

**SEMICONDUCTOR
TECHNICAL DATA**

KTA1505

EPITAXIAL PLANAR PNP TRANSISTOR

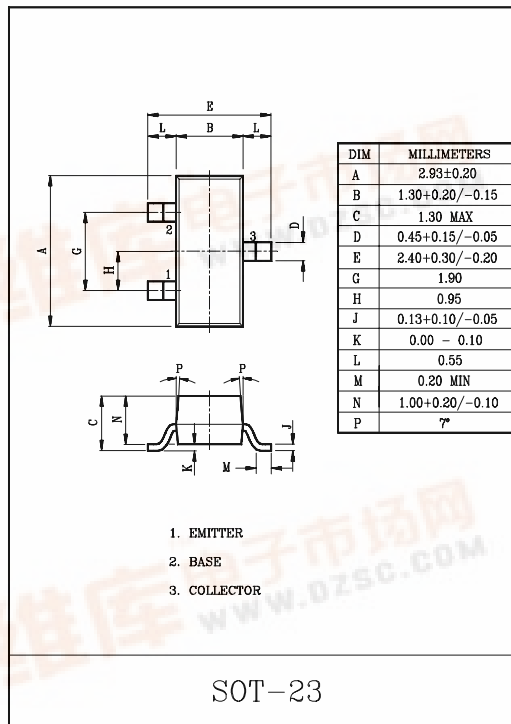
GENERAL PURPOSE APPLICATION.
SWITCHING APPLICATION.

FEATURES

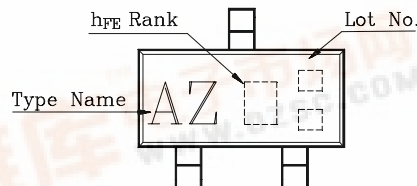
- Excellent h_{FE} Linearity
: $h_{FE(2)}=25(\text{Min.})$ at $V_{CE}=-6V, I_C=-400\text{mA}$.
- Complementary to KTC3876.

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	-35	V
Collector-Emitter Voltage	V_{CEO}	-30	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-500	mA
Base Current	I_B	-50	mA
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55~150	$^\circ\text{C}$



Marking



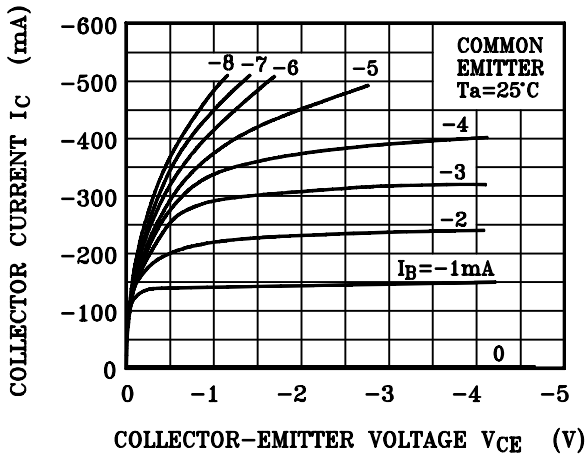
ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=-35V, I_E=0$	-	-	-0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=-5V, I_C=0$	-	-	-0.1	μA
DC Current Gain (Note)	$h_{FE(1)}$	$V_{CE}=-1V, I_C=-100\text{mA}$	70	-	400	
	$h_{FE(2)}$	$V_{CE}=-6V, I_C=-400\text{mA}$	25	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-100\text{mA}, I_B=-10\text{mA}$	-	-0.1	-0.25	V
Base-Emitter Voltage	V_{BE}	$V_{CE}=-1V, I_C=-100\text{mA}$	-	-0.8	-1.0	V
Transition Frequency	f_T	$V_{CE}=-6V, I_C=-20\text{mA}$	-	200	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=-6V, I_E=0, f=1\text{MHz}$	-	13	-	pF

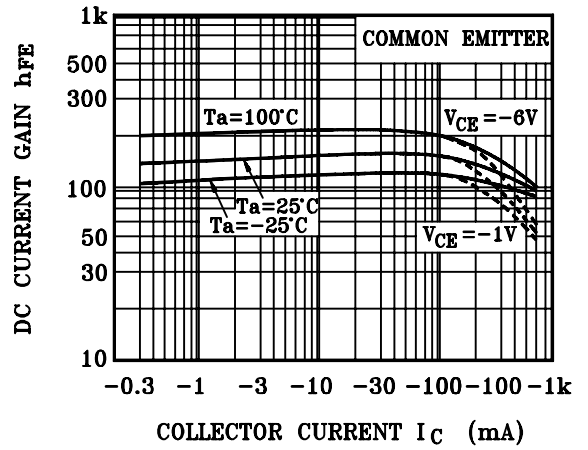
(Note) : $h_{FE(1)}$ Classification O:70~140 Y:120~240 GR:200~400
 $h_{FE(2)}$ Classification O:25Min. Y:40Min.

KTA1505

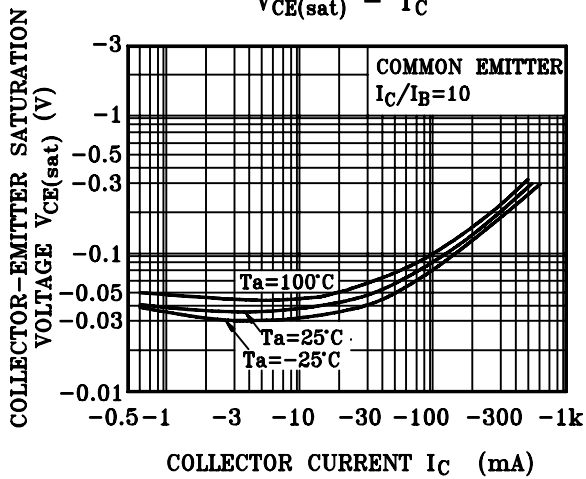
$I_C - V_{CE}$ (LOW VOLTAGE REGION)



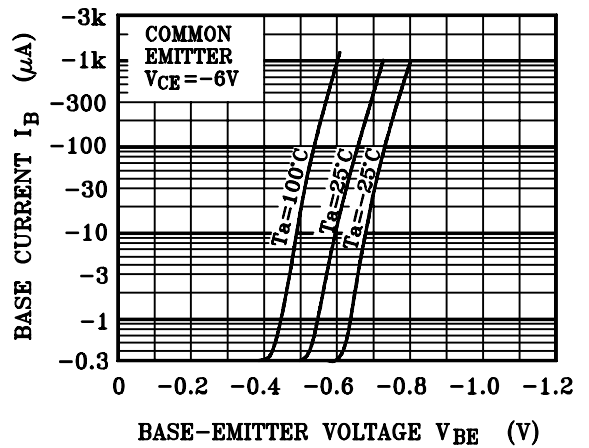
$h_{FE} - I_C$



$V_{CE(sat)} - I_C$



$I_B - V_{BE}$



$P_C - T_a$

