

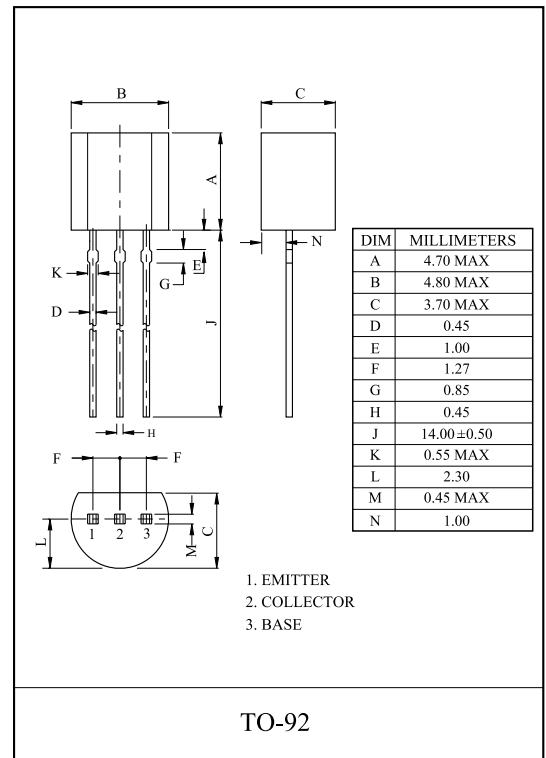
LOW FREQUENCY POWER AMP, CONVERTER
ELECTRONIC GOVERNOR APPLICATIONS

FEATURES

- Low Saturation Voltage
: $V_{CE(sat)}=0.3V(\text{Max.})$ at $I_C=0.5A$.
- Complementary to KTB598.

MAXIMUM RATING (Ta=25)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|-----------------------------|-----------|---------|------|
| Collector-Base Voltage | V_{CBO} | 30 | V |
| Collector-Emitter Voltage | V_{CEO} | 25 | V |
| Emitter-Base Voltage | V_{EBO} | 5 | V |
| Collector Current | I_C | 1 | A |
| Collector Power Dissipation | P_C | 625 | mW |
| Junction Temperature | T_j | 150 | |
| Storage Temperature Range | T_{stg} | -55 150 | |



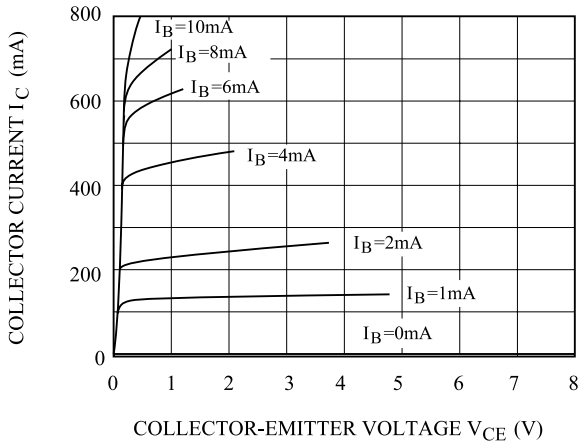
ELECTRICAL CHARACTERISTICS (Ta=25)

| 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) | $V_{CE}=2V, I_C=50mA$ | 70 | - | 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 |

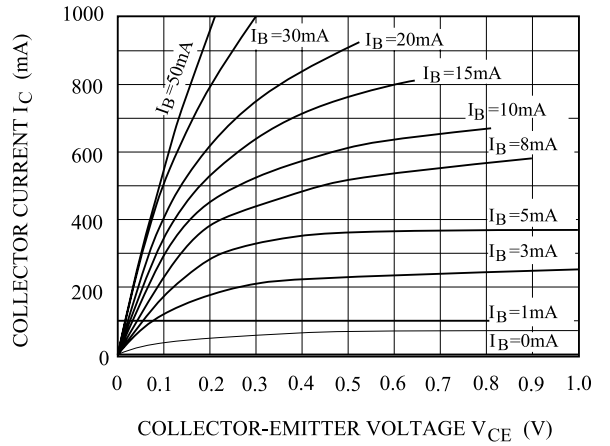
Note : h_{FE} Classification O:70 140, Y:120 240, GR:200 400

KTD545

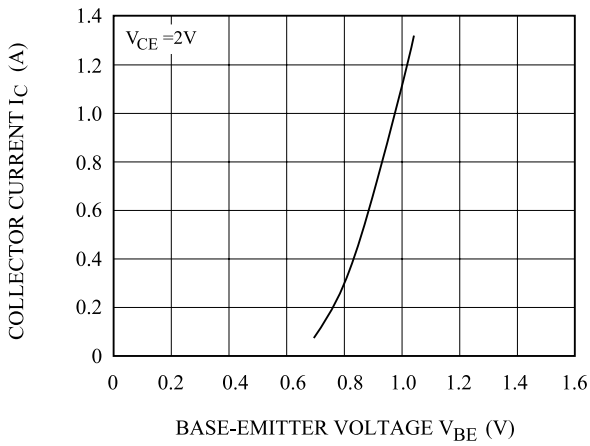
$I_C - V_{CE}$



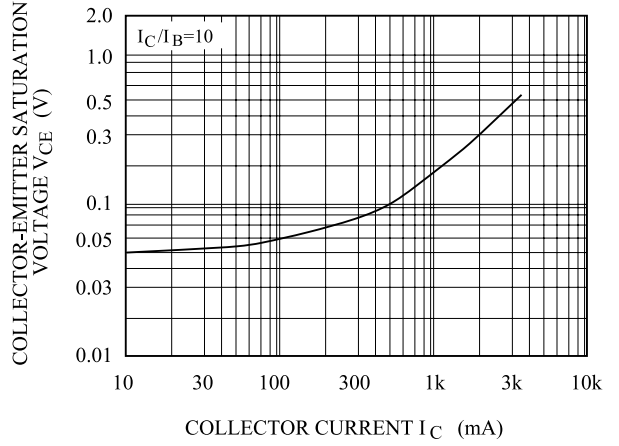
$I_C - V_{CE}$



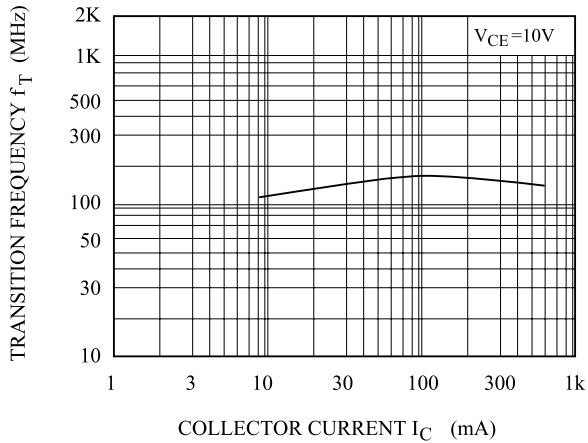
$I_C - V_{BE}$



$V_{CE(sat)} - I_C$



$f_T - I_C$



$h_{FE} - I_C$

