

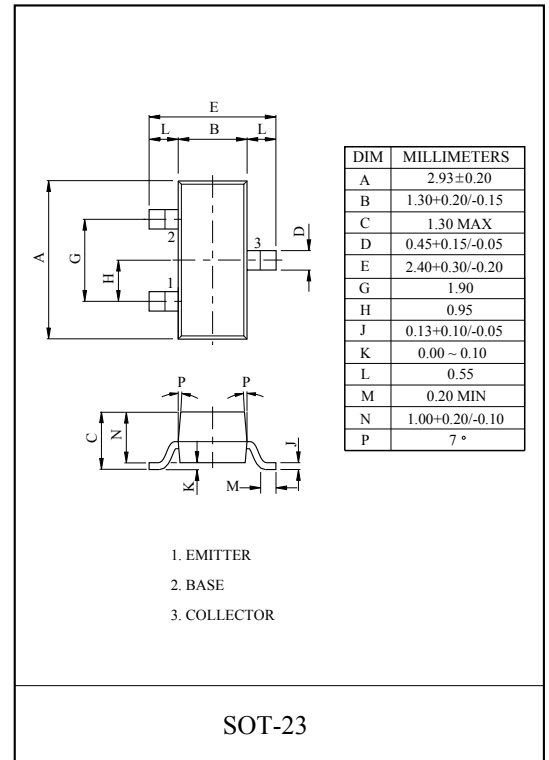
LOW FREQUENCY POWER AMPLIFIER APPLICATION.  
POWER SWITCHING APPLICATION.

### FEATURES

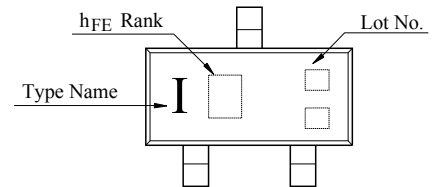
- High DC Current Gain :  $h_{FE}=100 \sim 320$ .
- Low Saturation Voltage  
:  $V_{CE(sat)}=-0.4V(\text{Max.})$  ( $I_C=-500\text{mA}$ ,  $I_B=-20\text{mA}$ ).
- Suitable for Driver Stage of Small Motor.
- Complementary to KTC3265.
- Small Package.

### MAXIMUM RATING (Ta=25°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           | $I_C$     | -800      | mA   |
| Base Current                | $I_B$     | -160      | mA   |
| Collector Power Dissipation | $P_C$     | 200       | mW   |
| Junction Temperature        | $T_j$     | 150       | °C   |
| Storage Temperature Range   | $T_{stg}$ | -55 ~ 150 | °C   |



### Marking



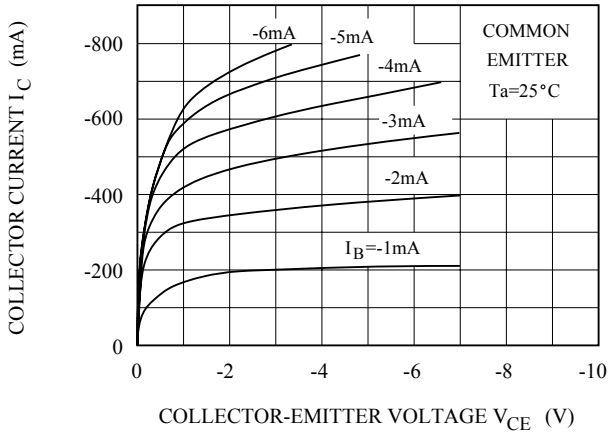
### ELECTRICAL CHARACTERISTICS (Ta=25°C)

| CHARACTERISTIC                       | SYMBOL             | TEST CONDITION                            | MIN. | TYP. | MAX. | UNIT |
|--------------------------------------|--------------------|---|------|------|------|------|
| Collector Cut-off Current            | $I_{CBO}$          | $V_{CB}=-30V$ , $I_E=0$                   | -    | -    | -100 | nA   |
| Emitter Cut-off Current              | $I_{EBO}$          | $V_{EB}=-5V$ , $I_C=0$                    | -    | -    | -100 | nA   |
| Collector-Emitter Breakdown Voltage  | $V_{(BR)CEO}$      | $V_{EB}=-10\text{mA}$ , $I_B=0$           | -30  | -    | -    | V    |
| Emitter-Base Breakdown Voltage       | $V_{(BR)EBO}$      | $I_E=-1\text{mA}$ , $I_C=0$               | -5.0 | -    | -    | V    |
| DC Current Gain                      | $h_{FE(1)}$ (Note) | $V_{CE}=-1V$ , $I_C=-100\text{mA}$        | 100  | -    | 320  |      |
|                                      | $h_{FE(2)}$        | $V_{CE}=-1V$ , $I_C=-800\text{mA}$        | 40   | -    | -    |      |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$      | $I_C=-500\text{mA}$ , $I_B=-20\text{mA}$  | -    | -    | -0.4 | V    |
| Base-Emitter Voltage                 | $V_{BE}$           | $V_{CE}=-1V$ , $I_C=-10\text{mA}$         | -0.5 | -    | -0.8 | V    |
| Transition Frequency                 | $f_T$              | $V_{CE}=-5V$ , $I_C=-10\text{mA}$         | -    | 120  | -    | MHz  |
| Collector Output Capacitance         | $C_{ob}$           | $V_{CB}=-10V$ , $I_E=0$ , $f=1\text{MHz}$ | -    | 13   | -    | pF   |

