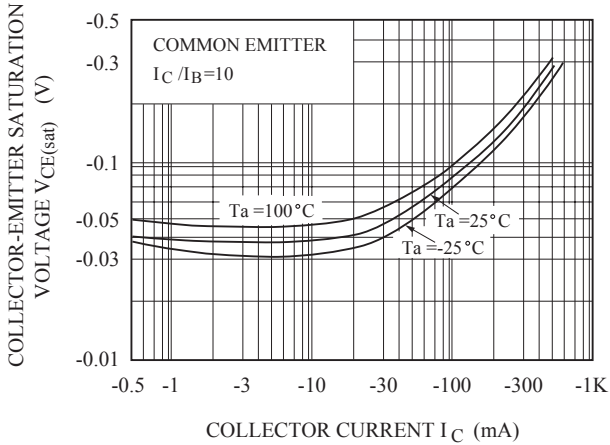
$I_C - V_{CE}$
(LOW VOLTAGE REGION)



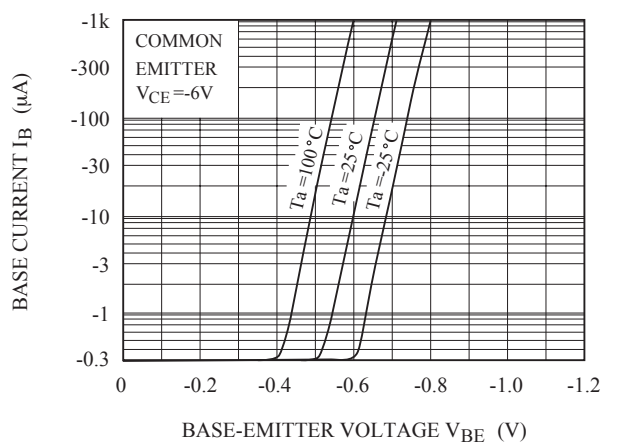
$h_{FE} - I_C$



$V_{CE(sat)} - I_C$



$I_B - V_{BE}$



$P_c - T_a$

