



## Features

- Low Speed Switching

## Ordering Information

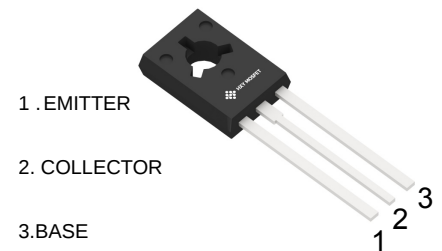
| Product ID | Pack  | Packing Method | Qty(PCS) |
|------------|-------|----------------|----------|
| KSB772YS   | TO-18 | Bulk           | 500      |

## Maximum Ratings (Ta=25°C unless otherwise noted)

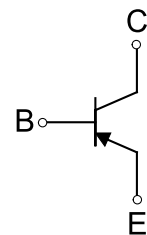
| Symbol         | Parameter                                        | Value    | Unit |
|----------------|--------------------------------------------------|----------|------|
| $V_{CBO}$      | Collector-Base Voltage                           | -60      | V    |
| $V_{CEO}$      | Collector-Emitter Voltage                        | -30      | V    |
| $V_{EBO}$      | Emitter-Base Voltage                             | -6       | V    |
| $I_C$          | Collector Current -Continuous                    | -3       | A    |
| $P_c$          | Collector Dissipation                            | 1        | W    |
| $T_J, T_{stg}$ | Operation Junction and Storage Temperature Range | -55~+150 | °C   |

## Electrical Characteristics(Ta=25°C unless otherwise specified)

| Parameter                            | Symbol        | Test conditions                            | Min | Max  | Unit    |
|--------------------------------------|---------------|--------------------------------------------|-----|------|---------|
| Collector-base breakdown voltage     | $V_{(BR)CBO}$ | $I_C = -1mA, I_E = 0$                      | -60 |      | V       |
| Collector-emitter breakdown voltage  | $V_{(BR)CEO}$ | $I_C = -1mA, I_B = 0$                      | -30 |      | V       |
| Emitter-base breakdown voltage       | $V_{(BR)EBO}$ | $I_E = -1mA, I_C = 0$                      | -6  |      | V       |
| Collector cut-off current            | $I_{CBO}$     | $V_{CB} = -60V, I_E = 0$                   |     | 0.1  | $\mu A$ |
| Collector cut-off current            | $I_{CEO}$     | $V_{CE} = -30V, I_B = 0$                   |     | 0.5  | $\mu A$ |
| Emitter cut-off current              | $I_{EBO}$     | $V_{EB} = -6V, I_C = 0$                    |     | 0.1  | $\mu A$ |
| DC current gain                      | $h_{FE}$      | $V_{CE} = -2V, I_C = -1A$                  | 200 | 300  |         |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C = -2A, I_B = -0.2A$                   |     | -0.5 | V       |
| Transition frequency                 | $f_T$         | $V_{CE} = -5V, I_C = -0.1A$<br>$f = 10MHz$ | 50  |      | MHz     |