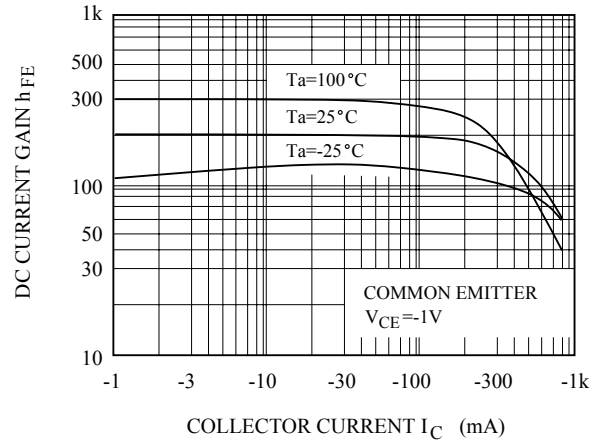
Note :  $h_{FE(1)}$  Classification O:100 ~ 200, Y:160 ~ 320

# KTA1298

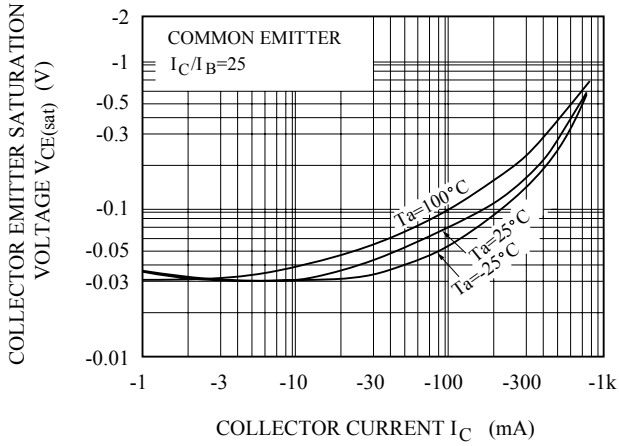
$I_C - V_{CE}$



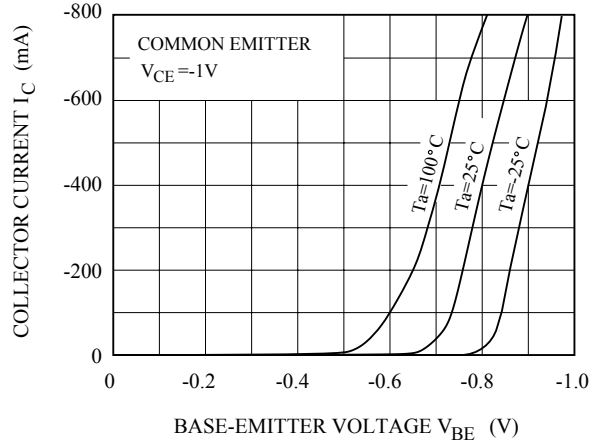
$h_{FE} - I_C$



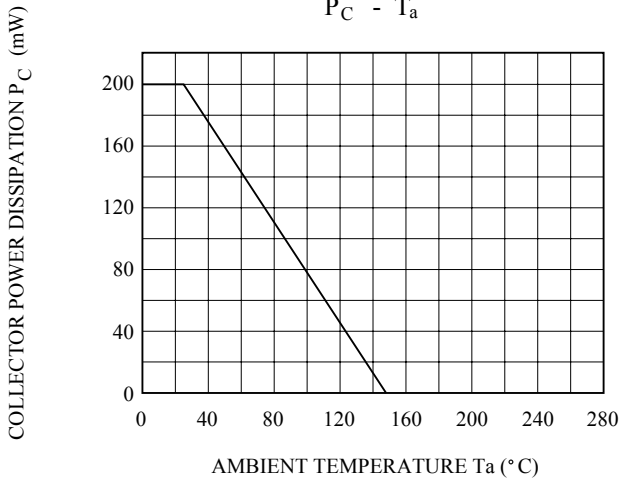
$V_{CE(sat)} - I_C$



$I_C - V_{BE}$



$P_C - T_a$



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