

GENERAL PURPOSE APPLICATION.
SWITCHING APPLICATION.

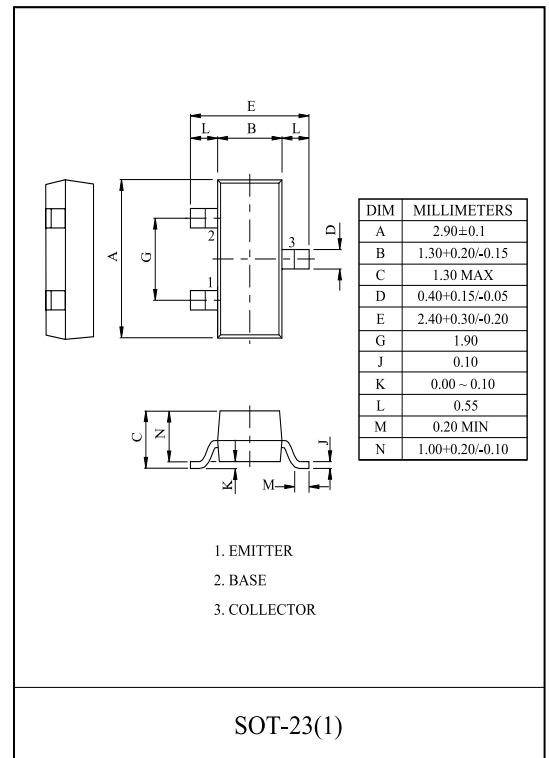
FEATURES

- Excellent h_{FE} Linearity.
- Complementary to KTC9013SC.

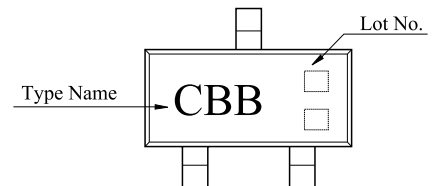
MAXIMUM RATING (Ta=25 °C)

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

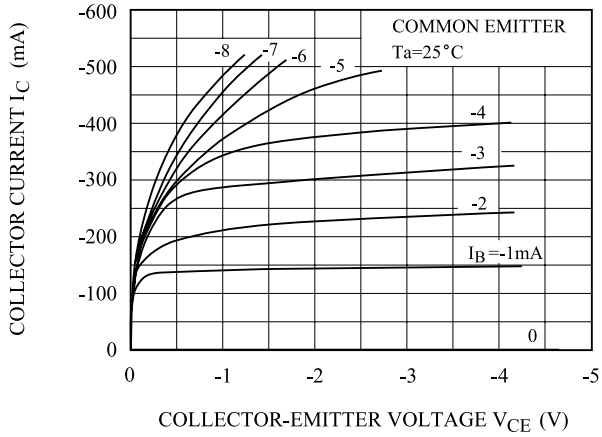


ELECTRICAL CHARACTERISTICS (Ta=25 °C)

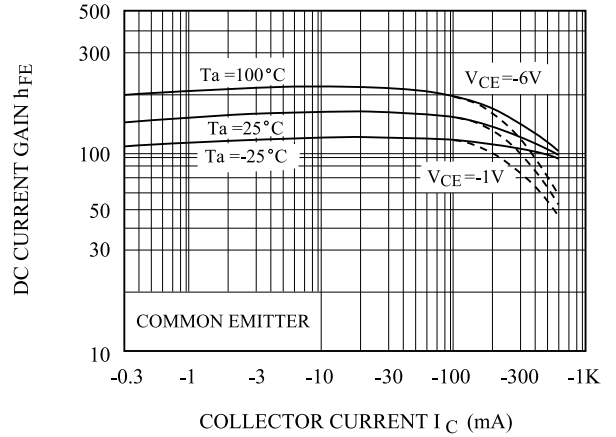
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = -0.05mA, I_E = 0$	-50	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -1mA, I_B = 0$	-30	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = -0.05mA, I_C = 0$	-8	-	-	V
Collector Cut-off Current	I_{CBO}	$V_{CB} = -35V, I_E = 0$	-	-	-0.1	uA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = -4V, I_C = 0$	-	-	-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

KTC9012SC

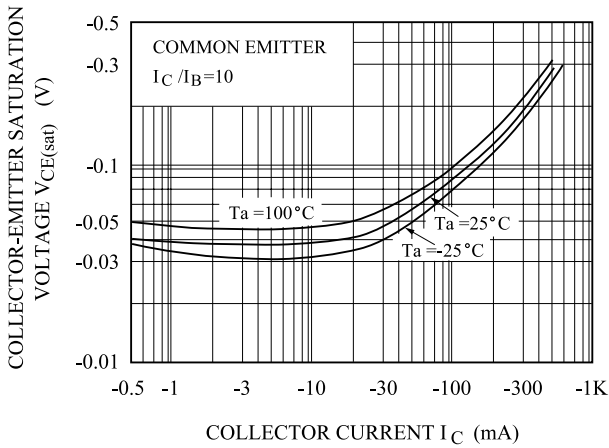
$I_C - V_{CE}$
(LOW VOLTAGE REGION)



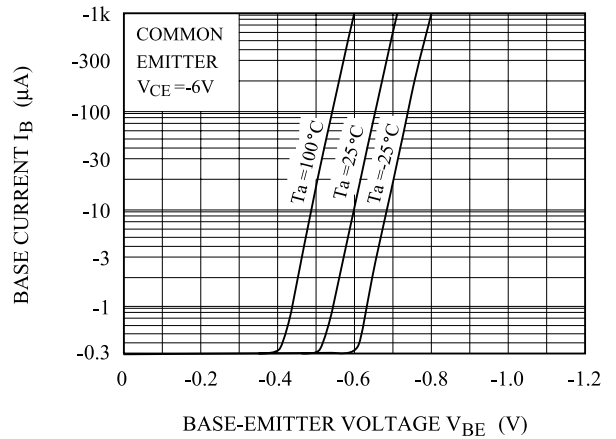
$h_{FE} - I_C$



$V_{CE(sat)} - I_C$



$I_B - V_{BE}$



$P_c - T_a$

