

GENERAL PURPOSE APPLICATION.
SWITCHING APPLICATION.

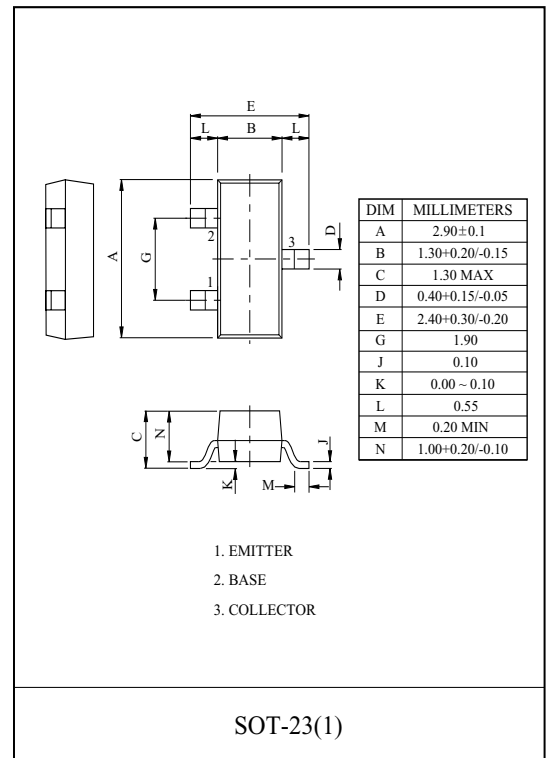
FEATURES

- Excellent h_{FE} Linearity.
- Complementary to KTC9012SC.

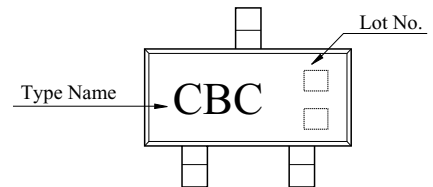
MAXIMUM RATING (Ta=25 °C)

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
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

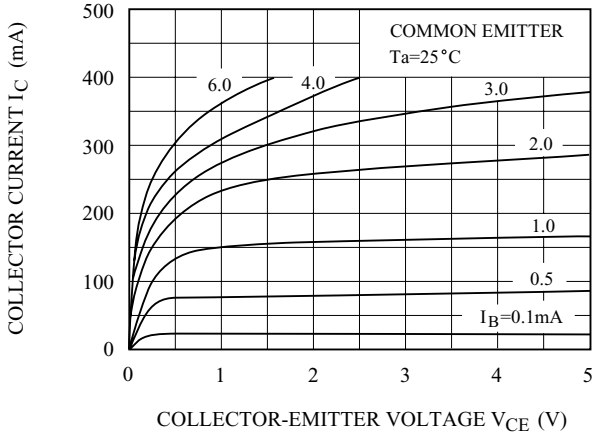


ELECTRICAL CHARACTERISTICS (Ta=25 °C)

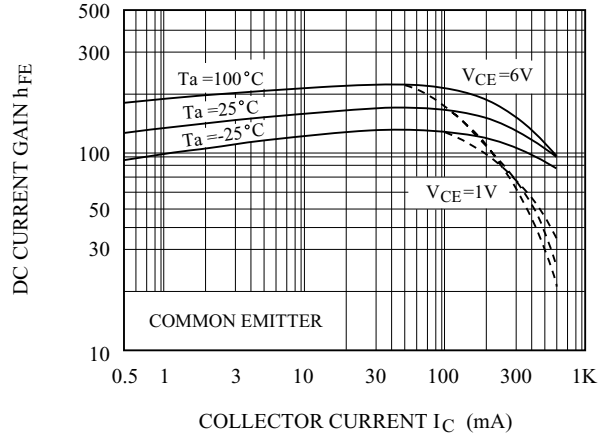
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=0.05mA, I_E=0$	70	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	30	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=0.05mA, I_C=0$	6	-	-	V
Collector Cut-off Current	I_{CBO}	$V_{CB}=40V, I_E=0$	-	-	0.1	uA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5V, I_C=0$	-	-	0.1	uA
DC Current Gain	h_{FE}	$V_{CE}=1V, I_C=50mA$	200	-	300	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500mA, I_B=50mA$	-	-	0.6	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=500mA, I_B=50mA$	-	-	1.2	V
Transition Frequency	f_T	$V_{CE}=6V, I_C=20mA, f=30MHz$	150	-	-	MHz

KTC9013SC

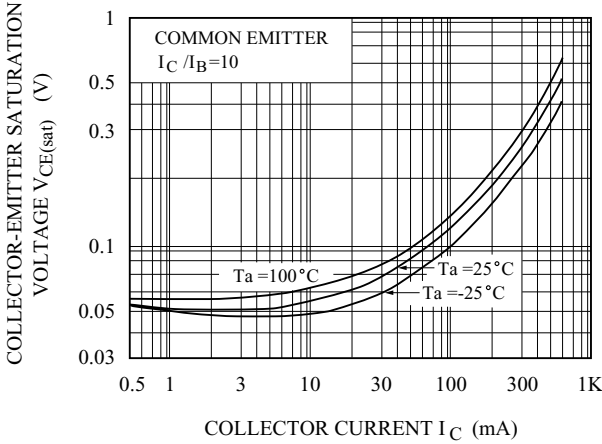
$I_C - V_{CE}$
(LOW VOLTAGE REGION)



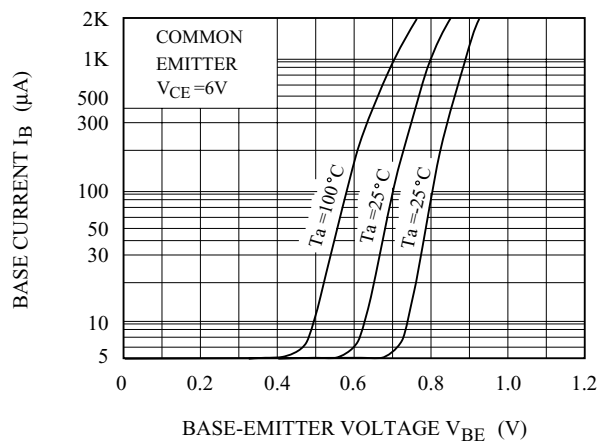
$h_{FE} - I_C$



$V_{CE(sat)} - I_C$



$I_B - V_{BE}$



$P_c - T_a$

