

GENERAL PURPOSE APPLICATION.  
SWITCHING APPLICATION.

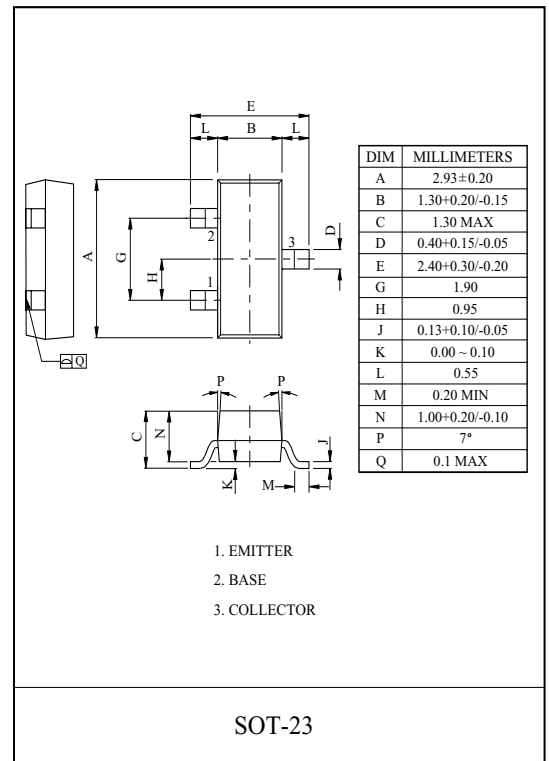
#### FEATURES

- Excellent  $h_{FE}$  Linearity  
:  $h_{FE}(I_C=-0.1mA)/h_{FE}(I_C=-2mA)=0.95(\text{Typ.})$ .
- Low Noise :NF=1dB(Typ.) at  $f=1\text{kHz}$ .
- Complementary to KTC9014S.

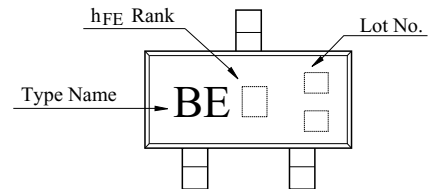
#### MAXIMUM RATING (Ta=25 °C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	-50	V
Collector-Emitter Voltage	$V_{CEO}$	-50	V
Emitter-Base Voltage	$V_{EBO}$	-5	V
Collector Current	$I_C$	-150	mA
Emitter Current	$I_E$	150	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



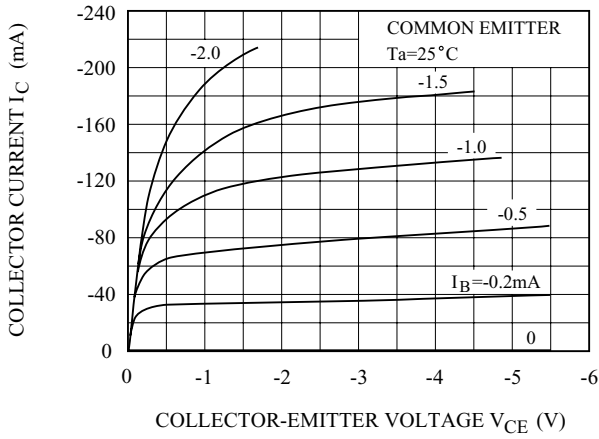
#### ELECTRICAL CHARACTERISTICS (Ta=25 °C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=-50V, I_E=0$	-	-	-50	nA
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=-5V, I_C=0$	-	-	-100	nA
DC Current Gain	$h_{FE}(\text{Note})$	$V_{CE}=-5V, I_C=-1mA$	100	-	600	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-100mA, I_B=-10mA$	-	-0.1	-0.3	V
Transition Frequency	$f_T$	$V_{CE}=-10V, I_C=-1mA, f=100\text{MHz}$	60	-	-	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB}=-10V, I_E=0, f=1\text{MHz}$	-	4.0	7.0	pF
Noise Figure	NF	$V_{CE}=-6V, I_C=-0.1mA, R_g=10k\Omega, f=1\text{kHz}$	-	1.0	10	dB

