

GENERAL PURPOSE APPLICATION.  
SWITCHING APPLICATION.

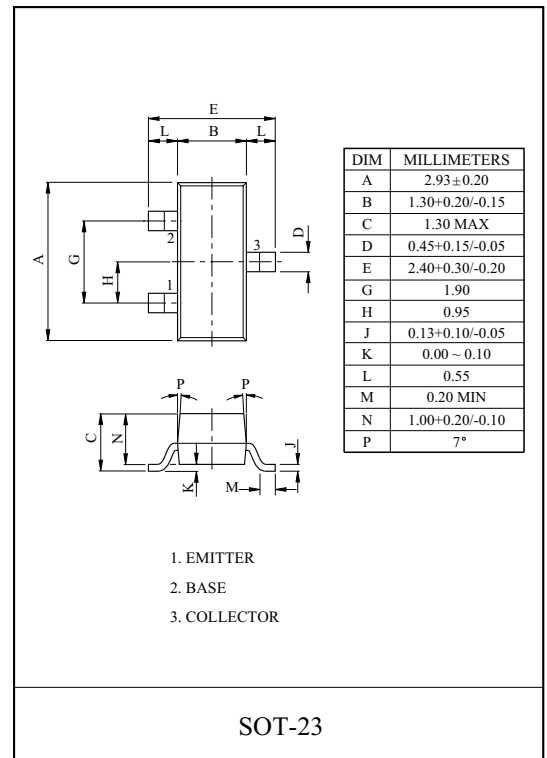
#### FEATURES

- Excellent  $h_{FE}$  Linearity  
:  $h_{FE}(I_C=0.1mA)/h_{FE}(I_C=2mA)=0.95(Typ.)$ .
- Low Noise :NF=1dB(Typ.) at f=1kHz.
- Complementary to KTC9015S.

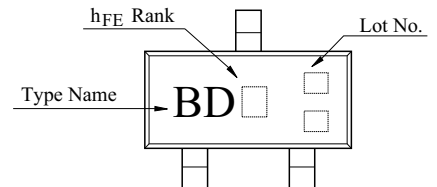
#### MAXIMUM RATING (Ta=25℃)

| CHARACTERISTIC              | SYMBOL    | RATING    | UNIT |
|-----------------------------|-----------|-----------|------|
| Collector-Base Voltage      | $V_{CBO}$ | 60        | V    |
| Collector-Emitter Voltage   | $V_{CEO}$ | 50        | V    |
| Emitter-Base Voltage        | $V_{EBO}$ | 5         | V    |
| Collector Current           | $I_C$     | 150       | mA   |
| Emitter Current             | $I_E$     | -150      | mA   |
| Collector Power Dissipation | $P_C^*$   | 350       | mW   |
| Junction Temperature        | $T_j$     | 150       | ℃    |
| Storage Temperature Range   | $T_{stg}$ | -55 ~ 150 | ℃    |

\*  $P_C$  : Package Mounted On 99.5% Alumina (10×8×0.6mm)



#### Marking



#### ELECTRICAL CHARACTERISTICS (Ta=25℃)

| CHARACTERISTIC                       | SYMBOL          | TEST CONDITION                                | MIN. | TYP. | MAX. | UNIT |
|--------------------------------------|-----------------|-----------------------------------------------|------|------|------|------|
| Collector Cut-off Current            | $I_{CBO}$       | $V_{CB}=50V, I_E=0$                           | -    | -    | 50   | nA   |
| Emitter Cut-off Current              | $I_{EBO}$       | $V_{EB}=5V, I_C=0$                            | -    | -    | 100  | nA   |
| DC Current Gain                      | $h_{FE}$ (Note) | $V_{CE}=5V, I_C=1mA$                          | 100  | -    | 1000 |      |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$   | $I_C=100mA, I_B=10mA$                         | -    | 0.1  | 0.25 | V    |
| Transition Frequency                 | $f_T$           | $V_{CE}=10V, I_C=1mA, f=100MHz$               | 60   | -    | -    | MHz  |
| Collector Output Capacitance         | $C_{ob}$        | $V_{CB}=10V, I_E=0, f=1MHz$                   | -    | 2.0  | 3.5  | pF   |
| Noise Figure                         | NF              | $V_{CE}=6V, I_C=0.1mA, R_g=10k\Omega, f=1kHz$ | -    | 1.0  | 10   | dB   |

Note :  $h_{FE}$  Classification B:100 ~ 300, C:200 ~ 600, D:400 ~ 1000