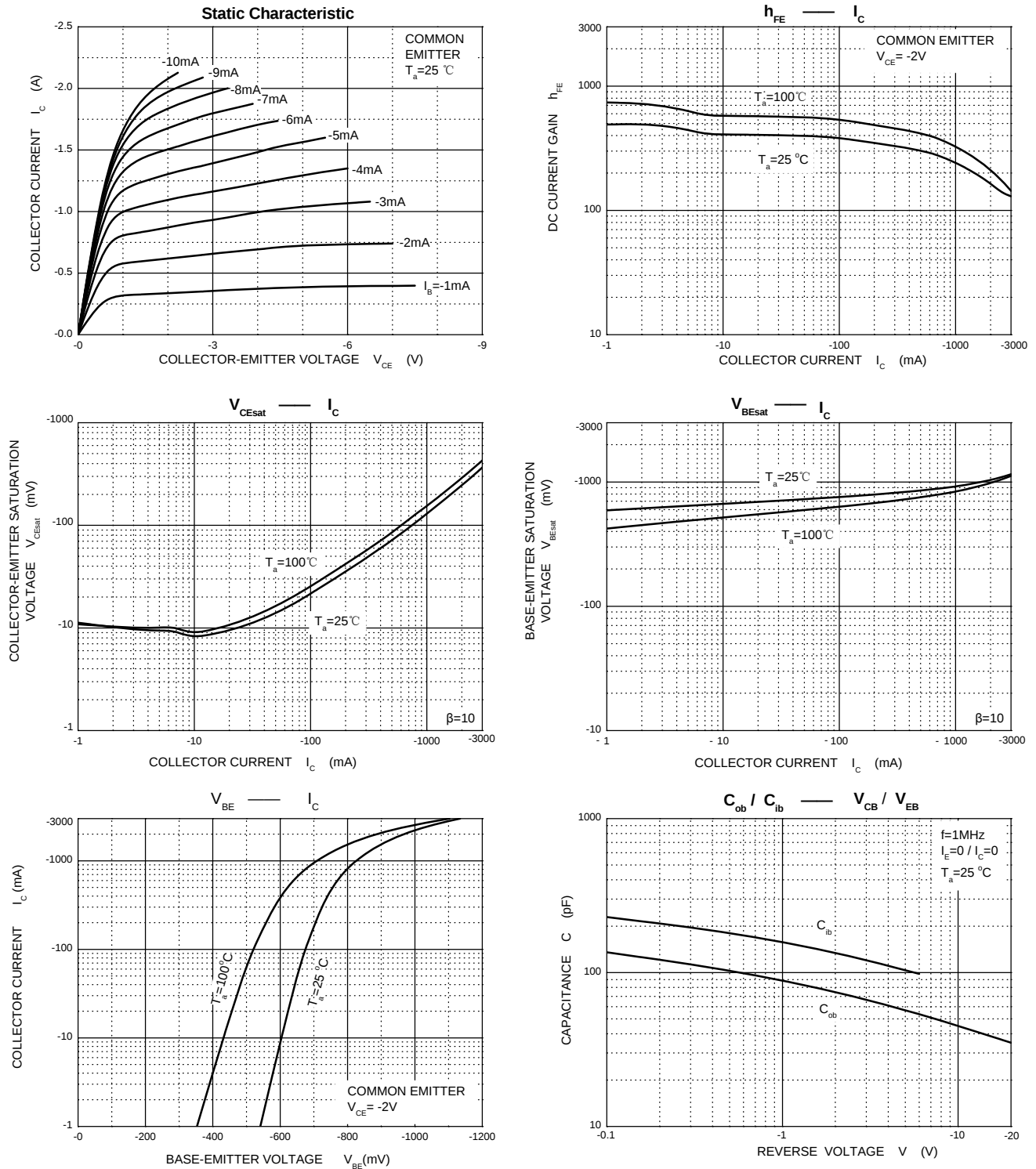


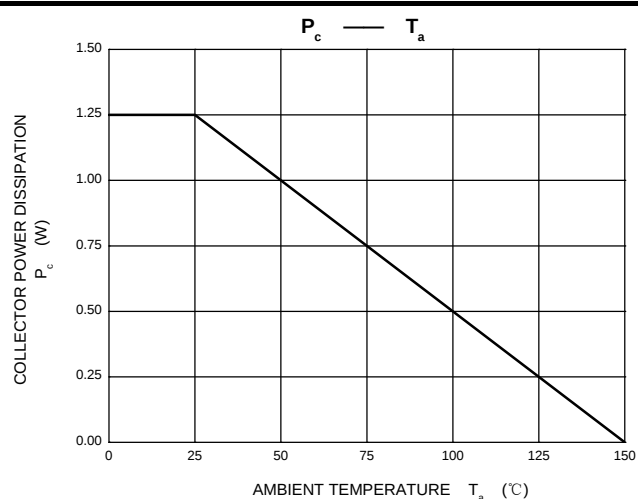
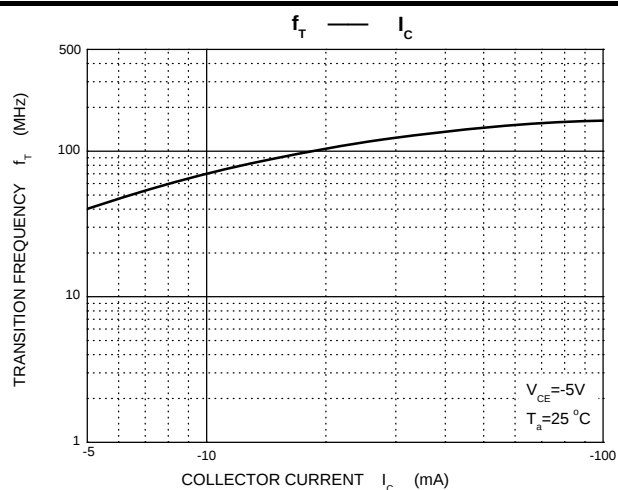
TO-18



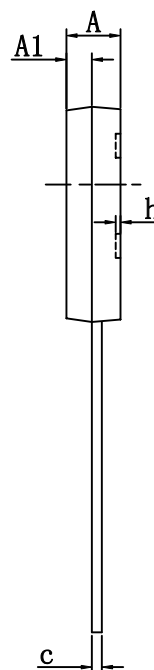
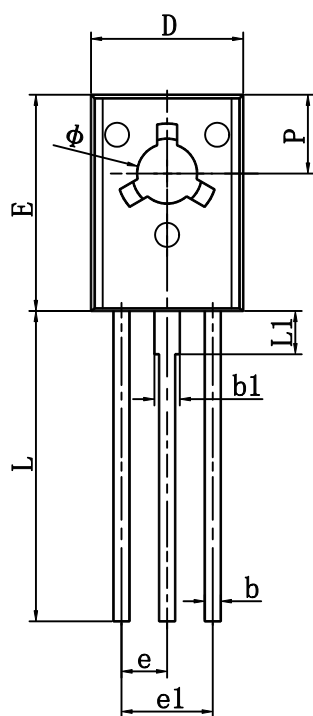


## Typical Characteristics





## TO-18 Package Outline Dimensions



| Symbol | Dimensions In Millimeters |        | Dimensions In Inches |       |
|--------|---------------------------|--------|----------------------|-------|
|        | Min                       | Max    | Min                  | Max   |
| A      | 2.500                     | 2.900  | 0.098                | 0.114 |
| A1     | 1.100                     | 1.500  | 0.043                | 0.059 |
| b      | 0.660                     | 0.860  | 0.026                | 0.034 |
| b1     | 1.170                     | 1.370  | 0.046                | 0.054 |
| c      | 0.450                     | 0.600  | 0.018                | 0.024 |
| D      | 7.400                     | 7.800  | 0.291                | 0.307 |
| E      | 10.600                    | 11.000 | 0.417                | 0.433 |
| e      | 2.290 TYP                 |        | 0.090 TYP            |       |
| e1     | 4.480                     | 4.680  | 0.176                | 0.184 |
| h      | 0.000                     | 0.300  | 0.000                | 0.012 |
| L      | 15.300                    | 15.700 | 0.602                | 0.618 |
| L1     | 2.100                     | 2.300  | 0.083                | 0.091 |
| P      | 3.900                     | 4.100  | 0.154                | 0.161 |
| $\Phi$ | 3.000                     | 3.200  | 0.118                | 0.126 |



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