

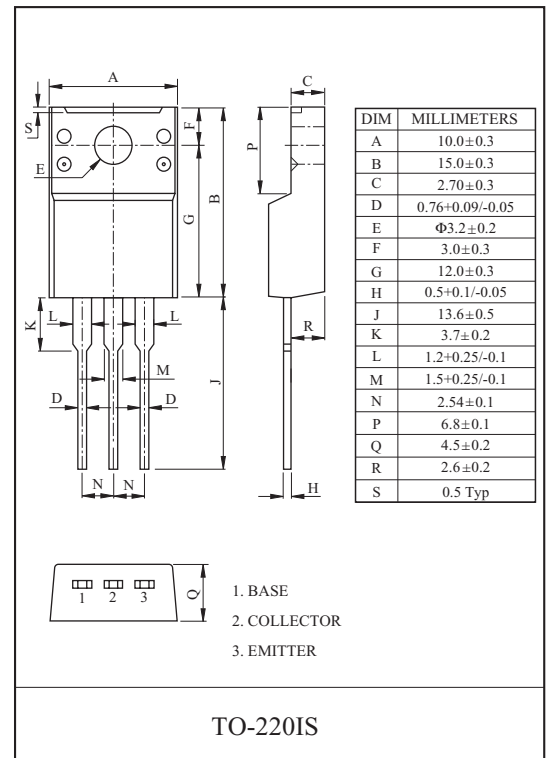
GENERAL PURPOSE APPLICATION.

FEATURES

- Low Saturation Voltage
: $V_{CE(sat)}=1.0V(\text{Max.})$ at $I_C=2A, I_B=0.2A$.
- Complementary to KTB1366.
- Suffix U : Qualified to AEC-Q101.
ex) KTD2058-Y-U/PU

MAXIMUM RATING (Ta=25)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|-----------------------------|-----------|---------|------|
| Collector-Base Voltage | V_{CBO} | 60 | V |
| Collector-Emitter Voltage | V_{CEO} | 60 | V |
| Emitter-Base Voltage | V_{EBO} | 7 | V |
| Collector Current | I_C | 3 | A |
| Base Current | I_B | 0.5 | A |
| Collector Power Dissipation | P_C | Ta=25 | 2 |
| | | Tc=25 | 25 |
| 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} | $V_{CB}=60V, I_E=0$ | - | - | 1 | μA |
| Emitter Cut-off Current | I_{EBO} | $V_{EB}=7V, I_C=0$ | - | - | 1 | μA |
| Collector-Emitter Breakdown Voltage | $V_{(BR)CEO}$ | $I_C=50mA, I_B=0$ | 60 | - | - | V |
| DC Current Gain | h_{FE} (Note) | $V_{CE}=5V, I_C=0.5A$ | 60 | - | 200 | |
| Collector Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=2A, I_B=0.2A$ | - | 0.25 | 1.0 | V |
| Base-Emitter Voltage | V_{BE} | $V_{CE}=5V, I_C=0.5A$ | - | 0.7 | 1.0 | V |
| Transition Frequency | f_T | $V_{CE}=5V, I_C=0.5A$ | - | 3.0 | - | MHz |
| Collector Output Capacitance | C_{ob} | $V_{CB}=10V, I_E=0, f=1MHz$ | - | 35 | - | pF |
| Switching Time | Turn-on Time | t_{on} | - | 0.65 | - | μS |
| | Storage Time | t_{stg} | - | 1.3 | - | |
| | Fall Time | t_f | - | 0.65 | - | |

$I_{B1}=-I_{B2}=0.2A$
DUTY CYCLE $\leq 1\%$

Note : h_{FE} Classification O:60 120, Y:100 200

