

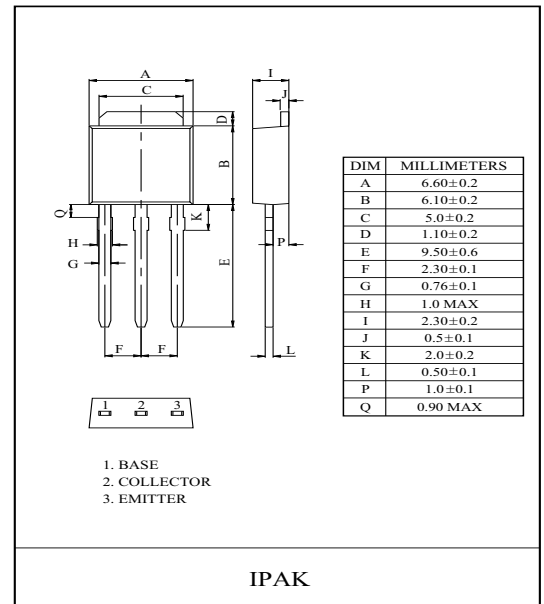
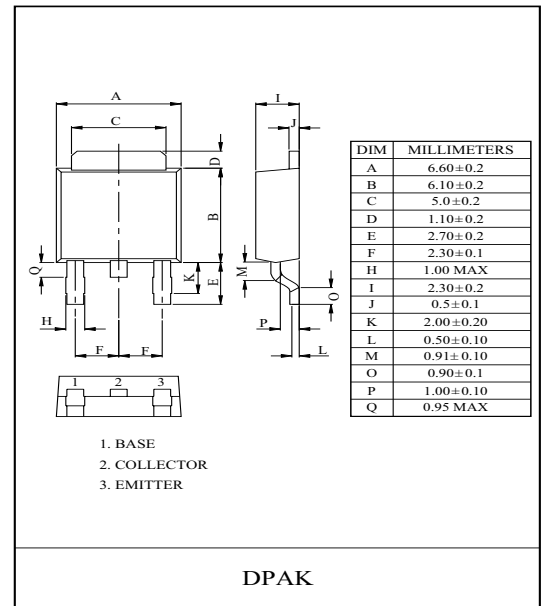
POWER AMPLIFIER APPLICATION.
POWER SWITCHING APPLICATION.

FEATURES

- Low Collector Saturation Voltage
: $V_{CE(sat)} = -0.5V(\text{Max.}) (I_C = -1A)$
- High Speed Switching Time : $t_{stg} = 1 \mu s(\text{Typ.})$
- Complementary to KTC2815D/L.

MAXIMUM RATING (Ta=25 °C)

| CHARACTERISTIC | | SYMBOL | RATING | UNIT |
|--------------------------------|----------|-----------|-----------|------|
| Collector-Base Voltage | | V_{CBO} | -50 | V |
| Collector-Emitter Voltage | | V_{CEO} | -50 | V |
| Emitter-Base Voltage | | V_{EBO} | -5 | V |
| Collector Current | | I_C | -2 | A |
| Collector Power Dissipation | Ta=25 °C | P_C | 1.0 | W |
| | Tc=25 °C | | 10 | |
| Junction Temperature | | T_j | 150 | °C |
| Storage Temperature Range | | T_{stg} | -55 ~ 150 | °C |



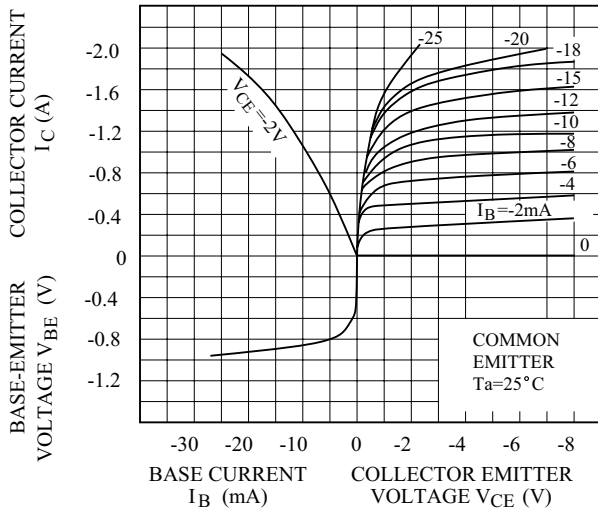
ELECTRICAL CHARACTERISTICS (Ta=25 °C)

