

HIGH VOLTAGE CONTROL APPLICATIONS.  
PLASMA DISPLAY, NIXIE TUBE DRIVER APPLICATIONS.  
CATHODE RAY TUBE BRIGHTNESS CONTROL APPLICATIONS.

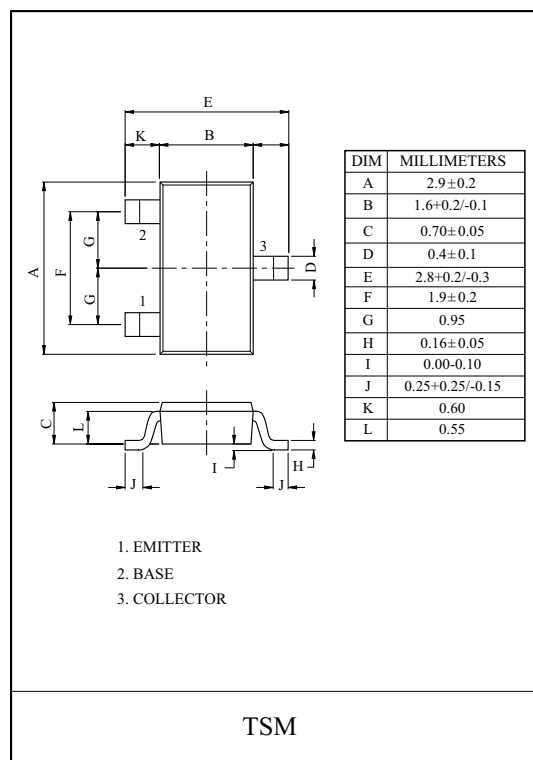
### FEATURES

- High Voltage :  $V_{CBO}=-300V$ ,  $V_{CEO}=-300V$
- Low Saturation Voltage :  $V_{CE(sat)}=-0.5V(\text{Max.})$
- Small Collector Output Capacitance :  $C_{ob}=5.5pF(\text{Typ.})$
- Complementary to KTC3207T.

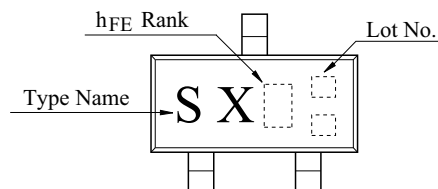
### MAXIMUM RATINGS (Ta=25 °C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	-300	V
Collector-Emitter Voltage	$V_{CEO}$	-300	V
Emitter-Base Voltage	$V_{EBO}$	-5	V
Collector Current	$I_C$	-100	mA
Base Current	$I_B$	-20	mA
Collector Power Dissipation	$P_C^*$	0.9	W
Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_{stg}$	-55 ~ 150	°C

\* Package mounted on a ceramic board (600mm<sup>2</sup> × 0.8mm)



### Marking



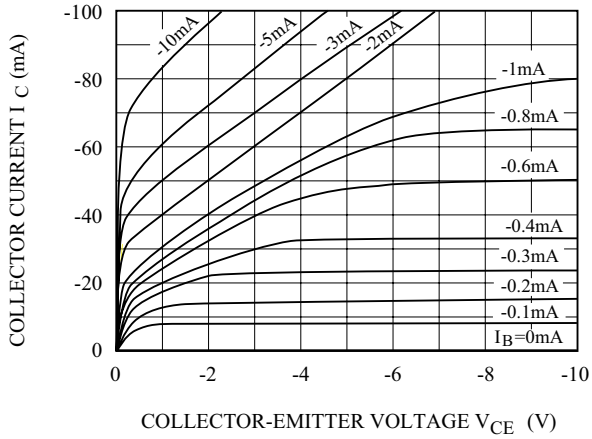
### ELECTRICAL CHARACTERISTICS (Ta=25 °C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=-300V$ , $I_E=0$	-	-	-0.1	μA
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=-5V$ , $I_C=0$	-	-	-0.1	μA
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=-0.1mA$ , $I_E=0$	-300	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=-1mA$ , $I_B=0$	-300	-	-	V
DC Current Gain	$h_{FE(1)}$	$V_{CE}=-10V$ , $I_C=-1mA$	30	-	-	
	$h_{FE(2)}$ (Note)	$V_{CE}=-10V$ , $I_C=-20mA$	50	-	200	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-20mA$ , $I_B=-2mA$	-	-	-0.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=-20mA$ , $I_B=-2mA$	-	-	-1.2	V
Transition Frequency	$f_T$	$V_{CE}=-10V$ , $I_C=-20mA$	50	55	-	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB}=-20V$ , $I_E=0$ , $f=1MHz$	-	5.5	6.0	pF