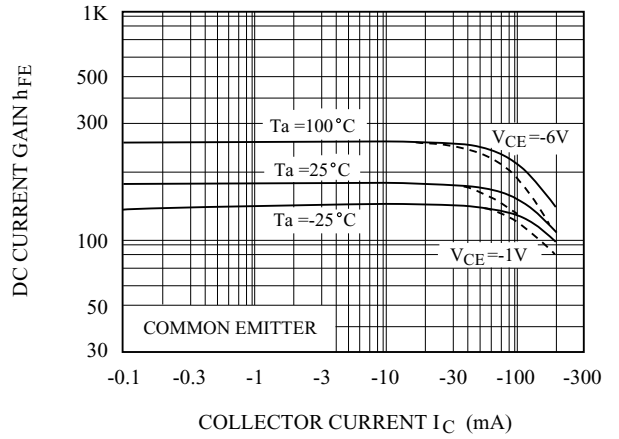
Note :  $h_{FE}$  Classification B:100 300, C:200 600

# KTC9015S

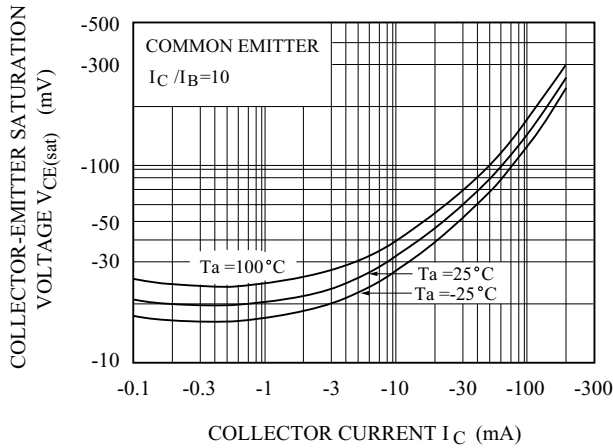
$I_C - V_{CE}$



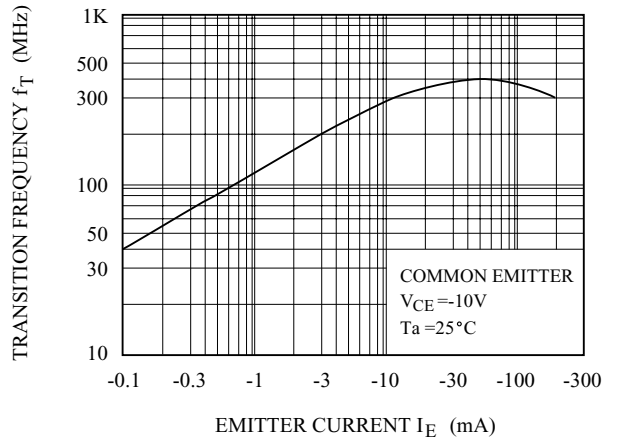
$h_{FE} - I_C$



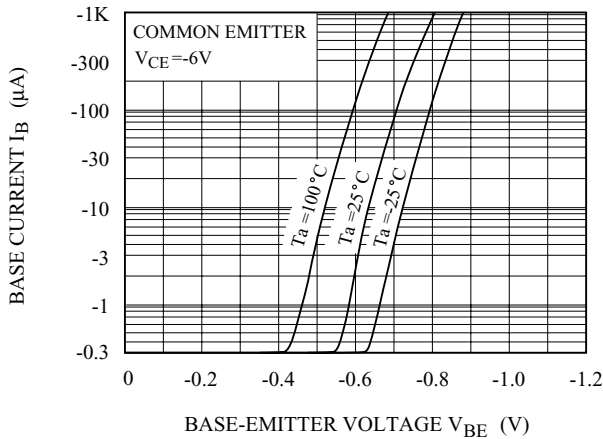
$V_{CE(sat)} - I_C$



$f_T - I_E$



$I_B - V_{BE}$



$P_c - T_a$

