

LOW FREQUENCY POWER AMP, CONVERTER  
ELECTRONIC GOVERNOR APPLICATIONS

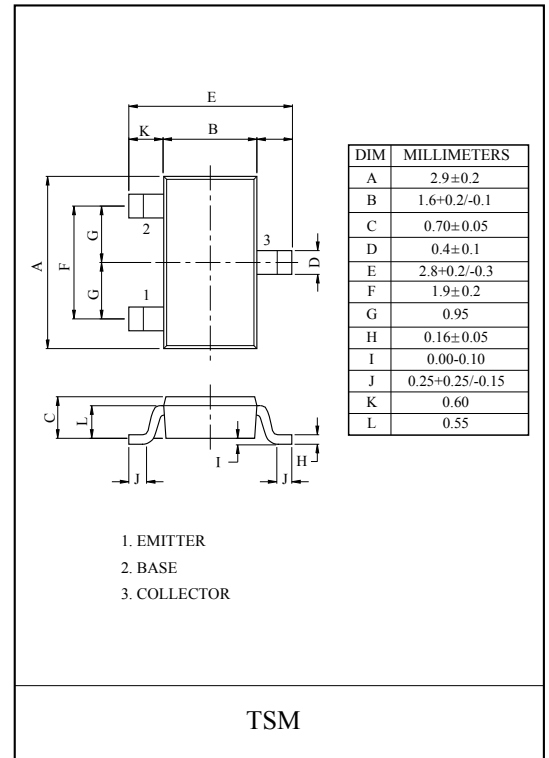
### FEATURES

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

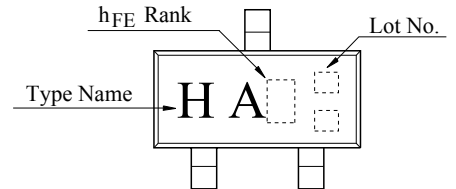
### MAXIMUM RATING (Ta=25°C)

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 (600mm<sup>2</sup> × 0.8mm)



### Marking



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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=20V, I_E=0$	-	-	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

