

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

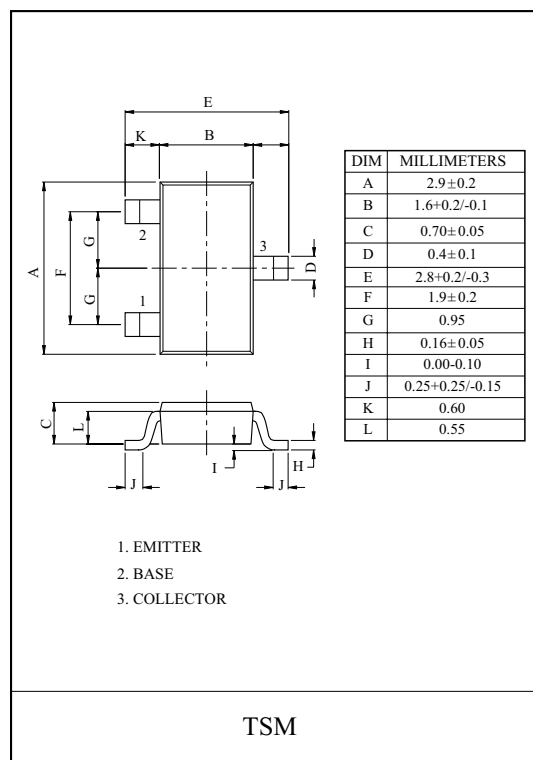
FEATURES

- 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.

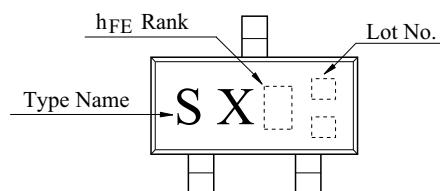
MAXIMUM RATINGS ($T_a=25^\circ\text{C}$)

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	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 ~ 150	$^\circ\text{C}$

* Package mounted on a ceramic board ($600\text{mm}^2 \times 0.8\text{mm}$)



Marking

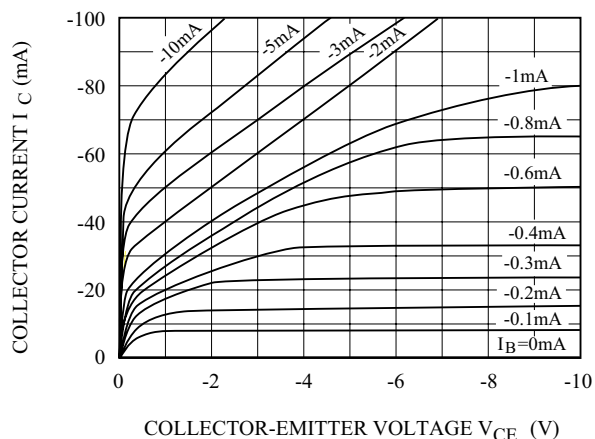
ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

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	$V_{(BR)CBO}$	$I_C=-0.1\text{mA}$, $I_E=0$	-300	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=-1\text{mA}$, $I_B=0$	-300	-	-	V
DC Current Gain	$h_{FE}(1)$	$V_{CE}=-10V$, $I_C=-1\text{mA}$	30	-	-	
	$h_{FE}(2)$ (Note)	$V_{CE}=-10V$, $I_C=-20\text{mA}$	50	-	200	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-20\text{mA}$, $I_B=-2\text{mA}$	-	-	-0.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=-20\text{mA}$, $I_B=-2\text{mA}$	-	-	-1.2	V
Transition Frequency	f_T	$V_{CE}=-10V$, $I_C=-20\text{mA}$	50	55	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=-20V$, $I_E=0$, $f=1\text{MHz}$	-	5.5	6.0	pF

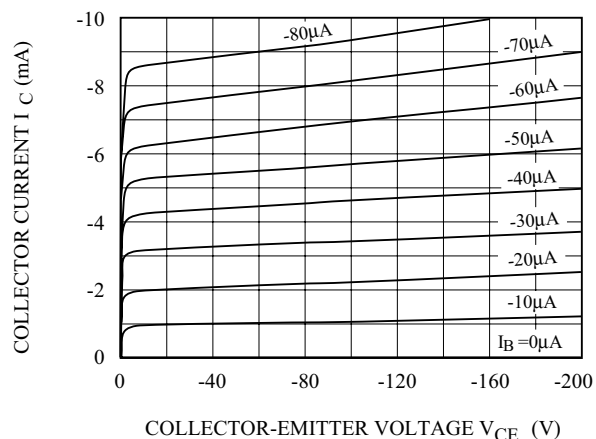
Note : $h_{FE}(1)$ Classification O:50 ~ 150, Y:100~200