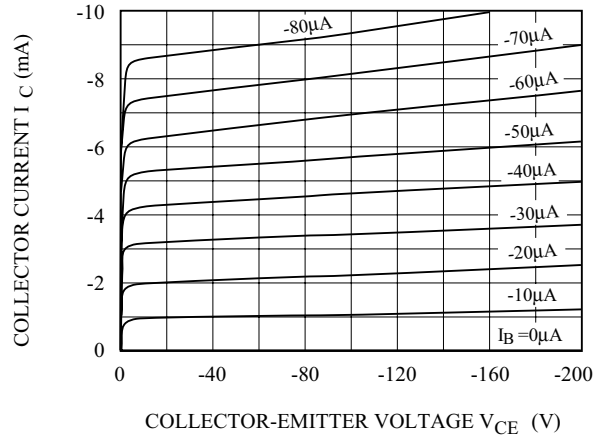
Note :  $h_{FE(1)}$  Classification O:50 ~ 150, Y:100~200

# KTA1073T

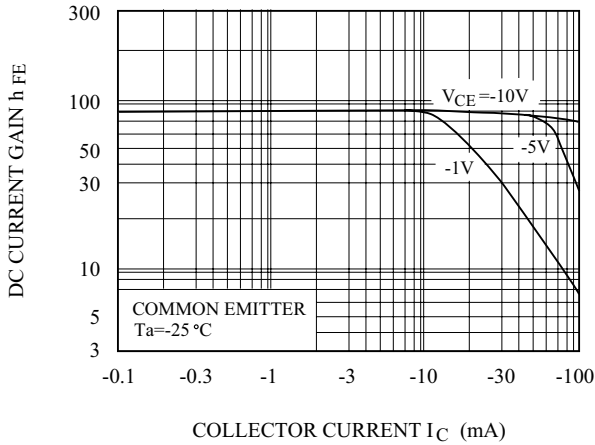
$I_C - V_{CE}$  (LOW VOLTAGE REGION)



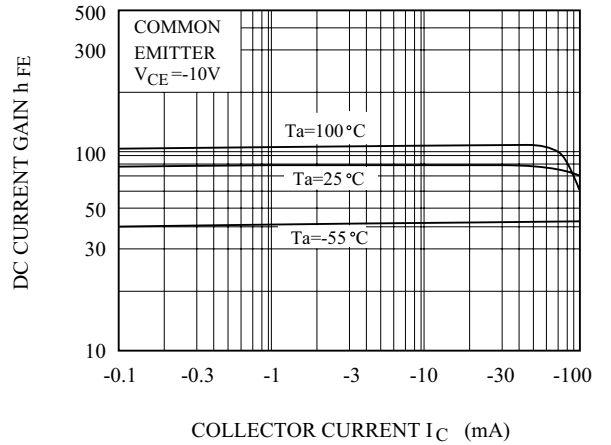
$I_C - V_{CE}$  (LOW CURRENT REGION)



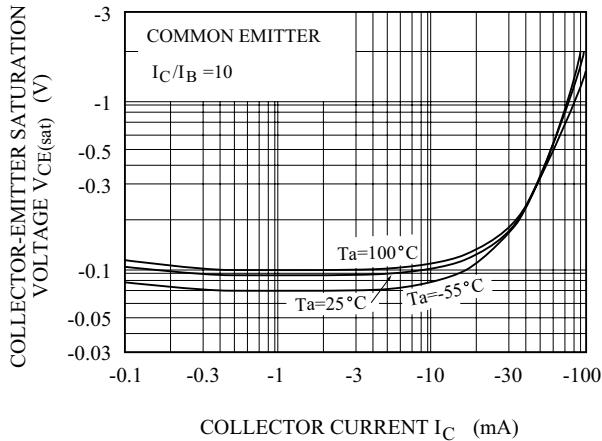
$h_{FE} - I_C$



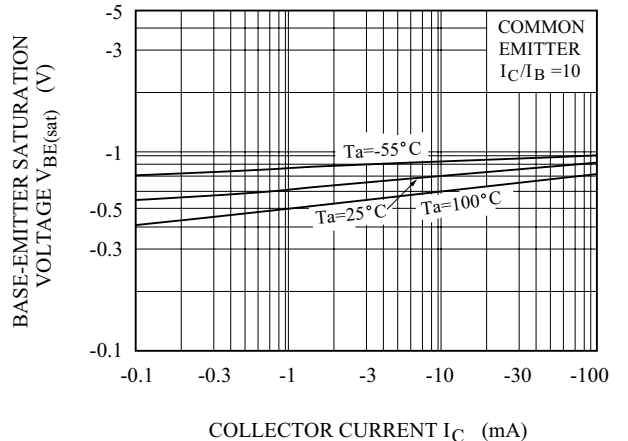
$h_{FE} - I_C$



$V_{CE(sat)} - I_C$



$V_{BE(sat)} - I_C$



# KTA1073T

