

LOW FREQUENCY POWER AMP, CONVERTER
ELECTRONIC GOVERNOR APPLICATIONS

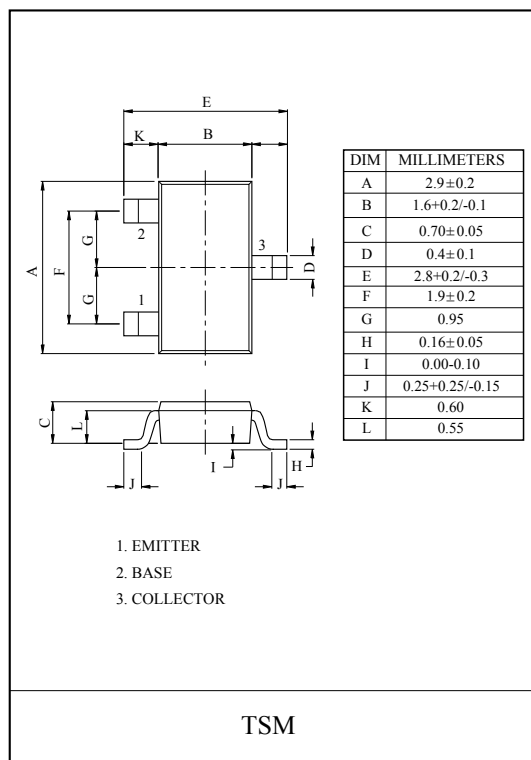
FEATURES

- Low Saturation Voltage
: $V_{CE(sat)}=0.3V(\text{Max.})$ at $I_C=0.5A$.
- Complementary to KTA1531T.

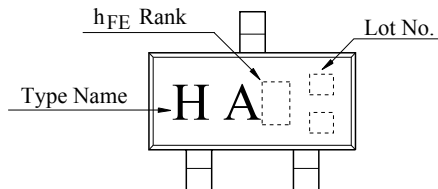
MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	30	V
Collector-Emitter Voltage	V_{CEO}	20	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	1	A
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 (600mm² × 0.8mm)



Marking



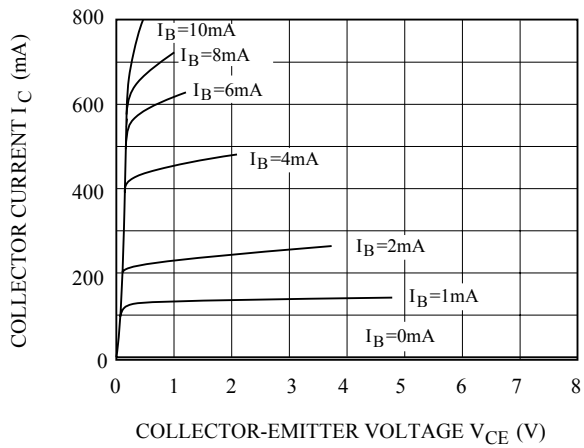
ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=20V, I_E=0$	-	-	0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5V, I_C=0$	-	-	0.1	μA
DC Current Gain	$h_{FE}(1)$ (Note)	$V_{CE}=2V, I_C=50mA$	120	-	400	
	$h_{FE}(2)$	$V_{CE}=2V, I_C=1A(\text{Pulse})$	30	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500mA, I_B=50mA$	-	0.1	0.3	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=500mA, I_B=50mA$	-	0.85	1.2	V
Transition Frequency	f_T	$V_{CE}=10V, I_C=50mA$	-	180	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$	-	15	-	pF

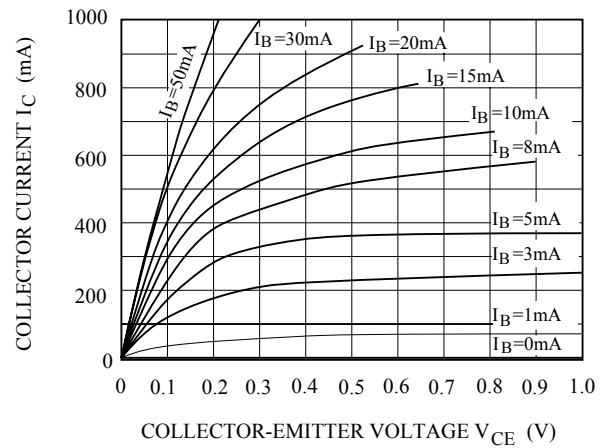
Note : h_{FE} Classification Y:120 ~ 240, GR(G):200 ~ 400

KTC3531T

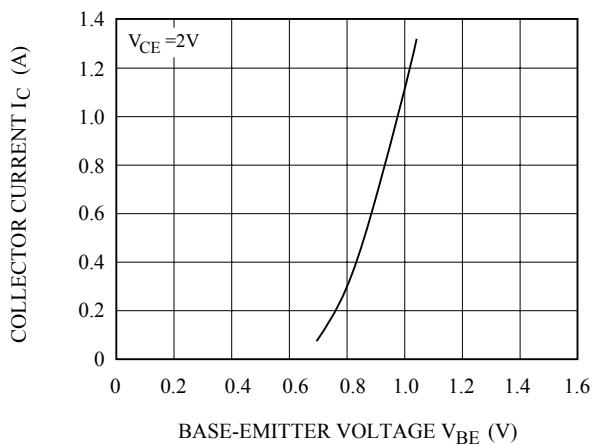
$I_C - V_{CE}$



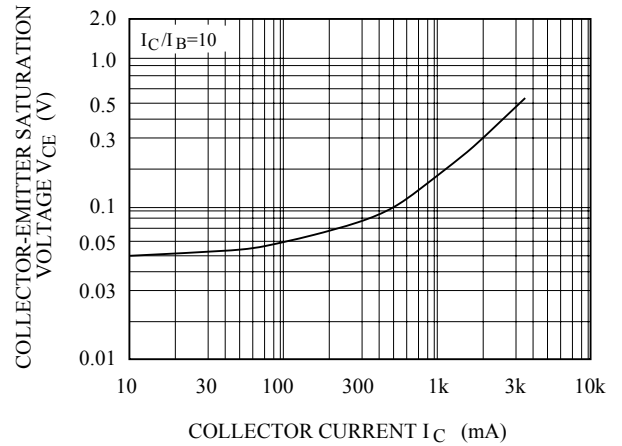
$I_C - V_{CE}$



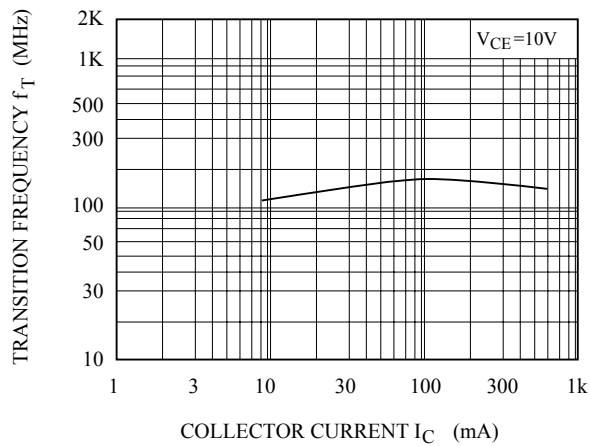
$I_C - V_{BE}$



$V_{CE(sat)} - I_C$



$f_T - I_C$



$h_{FE} - I_C$