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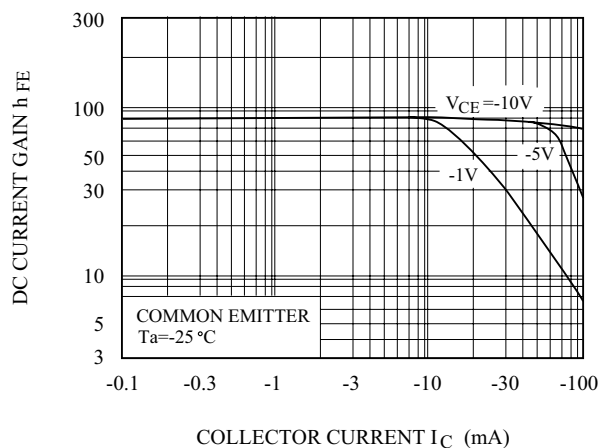
$I_C - V_{CE}$ (LOW VOLTAGE REGION)



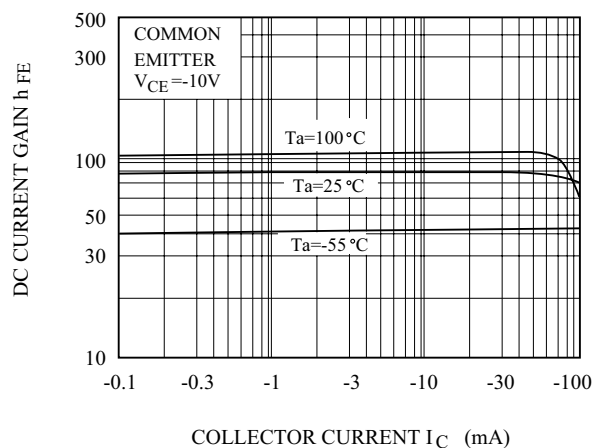
$I_C - V_{CE}$ (LOW CURRENT REGION)



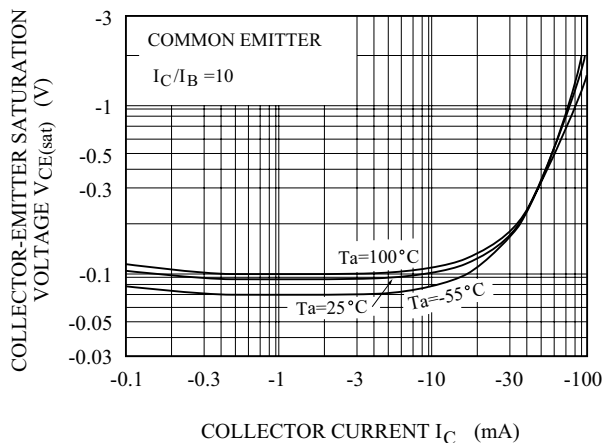
$h_{FE} - I_C$



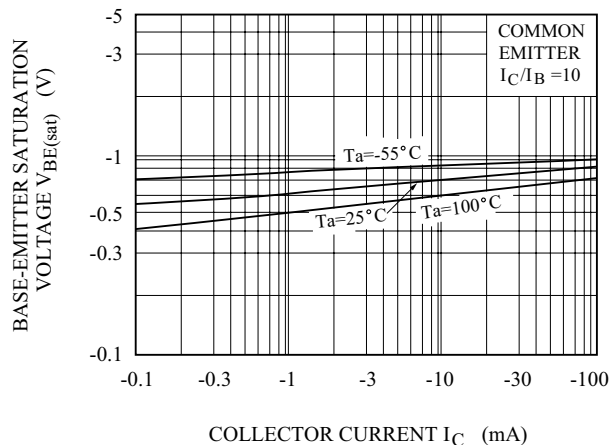
$h_{FE} - I_C$



$V_{CE(sat)} - I_C$



$V_{BE(sat)} - I_C$



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