

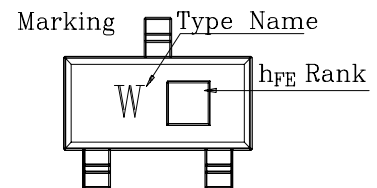
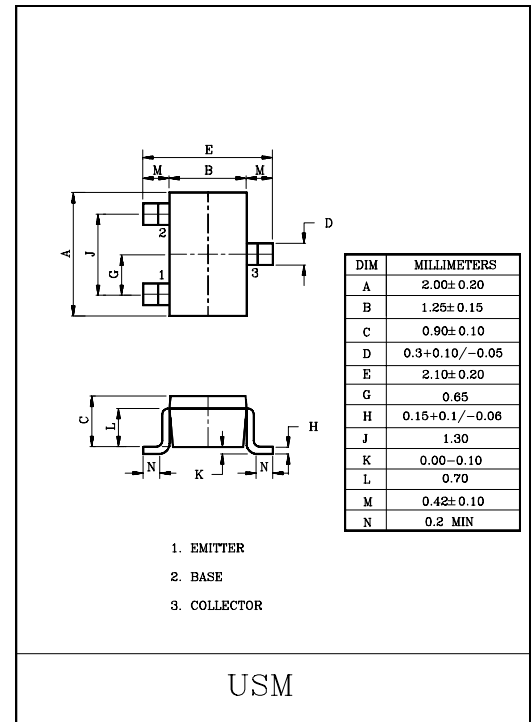
GENERAL PURPOSE APPLICATION.  
SWITCHING APPLICATION.

### FEAUTRES

- Excellent  $h_{FE}$  Linearity :  $h_{FE(2)}=25(\text{Min.})$   
at  $V_{CE}=6V, I_C=400mA.$
- Complementary to KTA2015.

### MAXIMUM RATINGS ( $T_a=25^\circ C$ )

| CHARACTERISTIC              | SYMBOL    | RATING  | UNIT       |
|-----------------------------|-----------|---------|------------|
| Collector-Base Voltage      | $V_{CBO}$ | 35      | V          |
| Collector-Emitter Voltage   | $V_{CEO}$ | 30      | V          |
| Emitter-Base Voltage        | $V_{EBO}$ | 5       | V          |
| Collector Current           | $I_C$     | 500     | mA         |
| Base Current                | $I_B$     | 50      | mA         |
| Collector Power Dissipation | $P_C$     | 100     | mW         |
| Junction Temperature        | $T_j$     | 150     | $^\circ C$ |
| Storage Temperature Range   | $T_{stg}$ | -55~150 | $^\circ C$ |



### ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ C$ )

| CHARACTERISTIC                       | SYMBOL        | TEST CONDITION             | MIN. | TYP. | MAX. | UNIT    |
|--------------------------------------|---------------|----------------------------|------|------|------|---------|
| Collector Cut-off Current            | $I_{CBO}$     | $V_{CB}=35V, I_E=0$        | -    | -    | 0.1  | $\mu A$ |
| Emitter Cut-off Current              | $I_{EBO}$     | $V_{EB}=5V, I_C=0$         | -    | -    | 0.1  | $\mu A$ |
| DC Current Gain (Note)               | $h_{FE(1)}$   | $V_{CE}=1V, I_C=100mA$     | 70   | -    | 240  |         |
|                                      | $h_{FE(2)}$   | $V_{CE}=6V, I_C=400mA$     | 25   | -    | -    |         |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=100mA, I_B=10mA$      | -    | 0.1  | 0.25 | V       |
| Base-Emitter Voltage                 | $V_{BE}$      | $V_{CE}=1V, I_C=100mA$     | -    | 0.8  | 1.0  | V       |
| Transition Frequency                 | $f_T$         | $V_{CE}=6V, I_C=20mA$      | -    | 300  | -    | MHz     |
| Collector Output Capacitance         | $C_{ob}$      | $V_{CE}=6V, I_E=0, f=1MHz$ | -    | 7.0  | -    | pF      |

Note)  $h_{FE(1)}$  Classification O(2) : 70~140, Y(4) : 120~240  
 $h_{FE(2)}$  Classification O : 25Min, Y : 40Min.