| CHARACTERISTIC | | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|--------------------------------------|--------------------|---------------|---|------|------|------|---------|
| Collector Cut-off Current | | I_{CBO} | $V_{CB} = -50V, I_E = 0$ | - | - | -0.1 | μA |
| Emitter Cut-off Current | | I_{EBO} | $V_{EB} = -5V, I_C = 0$ | - | - | -0.1 | μA |
| Collector-Emitter Breakdown Voltage | | $V_{(BR)CEO}$ | $I_C = -10mA, I_B = 0$ | -50 | - | - | V |
| DC Current Gain | $h_{FE(1)}$ (Note) | | $V_{CE} = -2V, I_C = -0.5A$ | 70 | - | 240 | |
| | h_{FE2} | | $V_{CE} = -2V, I_C = -1.5A$ | 40 | - | - | |
| Collector-Emitter Saturation Voltage | | $V_{CE(sat)}$ | $I_C = -1A, I_B = -0.05A$ | - | - | -0.5 | V |
| Base-Emitter Saturation Voltage | | $V_{BE(sat)}$ | $I_C = -1A, I_B = -0.05A$ | - | - | -1.2 | V |
| Transition Frequency | | f_T | $V_{CE} = -2V, I_C = -0.5A$ | - | 100 | - | MHz |
| Collector Output Capacitance | | C_{ob} | $V_{CB} = -10V, I_E = 0, f = 1MHz$ | - | 30 | - | pF |
| Switching Time | Turn On Time | t_{on} | <p style="text-align: center;">-$I_{B1} = I_{B2} = 0.05A$ DUTY CYCLE $\leq 1\%$</p> | - | 0.1 | - | μS |
| | Storage Time | t_{stg} | | - | 1.0 | - | |
| | Fall Time | t_f | | - | 0.1 | - | |

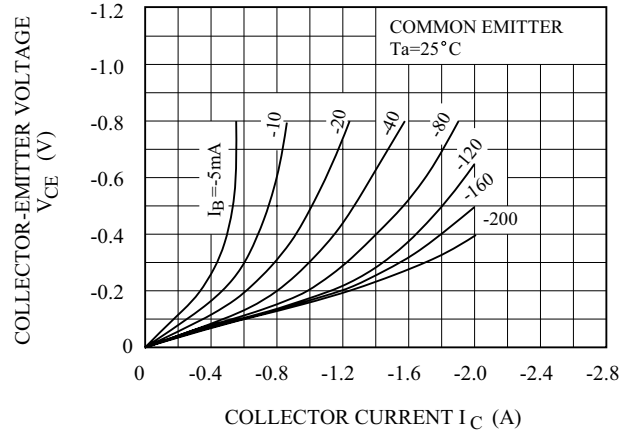
Note : $h_{FE(1)}$ Classification O:70~140, Y:120~240.

KTA1718D/L

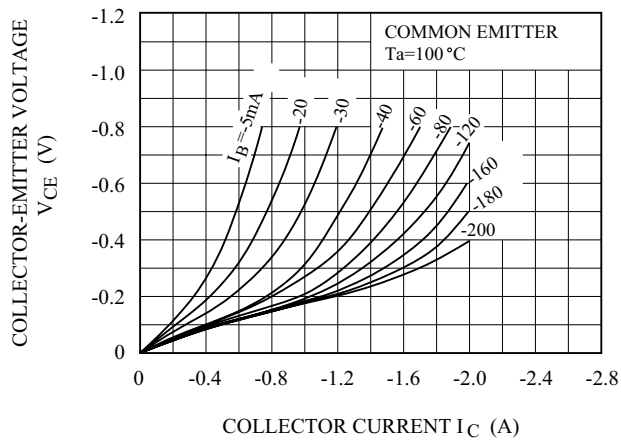
STATIC CHARACTERISTICS



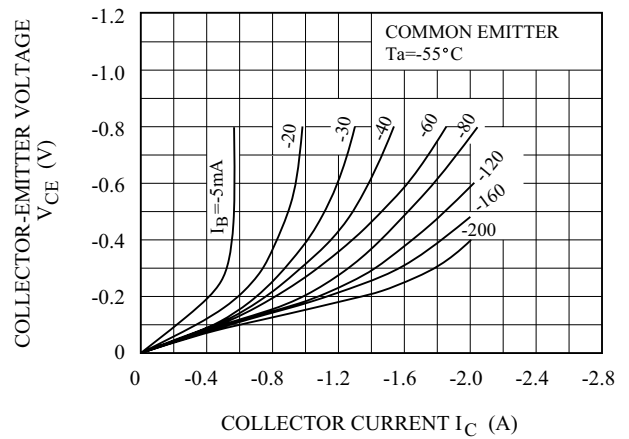
$V_{CE} - I_C$



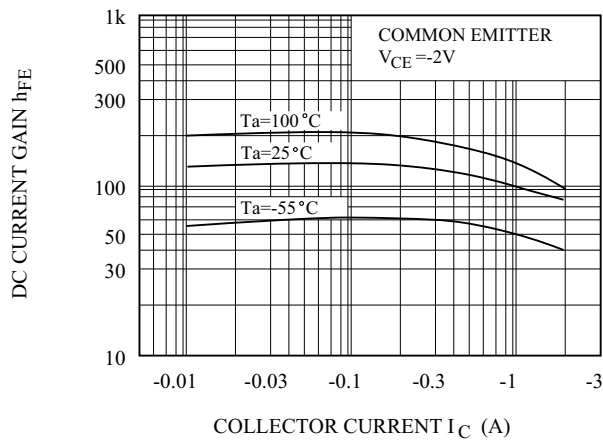
$V_{CE} - I_C$



$V_{CE} - I_C$



$h_{FE} - I_C$



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